ACKNOWLEDGEMENTS

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<td>v – ix</td>
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<tr>
<td>(B) Community Concerns and Aspirations. The purpose of this element is to provide an understanding of the underlying planning needs and desires of the community.</td>
<td>1-10</td>
</tr>
<tr>
<td>(1) Significant existing and emerging conditions: Describe the dominant growth-related conditions that influence land use, development, water quality, and other environmental concerns in the planning area.</td>
<td>5-1 to 5-6</td>
</tr>
<tr>
<td>(2) Key issues: Describe the land use and development topics most important to the future of the planning area. At a minimum, this description shall include public access, land use compatibility, infrastructure carrying capacity, natural hazard areas, water quality, and may also include local areas of concern as described in Subparagraph (D)(2) (Land Use Plan Management Topics) of the Rule.</td>
<td>5-1 to 5-11</td>
</tr>
<tr>
<td>(3) A community vision: Describe the general physical appearance and form that represents the local governments plan for the future. Include objectives to be achieved by the plan and identify changes that may be needed to achieve the planning vision.</td>
<td>1-4</td>
</tr>
<tr>
<td>(C) Existing and Emerging Conditions. The purpose of this element is to provide a sound factual base necessary to support the land use and development policies included in the plan. Describe the following:</td>
<td>5-1 to 5-5</td>
</tr>
<tr>
<td>(1) Population, Housing and Economy. Include discussion of the following data and trends:</td>
<td>2-1 to 2-8</td>
</tr>
<tr>
<td>(a) Population:</td>
<td>2-1 to 2-3</td>
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<tr>
<td>(i) Permanent population growth trends using data from the two most recent decennial Censuses;</td>
<td>2-2</td>
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<td>(ii) Current Permanent and Seasonal Estimates;</td>
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<td>(iv) Age;</td>
<td>2-2</td>
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<td>(v) Income; and</td>
<td>2-7</td>
</tr>
<tr>
<td>(vi) Thirty Year Projections of Permanent and Seasonal Population in five years increments.</td>
<td>2-3</td>
</tr>
<tr>
<td>(b) Housing stock: Estimate current housing stock, including permanent and seasonal units, tenure, and types of units (single-family, multifamily, and manufactured).</td>
<td>2-4 to 2-5</td>
</tr>
<tr>
<td>(c) Local economy: Describe employment by major sectors and community economic activity.</td>
<td>2-7</td>
</tr>
<tr>
<td>(2) Natural Systems. Describe the natural features and discuss the environmental conditions of the planning jurisdiction to include:</td>
<td>3-1 to 3-10</td>
</tr>
<tr>
<td>(a) Natural features</td>
<td>3-3 to 3-6</td>
</tr>
<tr>
<td>(i) Areas of Environmental Concern (AECs);</td>
<td>3-1</td>
</tr>
<tr>
<td>(ii) Soil characteristics, including limitations for septic tanks, erodibility, and other factors related to development;</td>
<td>3-5</td>
</tr>
<tr>
<td>(iii) Environmental Management Commission (EMC) water quality classifications (SC, SB, SA, HQW, and ORW) and related use</td>
<td>3-2 to 3-4</td>
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</tbody>
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(iv) Flood and other natural hazards;  
3-6 to 3-9

(v) Storm surge areas;  
3-6

(vi) Non-coastal wetlands including forested wetlands, shrub-scrub wetlands and freshwater marshes;  
3-6

(vii) Water supply watersheds or wellhead protection areas;  
3-2 to 3-3

(viii) Primary nursery areas;  
3-1

(ix) Environmentally fragile areas, such as, but not limited to wetlands, natural heritage areas, areas containing endangered species, prime wildlife habitats, or maritime forests; and  
3-6

(x) Additional natural features or conditions identified by the local government.  
3-3 to 3-4

(b) Environmental Conditions  
3-1 to 3-9

(i) Water quality: 4-1

(I) Status and changes of surface water quality, including impaired streams from the most recent N.C. Division of Water Resources Basin Planning Branch Reports, Clean Water Act 303 (d) List and other comparable data; 4-1

(II) Current situation and trends on permanent and temporary closures of shellfishing waters as determined by the Report on Sanitary Survey by the Shellfish Sanitation and Recreational Water Quality Section of the N.C. Division of Marine Fisheries; 3-3

(III) Areas experiencing chronic wastewater treatment system malfunctions; and 4-2 to 4-3

(IV) Areas with water quality or public health problems related to non-point source pollution. 3-3

(ii) Natural hazards: 3-6

(I) Areas subject to recurrent flooding, storm surges and high winds; and 3-6

(II) Areas experiencing significant shoreline erosion as evidenced by the presence of threatened structures or public facilities. 1-4; 3-1; 5-4

(iii) Natural resources: 3-1 to 3-9

(I) Environmentally fragile areas or areas where resource functions are being impacted as a result of development; and 3-4

(II) Valuable natural resource areas that are being impacted or lost as a result of incompatible development. These may include, but are not limited to the following: coastal wetlands, protected open space, and agricultural land. 3-6; 5-4

(3) Existing Land Use and Development. Include a map and descriptions of the following: 5-1; End of Chapter 5

(a) Existing land use patterns, which may include the following categories: Residential, commercial, industrial, institutional, public, dedicated open space, vacant, agricultural, and forestry. Land use descriptions shall include estimates of the land area allocated to each land use and characteristics of each land use category. 5-2

(b) Historic, cultural, and scenic areas designated by a state or federal agency or by local government. 3-6
(4) Community Facilities. Evaluate existing and planned capacity, location, and adequacy of community facilities that serve the community’s existing and planned population and economic base; that protect important environmental factors such as water quality; and that guide land development in the coastal area. These shall include:

<table>
<thead>
<tr>
<th>Description</th>
<th>Page Range</th>
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</thead>
<tbody>
<tr>
<td>(a) Public and private water supply and wastewater systems. Describe existing public and private systems, including existing condition and capacity. Describe any documented overflows, bypasses, or other problems that may degrade water quality or constitute a threat to public health. Indicate future needs based on population projections. Map existing and planned service areas.</td>
<td>4-1 to 4-2; End of Chapter 4</td>
</tr>
<tr>
<td>(b) Transportation systems. Map the existing and planned multimodal systems and port and airport facilities. Describe any highway segments deemed by the North Carolina Department of Transportation (NCDOT) as having unacceptable service levels. Describe highway facilities on the current thoroughfare plan or facilities on the current transportation improvement plan. Describe the impact of existing facilities on land use patterns.</td>
<td>4-3 to 4-4; End of Chapter 4</td>
</tr>
<tr>
<td>(c) Stormwater systems. Describe the existing public stormwater management system. Identify existing drainage problems and water quality issues related to point-source discharges of stormwater runoff.</td>
<td>3-3; 3-8; 5-2; 5-6 to 5-7; 5-10</td>
</tr>
</tbody>
</table>

(D) Future Land Use. This element of the plan is intended to guide the development and use of land in a manner that achieves the goals of the CAMA through local government land use and development policies, including a future land use map.

<table>
<thead>
<tr>
<th>Description</th>
<th>Page Range</th>
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<tbody>
<tr>
<td>(1) Policies</td>
<td>5-5 to 5-6</td>
</tr>
<tr>
<td>(a) Community Concerns and Aspirations and Existing and Emerging Conditions shall be considered in the development of local government land use plan policies as required in 7B.0702 (b) and (c).</td>
<td>5-4; 5-10</td>
</tr>
<tr>
<td>(b) Policies shall be consistent with the goals of the CAMA, shall address the CRC management topics for land use plans, and comply with all state and federal rules.</td>
<td>5-11 to 5-13</td>
</tr>
<tr>
<td>(c) Policies that exceed use standards and permitting requirements found in Subchapter 7H, State Guidelines for Areas of Environmental Concern, shall be identified in the plan.</td>
<td>3-8</td>
</tr>
</tbody>
</table>

(2) Land Use Plan Management Topics. The purposes of the CRC management topics are to ensure that land use plans support the goals of the CAMA, define the CRC’s expectations for land use policies, and provide a basis for land use plan review and certification. In addition to the management topics outlined below, plans may also include policies to address local areas of concern. Each management topic includes two components: a management goal and planning objectives.

<table>
<thead>
<tr>
<th>Description</th>
<th>Page Range</th>
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</thead>
<tbody>
<tr>
<td>(a) Public Access:</td>
<td>4-9; 5-10</td>
</tr>
<tr>
<td>(i) Management Goal: Maximize public access to the beaches and public trust waters of the Town and maximize recreational opportunities for residents and visitors.</td>
<td>5-10 to 5-13</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
</tr>
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<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>(ii) Planning Objectives: Policies that address access needs and opportunities with strategies to develop public access and provisions for all segments of the community, including persons with disabilities. Policies that address the reduction of user conflicts in the public trust waters of the Town. Policies that prevent uses that would directly or indirectly impair or block existing navigation channels. Provide a quality recreation experience to both residents and visitors.</td>
<td></td>
</tr>
<tr>
<td>(b) Land Use Compatibility:</td>
<td></td>
</tr>
<tr>
<td>(i) Management Goal: Ensure that development and use of resources or preservation of land balance protection of natural resources and fragile areas with economic development, avoids risks to public health, safety and welfare, and are consistent with the capability of the land.</td>
<td></td>
</tr>
<tr>
<td>(ii) Planning Objectives: Policies that maintain the small town, family friendly atmosphere of the Town by encouraging architecture in keeping with the Town's character, traditional family homes, neighborhood, and locally oriented businesses, parks, and natural areas.</td>
<td></td>
</tr>
<tr>
<td>(c) Infrastructure Carrying Capacity:</td>
<td></td>
</tr>
<tr>
<td>(i) Management Goal: To ensure that public infrastructure systems are appropriately sized, located, and managed so that quality and productivity of AECs and other fragile areas are protected or restored.</td>
<td></td>
</tr>
<tr>
<td>(ii) Planning Objectives: Policies that ensure that the location and capacity of public infrastructure is consistent with the Town's growth and development goals.</td>
<td></td>
</tr>
<tr>
<td>(d) Natural Hazard Areas:</td>
<td></td>
</tr>
<tr>
<td>(i) Management Goal: Conserve and maintain barrier dunes, beaches, flood plains, and other coastal features for their natural storm protection functions and their natural resources giving recognition to public health, safety, and welfare issues.</td>
<td></td>
</tr>
<tr>
<td>(ii) Planning Objectives: Policies that minimize damage and threats to public health and safety associated with hurricanes, severe weather, and other hazards, and work to implement the Southeastern NC Regional Hazard Mitigation Plan (2016). Following a hurricane, severe weather event, or other disaster, the Town will work as quickly as possible to restore essential services related to public health, safety, and welfare.</td>
<td></td>
</tr>
<tr>
<td>(e) Water Quality:</td>
<td></td>
</tr>
<tr>
<td>(i) Management Goals: Maintain, protect and where possible enhance water quality in all coastal wetlands, rivers, streams, and estuaries.</td>
<td></td>
</tr>
<tr>
<td>(ii) Planning Objectives: Policies that establish mitigation strategies designed to protect and where possible enhance and restore the sensitive natural resources located in and adjacent to the Town.</td>
<td></td>
</tr>
</tbody>
</table>

| 3 Future land use map. Depict the policies for growth and development, and the desired future patterns of land use and land development with |
| End of Chapter 5 |
consideration given to natural system constraints and infrastructure. Include designations with descriptions of land uses and development.

<table>
<thead>
<tr>
<th>Tools for Managing Development. The purpose of this element is to describe the management tools and actions the local government will use to implement the land use plan.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(E)</strong> Tools for Managing Development. The purpose of this element is to describe the management tools and actions the local government will use to implement the land use plan.</td>
</tr>
<tr>
<td>6-1 to 6-5</td>
</tr>
<tr>
<td><strong>(1)</strong> Guide for land use decision-making. Describe the role of the land use plan policies, including the future land use map, in local decisions regarding land use and development.</td>
</tr>
<tr>
<td>6-1</td>
</tr>
<tr>
<td><strong>(2)</strong> Existing development program. Describe the community’s existing development management program, including local ordinances, codes, plans, and policies.</td>
</tr>
<tr>
<td>6-3 to 6-4</td>
</tr>
<tr>
<td><strong>(3)</strong> Action plan and implementation schedule. Describe the actions that will be taken by the local government to implement policies that meet the CRC’s Management Topic goals and objectives. Specify the fiscal year(s) in which each action is anticipated to start and finish. Describe the specific steps the local government plans to take to implement the policies, including the adoption and amendment of local ordinances, plans, and special projects. The action plan shall be used to prepare the implementation status report for the land use plan.</td>
</tr>
<tr>
<td>6-5 to 6-8</td>
</tr>
</tbody>
</table>
CHAPTER 1: INTRODUCTION

HOLLY RIDGE COMMUNITY HISTORY

The Town of Holly Ridge, located in the southern portion of Onslow County, was established around 1890 and served as a fuel stop for the Atlantic Coast Line Railroad. In 1940, the unincorporated community’s population was 28, with two stores, seven houses, and a train station. On December 10th, 1940 a contract was granted to use the land beside the Town of Holly Ridge for the construction of Camp Davis. Camp Davis was first used as a temporary headquarters for the Army’s Barrage Balloon School, then in 1942, the Anti-Aircraft Artillery School opened. In July of 1943 the first Officers Candidate School class opened on base. On September 2, 1944, the Army announced plans to close Camp Davis and began to dismantle the base. Camp Davis was decommissioned for only a few months when the Army Air Force reactivated the base to serve as a redistribution and convalescent center. In June of 1946, the U.S. Navy began using the abandoned facilities to support “Operation Bumblebee.” It was not until 1948 that the base was completely dismantled. The population of the Town in 1950 was slightly higher than 1,000 residents. From the 1950s to the early 2000s, the Town’s population has waxed and waned. However, since the early 2000s, the Town has seen consistent growth and development that is expected to continue for the foreseeable future.
Regional Location

The Town of Holly Ridge is located on Highway 17 in Onslow County. The Town has easy access to urban centers in Jacksonville and the City of Wilmington. In addition, the Town is within 45 minutes of I-40. This accessibility allows many Holly Ridge residents to utilize many larger population centers and the services and amenities they provide. The bridge to Topsail Island is located less than five miles from the Town center.

Just north of Town lies the City of Jacksonville and Camp Lejeune. An hour south of Town lies Wilmington, which is North Carolina’s largest port and home to the Wilmington International Airport.

Climate

The South Atlantic states have a subtropical climate that typically experiences mild winters and hot, humid summers. Holly Ridge has an average annual rainfall is 48.3 inches with the majority of precipitation in the summer months. The average yearly temperature in the area is 62.2 degrees with an average of 42.4 degrees in January and 77.2 degrees in July. The average snowfall is less than 2 inches.

Purpose & Importance of Land Use Planning

The 2019 Land Use Plan provides a blueprint for growth and development over the next 20 to 30 years. When viewed as a guide, the document is intended to present the basic description of the Town of Holly Ridge now and into the next few decades. Preserving the Town’s unique sense of place while also providing vision for development and growth based on community desires is the primary purpose of this land use plan. Policies and recommendations drafted as part of the process are rooted in the desires of the Town’s citizenry. Public engagement and input is vital to the planning process as initiatives that cannot be supported by the Town’s residents will not be successful in implementation.

A land use plan functions as a tool for policy and decision making by analyzing/evaluating important factors of a local area’s population, demographics, economy, natural environment, capacity for growth, and development trends. By providing this guidance, a local government can avoid land use conflicts within their jurisdiction. Additionally, a land use plan can be an indicator of future action based on the information and goals present in the document, allowing staff, developers, elected officials, and citizens to be better informed about the future of their community.
WHAT IS CAMA AND HOW DOES IT RELATE TO HOLLY RIDGE?

The Coastal Zone Management Act (CZMA) was passed in 1972 by the United States Congress as a tool to encourage coastal land use planning at the local and state levels. In response to the CZMA, North Carolina created the Coastal Area Management Act (CAMA, N.C.G.S. 113A-100) in 1974, establishing a cooperative program between local and state governments. At the state level, CAMA provides a framework for local communities in the 20 coastal counties (including Onslow County and the Town of Holly Ridge) to plan and regulate development activity.

The Department of Environmental Quality (DEQ) administers CAMA programs and regulations through the Division of Coastal Management (DCM). CAMA established the governing body for regulations on the coast, the Coastal Resources Commission (CRC) within DEQ. The CRC is responsible for approving Coastal Habitat Protection Plans, designating Areas of Environmental Concern (AEC), and providing permits for these areas. The Coastal Resources Commission is also responsible for officially adopting land use plans in accordance with CAMA. The state government acts primarily in a supportive, standard-setting, and review capacity role. (Note: CAMA Land Use Plan guidelines are subject to revision).

The Holly Ridge 2019 Comprehensive Land Use Plan is prepared in accordance with the North Carolina Coastal Area Management Act, specifically Subchapter 7B, “CAMA Land Use Planning Requirements” of the North Carolina Administrative Code.

THE CAMA PERMIT PROCESS

The Coastal Area Management Act regulates activity in Areas of Environmental Concern (AEC). A CAMA permit is required if all of the following conditions are met for a project:

- It is located within one of the 20 coastal counties of North Carolina
- It is considered "development" under CAMA
- It is within, or it affects, an Area of Environmental Concern established by the CRC; and
- It does not qualify for an exemption.

CAMA (NCGS 113A-103(5)(a)) defines a development project as “any activity in a duly designated area of environmental concern ... involving, requiring or consisting of the construction or enlargement of a structure; excavation; dredging; filling; dumping; removal of clay, silt, sand, gravel or minerals; bulkheading; driving of pilings; clearing or alteration of land as an adjunct of construction; alteration or removal of sand dunes; alteration of the shore, bank or bottom of the Atlantic Ocean or any sound, bay, river, creek, stream, lake or canal.”
WHAT IS AN AREA OF ENVIRONMENTAL CONCERN?

Areas of Environmental Concern are natural areas of ecological importance. These areas are easily disturbed, possibly by erosion or flooding, or they have environmental, social, economic, or aesthetic importance. By classifying areas as AEC’s, the CRC can control development within those areas to prevent irreversible damage. The four categories of AEC’s as defined by the CRC include: the estuarine and ocean system, the ocean hazard system, public water supplies, and natural and cultural resource areas.

A project is likely located in an AEC if:

- It is in or on navigable waters within the 20 CAMA counties;
- It is on a marsh or coastal wetland;
- It is within 75 feet of the mean high water line along an estuarine shoreline;
- It is near the ocean beach; (not applicable to Holly Ridge)
- It is near an inlet; (not applicable to Holly Ridge)
- It is within 30 feet of the normal high water level of areas designated as inland fishing waters by the N.C. Marine Fisheries Commission; or
- It is near a public water supply.

It should be noted that only limited areas of the Town are located within an Area of Environmental Concern (AEC). Those areas are located along the Intracoastal Waterway (ICWW) and are considered part of the estuarine AEC.

VISION STATEMENT

A vision statement provides a one sentence declaration of the future intentions and general direction of an organization, business entity, or locality. For the Town of Holly Ridge, the vision statement was drafted based upon public input, stakeholder concerns, and future growth. The statement should support future actions and decisions which may impact the quality of life for residents.

The vision statement for the Town of Holly Ridge is a general assertion of the Town’s preferences for future growth and development.

Holly Ridge welcomes residents and visitors to enjoy our small-town coastal community that values recreational opportunities and cultural amenities. We have strong military ties and are the home of historic Camp Davis. Our town is known for its peaceful, friendly environment to live, work, play, and visit.
COMMUNITY SURVEY RESULTS

Question 1: Please best describe your relationship to the Town of Holly Ridge.

According to the 208 survey responses, 165 individuals live in Holly Ridge, 29 are nonresident property owners, and 11 are Holly Ridge residents who rent their homes. One business owner, one visitor, and one part-time resident also responded.

Question 2: What do you think are the most important growth and development issues facing Holly Ridge? (Please select as many as three)

Nearly half of respondents chose bicycle and pedestrian facilities as a top priority, followed by parks and recreation facilities, and then types of commercial development (mixed use, standalone). Environmental protection and stormwater runoff were also selected among the top five growth and development issues facing Holly Ridge.
Question 3: Which kind of new private development would you most like to see in Holly Ridge? (Please select as many as three)

<table>
<thead>
<tr>
<th>Development Type</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-family Housing (condos, townhomes, apartments, etc.)</td>
<td>16</td>
</tr>
<tr>
<td>Single-Family Subdivisions</td>
<td>49</td>
</tr>
<tr>
<td>Grocery store, shopping centers, or retail</td>
<td>109</td>
</tr>
<tr>
<td>Manufacturing/industrial development</td>
<td>22</td>
</tr>
<tr>
<td>Casual/Upscale Restaurants</td>
<td>158</td>
</tr>
<tr>
<td>Small businesses</td>
<td>120</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>32</td>
</tr>
</tbody>
</table>

Nearly 76% of respondents identified casual/upscale restaurants as one type of development they would like to see. Small businesses and grocery stores, shopping centers, or retail were both also selected by more than half of respondents.

Question 4: Which statement about regulating new development do you agree with most?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local officials should regulate the character and location of new development in order to protect nearby property values and broad community interests.</td>
<td>60</td>
</tr>
<tr>
<td>Local officials should lessen regulation on new development in order to protect individual property rights of developers.</td>
<td>12</td>
</tr>
<tr>
<td>Local officials should balance the need to preserve the character of the community with the need to encourage new business development.</td>
<td>136</td>
</tr>
</tbody>
</table>

More than 65% of respondents said they wanted local officials to balance preserving the character of the community with encouraging business development. Only 5.77% identified looser regulation on developers as more important than regulating character and location of new development.
Question 5: Which approaches do you think should be used to make Holly Ridge more attractive to new and existing businesses and residents? (Please select as many as three)

Almost 60% of respondents agreed that improving access to and availability of public open spaces and recreational opportunities was an approach that should be used. Protecting single-family neighborhoods was chosen by just under half of respondents, while improving stormwater management and flood protection rounded out the top three choices.

Question 6: Which of the following housing characteristics is most important? (Please select as many as three)

Just under half of respondents picked housing located within walking distance of community facilities and businesses as one of their most important housing characteristics. Owner-occupied housing and affordable for rent or purchase housing the second and third most popular responses.
Question 7: Which of the following environmental issues are most important for the Town of Holly Ridge? (Please select as many as three.)

53.17% of respondents identified drinking water quality as one of the key environmental issues to Holly Ridge. Stormwater runoff and flood prevention was the second most popular response, with air quality of streams, marshes, and other water bodies selected in 47.32% of surveys.

Question 8: Which of the following transportation concerns and needs are most important for the Town of Holly Ridge? (Please select as many as three)

Selected by just over 59% of respondents, sidewalks and bike lanes were the most frequently chosen transportation concern for Holly Ridge. Road maintenance and adequate street lighting were chosen by 47.6% and 41.4% of respondents respectively.
**Question 9:** What do you consider to be the most important in creating recreational opportunities? (Please select as many as three)

<table>
<thead>
<tr>
<th>Option</th>
<th>Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructing off-road pedestrian and cycling greenways</td>
<td>99</td>
</tr>
<tr>
<td>Constructing sidewalks and on-road bike lanes</td>
<td>100</td>
</tr>
<tr>
<td>Establishing more ball fields, sports courts, playgrounds, etc.</td>
<td>59</td>
</tr>
<tr>
<td>Establishing more walking trails, public open space, picnic areas, etc.</td>
<td>109</td>
</tr>
<tr>
<td>Expanding organized recreational programs</td>
<td>50</td>
</tr>
<tr>
<td>Establishing more indoor/outdoor and/or seasonal events (festivals, food trucks, etc.)</td>
<td>110</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>13</td>
</tr>
</tbody>
</table>

Establishing more indoor-outdoor and/or seasonal events was the most selected factor for creating recreational opportunities, with establishing more walking trails, public open space, and picnic areas achieving a close second. With 100 and 99 votes respectively, constructing sidewalks and on-road bike lanes as well as constructing off-road pedestrian and cycling greenways represented the second tier of responses.

**Question 10:** Please provide additional comments based on previous questions or other concerns.

43 surveys included additional comments. Of these comments, many highlighted the importance of bicycle and pedestrian access as well as interest in recreation and community events. In terms of commercial development, there was an interest in increased variety of places to shop in Holly Ridge.

**PUBLIC INPUT MEETING RESULTS**

A Public Input Meeting was held on March 7th, 2019. The meeting was held to gather input about the public’s concerns and aspirations for the future of the Town of Holly Ridge. While the public asked questions, no specific concerns were identified.
COMMUNITY CONCERNS AND ASPIRATIONS

In compliance with the 15A NCAC 7B requirements, the community concerns and aspirations are outlined below. Based on survey results, the top five public input priorities were developed. It should be noted that these priorities are goals and intentions of the survey respondents and are to serve merely as a resource. These priorities are by no means a mandate for future funding or policy change. The priorities are listed in order of significance.

**Top 5 Public Input Priorities**

1. Enhance bicycle and pedestrian facilities to provide safe and easy connectivity within Holly Ridge and the immediate region.

2. Develop additional recreational opportunities and public events for the community.

3. Attract a broad variety of businesses to Holly Ridge to maximize retail diversity.

4. Ensure clean drinking water, minimize pollution of water bodies and maintain high-quality stormwater infrastructure.

5. Encourage residential development that supports affordable housing units.
CHAPTER 2: COMMUNITY PROFILE

The following analysis provides information on the population characteristics of the Town of Holly Ridge. Such information is intended to allow Town officials to make growth management decisions based on an understanding and knowledge of where the Town has come from, where it is, and where it may be heading.

The current population and projected growth for the Town of Holly Ridge are important to consider when estimating how the area will be impacted by future development. Information on the population, housing availability, and economic characteristics of the Town of Holly Ridge will enhance the Town's ability to make growth management decisions using knowledge of the Town's history, the characteristics of today, and what it may be like in the future. Demands placed on community infrastructure, such as roads, sewer, stormwater, and community services are directly related to population growth and the need for planned development is critical to accommodate for the projected population increase in the area. The demographic statistics and data on the existing housing stock establishes a foundation for understanding the future demands of housing.

Note: Data and statistics in the following section come from a number of sources. Figures from beyond 2017 are estimations and projections. Statistics from 2017 are sourced from the US Census Bureau/ American Community Survey and the North Carolina Office of State Budget and Management (NCOSBM). The NCOSBM provides annual population figures for each municipality in the state. This number can often differ from those identified from the American Community Survey. Other statistics, facts, and figures related to age, housing, income, and employment will be sourced from the US Census Bureau American Community Survey. Additional information will be sourced from Holly Ridge and the Cape Fear Council of Governments where necessary.

POPULATION CHARACTERISTICS

According to the 2017 Census data, the Town of Holly Ridge has a population of 2,202. Of particular note is the increase in population from 2015 to 2017 – an increase of 417 people or 23.4%. This substantial increase in population is due to development growth and annexation of new communities.
In order to plan for the future, it is important to consider the past, present, and future population figures. The 1990 U.S. Census indicates that the population of Holly Ridge was 728 residents and grew by 103 residents over the next 10 year period. Holly Ridge experienced a sharp increase in population, up nearly 53% from 2000 to 2010. From 2010 to 2016, Holly Ridge had the second fastest growth rate (71%) of all North Carolina municipalities. The Town was second only to the Town of Rolesville, which had a growth rate of 82.7%. It must be noted that annexation has partially resulted in some of the substantial population increase. As of 2017, the Town is now ranked 13th in the state in growth since 2010. It is anticipated that population growth will continue to occur over the next 20 years.
When compared to North Carolina, the median age of the Town is considerably lower. The median age of the Town of Holly Ridge is 30.2 while the median age of North Carolina is 38.4. The largest age group of individuals residing in the Town of Holly Ridge ranges from 20 to 34 years of age, as seen in Figure 2.2. Since only 10.8% of the population is over the age of 65, and nearly 38% are in the age range of 20 to 34, this indicates that the Town is attracting military personnel, young professionals, and young families. Communities with younger populations are also indicative of a growing and diverse locality. Many communities facing stagnating growth or population loss actively recruit younger families and citizens to their community.

**Population Projections**

Population projections can vary widely due to intervening factors such as the strength of the economy, availability of jobs, and housing prices. Population projections identify potential challenges and needs that may confront the community in the near future. Holly Ridge is located in Onslow County, just north of Pender County, which is the second fastest growing county in the state. In addition, the Town is located within 30 miles of the high growth areas of Sneads Ferry, Jacksonville, Hampstead, and Wilmington, NC. Proximity to Topsail Island also lends to the attraction of Holly Ridge and surrounding communities.

County population projections are provided by the North Carolina State Demographer (NCOSBM); however, municipal population projections are not, thus requiring a third party estimate of the projection. The State Demographer’s population growth estimate for Onslow County indicates population increase will occur primarily from natural growth of births and not migration. However, much of the Town’s population growth has occurred as a result of migration from other areas.

The Division of Coastal Management (DCM) recommends the use of the ratio approach to develop population projections for municipalities. By utilizing the NC Office of State Budget and Management (NCOSBM) population projections for Onslow County, the population projection for Holly Ridge can be determined. In 2017, Holly Ridge accounted for 1.1% of the population of Onslow County. The Division of Coastal Management requires that population projections be calculated for a 30-year horizon. However, for infrastructure planning and other calculations based upon these projections, it is wise to use only a twenty-year projection. Estimates through 2047 were made by the Cape Fear Council of Governments (CFCOG). These additional estimates assumed linear growth beyond 2037.
Table 2.1: 30-Year Population Projection: Holly Ridge
Source: NCOE and Cape Fear COG.

<table>
<thead>
<tr>
<th>Year</th>
<th>Holly Ridge – Onslow Growth Projection</th>
<th>Onslow County</th>
<th>Onslow Share</th>
<th>Holly Ridge – Pender Growth Projection</th>
<th>Pender County</th>
<th>Pender Share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
<td>2020</td>
<td>2025</td>
<td>2030</td>
<td>2035</td>
<td>2040</td>
</tr>
<tr>
<td></td>
<td>2,202</td>
<td>2,238</td>
<td>2,362</td>
<td>2,486</td>
<td>2,609</td>
<td>2,733</td>
</tr>
<tr>
<td></td>
<td>196,793</td>
<td>203,464</td>
<td>214,719</td>
<td>225,971</td>
<td>237,223</td>
<td>248,475</td>
</tr>
<tr>
<td></td>
<td>1.1%</td>
<td>1.1%</td>
<td>1.1%</td>
<td>1.1%</td>
<td>1.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td></td>
<td>2,202</td>
<td>2,334</td>
<td>2,546</td>
<td>2,759</td>
<td>2,971</td>
<td>3,184</td>
</tr>
<tr>
<td></td>
<td>60,905</td>
<td>64,820</td>
<td>70,726</td>
<td>76,632</td>
<td>82,534</td>
<td>88,444</td>
</tr>
<tr>
<td></td>
<td>3.6%</td>
<td>3.6%</td>
<td>3.6%</td>
<td>3.6%</td>
<td>3.6%</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

Utilizing the ratio approach, in 2035, the population of Holly Ridge is projected to be 2,609 people. This is an increase of about 400 people or nearly 20%. In 2047, the population is expected to be 2,907 people. Assuming this projection is accurate, the population will increase by approximately 700 people over the next thirty years. However, because the ratio method utilizes the Onslow County growth rate, rather than that of faster growing Pender County, the projections are likely on the low end of anticipated growth for the Town. If the ratio method utilized the Pender County growth rate and population projections, the Town’s 2047 population would be 3,482 persons.

Yet, if the population projection was based on residential building permits issued the projections would be much higher. Over the last several years, the Town has issued approximately 100 new construction residential building permits per year. Based on 2.5 persons per housing unit, this would equate to roughly 250 new residents per year. Given this figure, by 2047, the Town’s population would be nearly 10,000 (9,702).

**Housing**

Analyzing the Town’s housing stock allows the community, elected officials, and planners to get a sense of the range of housing opportunities available and the demand for future housing within the Town. Table 2.2 shows the Town’s housing occupancy and tenure in 2017. Of the total housing units, approximately 76% are occupied and roughly 24% are vacant. Approximately 62% of the occupied housing units are owner-occupied, while nearly 38% are renter-occupied. The rate of renter-occupied housing units in the Town is marginally higher than the 32.9% renter-occupied housing rate for North Carolina.
Table 2.2. Town of Holly Ridge: Housing Units by Occupancy  
Source: U.S. Census Bureau ACS 2017 5-Year Estimates

<table>
<thead>
<tr>
<th>Housing Units</th>
<th>Percentage of Housing Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupied housing units</td>
<td>76.1%</td>
</tr>
<tr>
<td>Owner-occupied housing units</td>
<td>62.0%</td>
</tr>
<tr>
<td>Renter-occupied housing units</td>
<td>38.0%</td>
</tr>
<tr>
<td>Vacant housing units</td>
<td>23.9%</td>
</tr>
<tr>
<td>Total housing units</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The Town’s housing stock consists of over 70% of single-family residences. Of the remaining housing units, over 22% are mobile homes and less than 5% are occupied for multi-family use. When compared to the state’s housing stock, the Town of Holly Ridge has more mobile homes and less multi-family housing units. The 2017 Census data for North Carolina indicates that approximately 13.2% of all housing units are mobile homes and approximately 17.6% are occupied for multi-family use. The figures in Figure 2.3 are sourced from the American Community Survey 2017 5-Year Estimates and the total housing units reflect the total number of structures built, as provided in Table 2.3.

Figure 2.3. Town of Holly Ridge: Types of Housing Units  
Source: U.S. Census Bureau ACS 2017 5-Year Estimates

Table 2.3 shows the years in which housing units were built. The largest percentage of structures in the Town were built between 2010 and 2017 – higher than the percentage of structures built during the housing boom in the early 2000s. Nearly 50% of the Town’s structures were built since 2010, indicating significant population and housing growth. It should be noted, that census figures do not provide a current estimate of total structures built. Based on building permit figures from the Town, there have been 446 structures built since 2014.
Table 2.3. Town of Holly Ridge: Year House Built
Source: U.S. Census Bureau ACS 2017 5-Year Estimates

<table>
<thead>
<tr>
<th>Year House Built</th>
<th>Number of Homes Built</th>
<th>Percentage of Homes Built</th>
</tr>
</thead>
<tbody>
<tr>
<td>*2014 to 2017</td>
<td>446</td>
<td>30.0%</td>
</tr>
<tr>
<td>2010 to 2013</td>
<td>281</td>
<td>18.9%</td>
</tr>
<tr>
<td>2000 to 2009</td>
<td>277</td>
<td>18.7%</td>
</tr>
<tr>
<td>1990 to 1999</td>
<td>186</td>
<td>12.5%</td>
</tr>
<tr>
<td>1980 to 1989</td>
<td>125</td>
<td>8.4%</td>
</tr>
<tr>
<td>1970 to 1979</td>
<td>72</td>
<td>4.8%</td>
</tr>
<tr>
<td>1960 to 1969</td>
<td>43</td>
<td>2.9%</td>
</tr>
<tr>
<td>1950 to 1959</td>
<td>35</td>
<td>2.4%</td>
</tr>
<tr>
<td>1940 to 1949</td>
<td>10</td>
<td>0.7%</td>
</tr>
<tr>
<td>1939 and earlier</td>
<td>10</td>
<td>0.7%</td>
</tr>
<tr>
<td>Total Structures Built</td>
<td>1,485</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

*Number of residential permits issued: Year 2014: 102; Year 2015: 118; Year 2016: 84, Year 2017: 142

EDUCATION

The educational attainment of a community is the highest level of education completed and can indicate the population’s health, employment, and income level. A community that contains higher education levels tends to increase workforce productivity and involvement in society.

Table 2.4. Town of Holly Ridge: Educational Attainment
Source: U.S. Census Bureau ACS 2017 5-Year Estimates

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population 25 years and over</td>
<td>1,588</td>
<td>100%</td>
</tr>
<tr>
<td>Less than 9th grade</td>
<td>43</td>
<td>2.7%</td>
</tr>
<tr>
<td>9th to 12th grade, no diploma</td>
<td>56</td>
<td>3.5%</td>
</tr>
<tr>
<td>High school graduate (includes equivalency)</td>
<td>333</td>
<td>21.0%</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>329</td>
<td>20.7%</td>
</tr>
<tr>
<td>Associate degree</td>
<td>183</td>
<td>11.5%</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>490</td>
<td>30.9%</td>
</tr>
<tr>
<td>Graduate or professional degree</td>
<td>154</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

Percent high school graduate or higher  --  93.8%
Percent bachelor’s degree or higher     --  40.6%

Of the population that is over 25 years of age, the education level ranges from less than 9th grade to graduate and professional degrees. Approximately 94% of the Town’s population earned at least a high school diploma, followed by nearly 41% earning at least a bachelor’s degree. Both of these percentages have increased since 2010. Nearly 10% of the Town’s population has a Graduate or professional degree.
ECONOMY

Local economic statistics are important for future employers, business owners, and economic development initiatives. Household income is the combined gross income of all members of a household who are 15 years or older. It is important to gauge household income because it is a useful economic indicator of the Town’s standard of living and is typically used by lenders to assess the risk of underwriting loans. The median household income in the Town is $61,324, which is nearly $11,000 more than North Carolina’s median household income. The figures presented in Table 2.5 show a range of incomes, adjusted to the 2017 dollar value. This indicates that many residents have discretionary income to support retail and commercial enterprises, and to allow for leisure activities. The median household income for North Carolina in 2017 was $50,320.

Table 2.5 Town of Holly Ridge: Household Income
Source: U.S. Census Bureau ACS 2017 5-Year Estimates

<table>
<thead>
<tr>
<th>Income in 2015 (Inflation adjusted 2017 dollars)</th>
<th>Number of Households</th>
<th>Percentage of Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $10,000</td>
<td>51</td>
<td>5.6%</td>
</tr>
<tr>
<td>$10,000 to $14,999</td>
<td>25</td>
<td>2.7%</td>
</tr>
<tr>
<td>$15,000 to $24,999</td>
<td>107</td>
<td>11.8%</td>
</tr>
<tr>
<td>$25,000 to $34,999</td>
<td>68</td>
<td>7.5%</td>
</tr>
<tr>
<td>$35,000 to $49,999</td>
<td>128</td>
<td>14.1%</td>
</tr>
<tr>
<td>$50,000 to $74,999</td>
<td>156</td>
<td>17.1%</td>
</tr>
<tr>
<td>$75,000 to $99,999</td>
<td>186</td>
<td>20.4%</td>
</tr>
<tr>
<td>$100,000 to $149,999</td>
<td>107</td>
<td>11.8%</td>
</tr>
<tr>
<td>$150,000 to $199,999</td>
<td>35</td>
<td>3.8%</td>
</tr>
<tr>
<td>$200,000 or more</td>
<td>47</td>
<td>5.2%</td>
</tr>
<tr>
<td>Households (estimated)</td>
<td>910</td>
<td>100.0%</td>
</tr>
<tr>
<td>Median household income (dollars)</td>
<td>$61,324</td>
<td>--</td>
</tr>
</tbody>
</table>

Table 2.6. Town of Holly Ridge: Employment by Industry
Source: U.S. Census Bureau ACS 2017 5-Year Estimates

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry, fishing and hunting, and mining</td>
<td>4</td>
<td>0.5%</td>
</tr>
<tr>
<td>Construction</td>
<td>121</td>
<td>13.6%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>32</td>
<td>3.6%</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>27</td>
<td>3.0%</td>
</tr>
<tr>
<td>Retail trade</td>
<td>124</td>
<td>14.0%</td>
</tr>
<tr>
<td>Transportation and warehousing, and utilities</td>
<td>25</td>
<td>2.8%</td>
</tr>
<tr>
<td>Information</td>
<td>10</td>
<td>1.1%</td>
</tr>
<tr>
<td>Finance, insurance, real estate, and rental and leasing</td>
<td>40</td>
<td>4.5%</td>
</tr>
<tr>
<td>Professional, scientific, management, administrative, and waste management services</td>
<td>48</td>
<td>5.4%</td>
</tr>
<tr>
<td>Educational, health and social services</td>
<td>212</td>
<td>23.9%</td>
</tr>
<tr>
<td>Arts, entertainment, recreation, accommodation and food services</td>
<td>142</td>
<td>16.0%</td>
</tr>
<tr>
<td>Other services (except public administration)</td>
<td>25</td>
<td>2.8%</td>
</tr>
<tr>
<td>Public administration</td>
<td>77</td>
<td>8.7%</td>
</tr>
<tr>
<td>Civilian employed population 16 years and over</td>
<td>887</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Table 2.6 shows the number and percentage of the population employed in each industry within the Town. Approximately 50% of the civilian population over the age of 16 is part of the labor force. Per the U.S. Census Bureau classifications, labor force refers to those employed at a place of business or in private practice and only includes civilian employment. The largest civilian industry in Holly Ridge is education, health, and social services employing over one fifth of the working population at 23.9%. Arts, entertainment, recreation, accommodation and food services closely follows education, health, and social services, employing nearly 16.0% of the population. In 2010, retail trade was the largest industry in Holly Ridge, at 14% but has dropped to the third largest industry in 2017.

Based on census figures, 238 residents are employed in the Armed Forces. When compared with the civilian employment figures, the largest single industry would then be Armed Forces.

**SUMMARY**

- From 2010 to 2016, Holly Ridge had the second fastest growth rate (71%) of all North Carolina municipalities. The Town was second only to the Town of Rolesville, which had a growth rate of 82.7%. As of 2017, the Town is now ranked 13th in the state in growth since 2010.
- When compared to North Carolina, the median age of the Town is considerably lower. The median age of the Town of Holly Ridge is 30.2 while the median age of North Carolina is 38.4.
- The Town's housing stock consists of over 70% of single-family residences. Of the remaining housing units, over 22% are mobile homes and less than 5% are occupied for multi-family use.
- Approximately 36.6% of the Town's structures were built since 2010, indicating significant population and housing growth.
- Approximately 94% of the Town's population earned at least a high school diploma, followed by nearly 41% earning at least a bachelor’s degree.
- The median household income in the Town is $61,324, which is nearly $11,000 more than North Carolina’s median household income.
CHAPTER 3: NATURAL SYSTEMS ANALYSIS

The Natural Systems Analysis defines, describes, and analyzes the natural features and environmental conditions found in the Town of Holly Ridge. There are several features identified that contribute to quality of life and property values for residents and could impact development suitability for certain types of new development or potential redevelopment.

This chapter contains a series of maps and inventories to visually display the condition, location, and extent of the natural environment within the Town. All referenced maps are located at the end of the chapter.

AREAS OF ENVIRONMENTAL CONCERN

The State Guidelines for Areas of Environmental Concern (15A NCAC 7H, or regulations governing development for AECs) require that local land use plans give special attention to the protection of appropriate AECs. CAMA charges the Coastal Resources Commission (CRC) with the responsibility for identifying the areas—water and land—in which uncontrolled or incompatible development might result in irreversible damage. CAMA further instructs the CRC to determine what development activities are appropriate in such areas – local governments are required to give special attention to these areas when developing land use plans. An AEC is an area of natural importance designated by the CRC. An AEC may be easily destroyed by erosion or flooding. It may also have environmental, social, economic, or aesthetic values worthy of protection. AECs have also been designated for protection from uncontrolled development that causes irreversible damage to property, public health, or the environment.

To limit detrimental impacts on AECs, CAMA established a permitting program. The intent of the permitting program is not to stop development, but rather to ensure the compatibility of development with continued productivity and value of critical land, waters, and natural resources. Responsibility for the permitting program is shared between the CRC and local governments. Within the Town of Holly Ridge, CAMA permits are issued by a Division of Coastal Management Representative.

Estuarine shorelines and Coastal Wetlands are the only AECs applicable to the Town of Holly Ridge. These areas are located along the Intracoastal Waterway and the Summerhouse community.
**WATER QUALITY**

The Water Pollution Control Act Amendments (Clean Water Act) of 1972, and the revised Act of 1977, marked an important step in regulating water pollution. First, it increased the funding levels available through the construction grants program for assistance in the building of water treatment plants. Second, it instituted technology based effluent standards as opposed to stream base standards. Third, it established a national permit system for regulating point source discharges. Most importantly, the Act established a national policy and specific goals for restoring and maintaining the chemical, physical, and biological properties of the nation’s fishable and swimmable waters.

Several sections instituted programs under the Clean Water Act that significantly affect development projects today, including Section 401, which requires water quality certification for activities that may cause a discharge into navigable waters or wetlands; Section 402, which established the National Pollution Discharge Elimination System (NPDES) for wastewater discharge permits; and Section 404, which regulates the discharge of dredge and fill material into navigable waters or wetlands. The evolution of the implementation of the Clean Water Act was the shift in the enforcement and day-to-day administration of the programs from the U.S. Environmental Protection Agency to the states.

**SURFACE WATER QUALITY CLASSIFICATIONS**

Surface Water Classifications are designations applied to surface water bodies, such as streams, rivers, and lakes, which define suitable uses for the applicable water body (e.g. swimming, fishing, or drinking water supply) and carry with them an associated set of water quality standards to protect those uses. Surface water classifications are a regulatory tool used to manage and protect all streams, rivers, lakes, and other surface waters in North Carolina. Classifications and their associated protection rules may be designed to protect water quality, fish and wildlife, or other special characteristics. Each classification has associated standards that are used to determine if the designated uses are being protected. All surface waters in Holly Ridge are High Quality Waters (HQW) (see below) that also have additional designations as “swamp waters” due to their low velocity and high nutrient content or SA for being designated as tidal salt waters based on their location. Map 3.1 shows the Surface Water Classifications in the Town of Holly Ridge.

**Class SC** – All tidal salt waters protected for secondary recreation such as fishing, boating, and other activities involving minimal skin contact; fish and noncommercial shellfish consumption; aquatic life propagation and survival; and wildlife.

**High Quality Waters (HQW)** – Supplemental classification intended to protect waters which are rated excellent based on biological and physical/chemical characteristics through Division monitoring or special studies, primary nursery areas designated by the Marine Fisheries Commission, and other functional nursery areas designated by the Marine Fisheries Commission.
Swamp Waters (Sw) – Supplemental classification intended to recognize those waters which have low velocities and other natural characteristics which are different from adjacent streams. A water labeled as a swamp water classification are those waters which have low velocities and dissolved oxygen levels. These waters are naturally more acidic (have lower pH values).

Class SA – Tidal salt waters that are used for commercial shellfishing or marketing purposes and are also protected for all Class SC and Class SB uses. All SA waters are also HQW by supplemental classification.

Outstanding Resource Waters (ORW) – All outstanding resource waters are a subset of High Quality Waters. This supplemental classification is intended to protect unique and special waters having excellent water quality and being of exceptional state or national ecological or recreational significance. To qualify, waters must be rated Excellent by the NC Division of Water Resources (NCDWR) and have one of the following outstanding resource values: outstanding fish habitat and fisheries, unusually high level of water-based recreation or potential for such kind of recreation, some special designation such as North Carolina Natural and Scenic River or National Wildlife Refuge, important component of state or national park or forest, or special ecological or scientific significance.

Shellfishing Closures

There are a number of waters in and adjacent to the Town of Holly Ridge that are closed to shellfishing. These areas are illustrated graphically on Figure 3.1 as well as on the NCDEQ Division of Marine Fisheries website. These closures are due primarily to stormwater runoff and other nonpoint sources resulting from development located within the watershed.

Closed shellfish areas are areas where shellfish harvesting is prohibited by law due to unsafe levels of pollutants caused by conditions such as wastewater discharge and non-point source stormwater run-off. In waters around Holly Ridge, shellfishing is prohibited in portions of the Spicer Bay/ King Creek area, Turkey Creek, Red’s Cove and Batt’s Mill Creek. See the NCDEQ Division of Marine Fisheries website to view the entire shellfish closure map.
Wetlands are important ecological features in much of the Southeast United States. As a protected ecosystem, wetlands must be delineated by the Army Corps of Engineers if development is proposed within a wetland system or close by. This ensures the wetland is either protected or mitigated through land banking programs that replace removed systems. Wetlands enhance water quality by removing excess nutrients and chemicals and generally function as filters. Wetlands are scattered throughout the ETJ and Corporate Limits. Within these areas there are approximately 2,426 acres of wetlands. See below for descriptions of the types of wetlands and see Map 3.2 for locations.

**Bottomland Hardwood/Riverine Swamp Forest** – Riverine forested or occasionally scrub/shrub communities usually occurring in floodplains that are semi-permanently to seasonally flooded. In bottomland hardwood systems, typical species include oaks (overcup, water, laurel, and swamp chestnut), sweet gum, green ash, cottonwoods, willows, river birch, and occasionally pines. In swamp forest systems, typical species include cypress, black gum, water tupelo, green ash, and red maple.
Coastal Wetlands – CAMA specifically defines coastal wetlands as any salt marsh or other marsh subject to regular or occasional flooding by lunar tides and contains some, but not necessarily all of the following marsh plant species: Cord Grass, Black Needlebrush, Glasswort, Salt Grass, Sea Lavender, Bulrush, Saw Grass, Cat-tail, Salt Meadow Grass, and Salt Reed Grass. This definition does not include flooding by tides associated with hurricanes, tropical storms, or severe weather events.

Estuarine Shrub/Scrub – Any shrub/scrub vegetation dominated habitat subject to occasional flooding by tides, including wind tides (whether or not the tidewaters reach the marshland areas through natural or artificial watercourses).

Hardwood Flat – Poorly drained interstream flats not associated with rivers or estuaries. Seasonally saturated by a high water table or poor drainage. Species vary greatly but often include sweet gum and red maple.

Headwater Swamp – Wooded, riverine systems along first order streams. These include hardwood dominated communities with moist soil most of the year. Channels receive their water from overland flow and rarely overflow their own banks.

Human Impacted Wetlands – Areas of human impact have physically disturbed the wetland, but the area is still a wetland. Impoundments and some cutovers are included in this category, as well as other disturbed areas such as power lines.

Pine Flat – Palustrine (non-tidal), seasonally saturated pine habitats on hydric (saturated) soils that may become dry for part of the year, generally on flat or nearly flat areas that are not associated with a river or stream system. This category does not include managed pine systems.

Pocosin – Palustrine (non-tidal) scrub/shrub communities (i.e. non-Estuarine Scrub/Shrub) dominated by evergreen shrubs, often mixed with pond or loblolly pines. Typically occur on saturated, acid, nutrient poor, sandy or peaty soils; usually removed from large streams; and subject to periodic burning.

Managed Pineland – Seasonally saturated, managed pine forests occurring on hydric soils. This wetland category may also contain non-managed pine forests occurring on hydric soils. Generally these are areas that were not shown on National Wetland Inventory maps. These areas may or may not be jurisdictional wetlands.
### Table 3.1: Types of Wetlands in Holly Ridge

<table>
<thead>
<tr>
<th>Types</th>
<th>Acres</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottomland Hardwood and Riverine Swamp Forest</td>
<td>223.22</td>
<td>9.20%</td>
</tr>
<tr>
<td>Coastal Wetlands</td>
<td>25.23</td>
<td>1.04%</td>
</tr>
<tr>
<td>Estuarine Shrub/Scrub</td>
<td>11.00</td>
<td>0.45%</td>
</tr>
<tr>
<td>Hardwood Flat</td>
<td>82.44</td>
<td>3.40%</td>
</tr>
<tr>
<td>Headwater Swamp</td>
<td>59.73</td>
<td>2.46%</td>
</tr>
<tr>
<td>Human Impacted</td>
<td>15.61</td>
<td>0.64%</td>
</tr>
<tr>
<td>Managed Pineland</td>
<td>1,119.95</td>
<td>46.15%</td>
</tr>
<tr>
<td>Pine Flat</td>
<td>700.33</td>
<td>28.86%</td>
</tr>
<tr>
<td>Pocosin</td>
<td>189.14</td>
<td>7.79%</td>
</tr>
<tr>
<td>Total</td>
<td>2,426.67</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

#### Natural Heritage Areas

The North Carolina Natural Heritage Program collects information on the geographic location of rare plants and animals, exemplary or unique natural communities, and important animal assemblages (e.g., colonial waterbird nesting sites). Collectively, these plants, animals, natural communities, and animal assemblages are referred to as "elements." No element occurrences are located within the Town boundary. However, the Turkey Creek Marsh Significant Natural Heritage Area (SNHA) is located just east of the Town boundary. This particular SNHA is classified as “High” due to the abundance of natural species and habitat. As a result, this land area could be considered for conservation by a land trust or public agency. See Map 3.3 for more information.

#### Natural Hazards

**Flood Hazard**

In support of the National Flood Insurance Program (NFIP), FEMA has undertaken a nationwide effort of flood hazard identification and mapping to produce Flood Hazard Boundary Maps (FHBMs), Flood Insurance Rate Maps (FIRMs), and Flood Boundary and Floodway Maps (FBFMs). Several areas of flood hazards are commonly identified on these maps. One of these areas is the Special Flood Hazard Area (SFHA), which is defined as an area of land that would be inundated by a flood having a 1-percent chance of occurring in any given year (also referred to as the base flood or 100-year flood). The 1-percent-annual chance standard was chosen after considering various alternatives. The standard, in the opinion of the agency, constitutes a reasonable compromise between the need for building restrictions to minimize potential loss of life and property and the economic benefits to be derived from floodplain development. Development may take place within the SFHA, provided that development complies with local floodplain management ordinances. Flood insurance is required for structures with a mortgage that are located within the SFHA. Flood insurance is available to protect federal financial investments and assistance used for acquisition and/or construction purposes within communities participating in the NFIP.
Minimal Special Flood Hazard Areas (SFHA) are found within the Town. The most significant concentration of flood prone land is located in the Summerhouse Community adjacent to the Intracoastal Waterway. See Map 3.4 for more information.

**Summary**

Listed below is a summary of findings for Holly Ridge.

- All surface waters in Holly Ridge are High Quality Waters.
- Within the Town of Holly Ridge there are approximately 2,426 acres of wetlands. The majority of these are non-coastal wetlands, with 1 percent of the total wetland area consisting of coastal wetlands.
- Estuarine shorelines and coastal wetlands are the only Areas of Environmental Concern (AECs) applicable to the Town of Holly Ridge. These areas can be found along the Intracoastal Waterway and the Summerhouse community.
- In waters around Holly Ridge, shellfishing is prohibited in portions of the Spicer Bay/ King Creek area, Turkey Creek, Red’s Cove and Batt’s Mill Creek.
- Minimal Special Flood Hazard Areas (SFHA) are found within the Town with the most significant concentration of flood prone land located in the Summerhouse Community adjacent to the Intracoastal Waterway.
NATURAL SYSTEMS GOALS, OBJECTIVES, AND POLICIES

The Town has established a set of land use and development-related policies to act as guidelines during any official decision making process. These policies and goals provide citizens, property owners, and developers with a predictability of official actions. Town policies in this chapter relate to natural systems. Two CAMA management topics are covered in the policy section herein: Water Quality and Natural Hazard Areas. It should be noted that these topic areas are developed as part of the Division of Coastal Management’s 7B Land Use Planning Guidelines.

Refer to Appendix A for Definitions of actions words contained within the policy section.

WATER QUALITY AND NATURAL ENVIRONMENT

Goal 3.1: Maintain, protect, and, where possible, enhance the natural environment and water quality in all coastal wetlands, rivers, streams, and estuaries.

Objective 3.1: The Town shall take actions designed to protect and where possible enhance and restore the sensitive natural resources located in and adjacent to the Town of Holly Ridge.

Policy 3.1.A: Areas of Environmental Concern (AECs): The Town supports the CAMA Permitting program and State policies to protect AECs. Acceptable uses within the individual AECs of the estuarine system shall be those requiring water access or those that cannot function elsewhere. Such uses shall be consistent with the general use standards for coastal wetlands, estuarine waters, and public trust areas stated in 15NCAC subchapter 7H.

Policy 3.1.B: CAMA Guidelines: The Town supports the Coastal Area Management Act (CAMA) guidelines and efforts of the North Carolina Department of Environmental Quality, Division of Coastal Management and the Coastal Resources Commission to protect the coastal wetlands, estuarine waters, estuarine shorelines, and public trust waters in and adjacent to Holly Ridge.

Policy 3.1.C: Estuarine Shorelines: The Town supports residential, recreational, research, educational, and commercial land uses along the estuarine shoreline provided all standards of 15NCAC Subchapter 7H relevant to estuarine shoreline AECs are met, and the proposed use is consistent with the Town’s Zoning Regulations.

Policy 3.1.D: Stormwater Management: The Town supports efforts to mitigate stormwater and localized flooding as a result of new development.

Recommended Action 3.1.D.1: Consider establishing local stormwater management controls to address such things as fill, individual lot development, and impervious coverage thresholds.
**Recommended Action 3.1.D.2:** Consider developing a Stormwater Management Master Plan.

**Recommended Action 3.1.D.3:** Consider applying for funding to complete a Watershed Restoration Plan to encourage a reduction in stormwater runoff and a subsequent enhancement of surface water quality.

**Policy 3.1.E: Municipal Stormwater Management:** Where practicable, the Town shall strive to eliminate stormwater discharges resulting from municipal activities. Where elimination is not possible, the Town shall mitigate the sources of stormwater discharges to the maximum extent practicable.

**Policy 3.1.F: Wetland Preservation:** The Town supports wetland preservation as a means for reducing flood vulnerability, mitigating stormwater runoff, and protecting local surface water quality.

**Recommended Action 3.1.F.1:** Consider wetland acquisition as a priority in future expansions of Holly Ridge parks and recreation areas.

**Policy 3.1.G: Commercial and Recreational Fishing:** The Town supports commercial and recreational fishing and efforts to control pollution of affected waters to preserve nursery and habitat areas.

**Policy 3.1.H: Aquaculture:** The Town supports aquaculture activities that meet applicable federal, state, and local policies provided they do not negatively alter the natural environment, impact scenic vistas, or disrupt maritime navigation.

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**Natural Hazard Areas**

**Goal 3.2:** Conserve and maintain flood plains, coastal wetlands, and other environmental resource features for their natural storm protection functions and their natural resources giving recognition to public health, safety, and welfare issues.

**Objective 3.2:** The Town will be proactive in its efforts to minimize damage and threats to public health and safety associated with hurricanes, severe weather, and other hazards and work to implement the *Onslow County Multi-jurisdictional Hazard Mitigation Plan (2016).*

**Policy 3.2.A: Flood Prone Areas:** The Town supports development within the Special Flood Hazard Area (SFHA), provided that all new construction and substantial improvements comply strictly to the Town’s Flood Damage Prevention Ordinance, which has been adopted in conjunction with the Town’s participation in the National Flood Insurance Program.

**Recommended Action 3.2.A.1:** Continue to participate in the National flood Insurance Program and enforce the Flood Damage Prevention Ordinance.
Policy 3.2.B: Minimize Potential Fire Damage: The Town supports efforts to reduce the risk of damage from urban fires as a result of future development.

Policy 3.2.C: Public Education: The Town supports efforts to ensure the public is aware of the risks of different types of natural hazards in order to reduce their personal exposure to natural hazards.

Recommended Action 3.2.C.1: Implement a public education program designed to help inform the public about their exposure to natural hazards and actions they can take to mitigate potential damage to public health, safety, and property from natural disasters. This includes, but is not limited to:

- Ensure the Town Hall maintains documents about flood insurance, flood protection, floodplain management, and natural and beneficial functions of floodplains. Many documents are available free of charge from the Federal Emergency Management Agency (FEMA);
- Encourage builders, developers and architects to become familiar with the NFIP’s land use and building standards;
- Provide local real estate agents with handouts advising potential buyers to investigate potential flood hazards for the property they are considering purchasing;
- Advertise the availability of flood insurance on an annual basis; and
- Place hazard-related information on the Town’s website and distribute appropriate educational materials.

Policy 3.2.D: Mutual Aid: The Town shall maintain established mutual aid agreements and where necessary develop new agreements to assist with post-storm event clean-up, damage assessment, and reconstruction activities.
*See Chapter 3 for descriptions of each wetland type.
CHAPTER 4: COMMUNITY FACILITIES

The CAMA planning guidelines encourage coastal communities to evaluate the location and adequacy of community facilities that protect important environmental factors and that attract land development in the coastal area. This chapter provides analysis and information pertaining to each item listed below.

- water supply system;
- wastewater system;
- transportation systems; and
- parks and recreation facilities.

WATER SUPPLY SYSTEM

The Onslow Water and Sewer Authority (ONWASA) supplies the Town of Holly Ridge with water service. Due to increasing need for centralized water and sewer service to serve Onslow County’s growing population, the ONWASA regional authority was formed in 2000 and in 2005 acquired the Town’s water and sewer facilities. As a result, the Town is no longer directly responsible for maintaining or providing water or sewer service to its residents.

According to the 2017 ONWASA Local Water Supply Plan, the authority has more than 1,100 miles of water lines serving Onslow County (See Map 4.1 displaying the location of water lines). The Local Water Supply Plan is reviewed annually and is required by the North Carolina Division of Water Resources to ensure adequate supplies are available for shortages or emergencies (i.e. fires). Throughout the County, there are 48,190 residential and 1,716 nonresidential connections to the centralized water system.

Drinking water for Holly Ridge residents is sourced from various groundwater wells in the area. According to the Local Water Supply Plan, there are 17.7 million gallons per day (MGD) of water supply available to ONWASA customers. In 2017, the ONWASA customer base used an average of 8.7 MGD per day or just under 50% of available supply. Accordingly, the system has ample supply to serve the County’s growing population. Of the approximately 8.7 MGD used throughout the County, the Town accounts for roughly 0.16 MGD or 160,000 gallons per day. By 2060, ONWASA anticipates water demand will account for only 65% of available supply (See Table 4.1). Barring unforeseen population increases or groundwater supply shortages, there is ample water supply to serve the Town’s current and future population base.
Table 4.1: Holly Ridge Water Consumption

<table>
<thead>
<tr>
<th>Month</th>
<th>Average Use (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug-18</td>
<td>0.17</td>
</tr>
<tr>
<td>Jul-18</td>
<td>0.18</td>
</tr>
<tr>
<td>Jun-18</td>
<td>0.16</td>
</tr>
<tr>
<td>May-18</td>
<td>0.15</td>
</tr>
<tr>
<td>Apr-18</td>
<td>0.13</td>
</tr>
<tr>
<td>Mar-18</td>
<td>0.15</td>
</tr>
<tr>
<td>Feb-18</td>
<td>0.19</td>
</tr>
<tr>
<td>Jan-18</td>
<td>0.14</td>
</tr>
<tr>
<td>Dec-17</td>
<td>0.16</td>
</tr>
<tr>
<td>Nov-17</td>
<td>0.16</td>
</tr>
<tr>
<td>Oct-17</td>
<td>0.14</td>
</tr>
<tr>
<td>Sep-17</td>
<td>0.19</td>
</tr>
<tr>
<td>Average</td>
<td>0.16</td>
</tr>
</tbody>
</table>

Wastewater System

Similar to water, wastewater (sanitary sewer) service is also provided by ONWASA. In Holly Ridge, wastewater flow is treated at two different wastewater treatment plants (WWTP) – the Holly Ridge WWTP and the Summerhouse WWTP (See Map 4.1). The wastewater distribution system is comprised of both gravity lines and pressurized force mains. The Holly Ridge Wastewater Treatment Plant (WWTP) has a capacity of 0.24 million gallons per day (MGD). The average flow at the plant from September 2017 to August 2018 was 0.13 MGD, which accounts for 54% of the permitted design flow of the wastewater plant (See Table 4.2). However, the facility had many days in which the maximum daily flow exceeded the available capacity. Due to a force main connecting the Holly Ridge plant to the Summerhouse WWTP, excess flow can be distributed to the Summerhouse WWTP to ensure continued operation of the system and reduce the potential for overflow.

Located in the large planned development bordering the Intracoastal Waterway, the Summerhouse WWTP has a design capacity of 400,000 gallons per day (0.4 MGD) but is currently permitted to treat just 132,00 gallons per day (0.13 MGD). Because the plant was built to serve the Summerhouse Community at full build-out, average flow is much less than the plants design capacity. From September 2017 to August 2018, the average flow at the plant was 0.10 MGD, with a total max daily flow of 0.13 MGD (See Table 4.2). The Summerhouse WWTP has the potential to expand the permitted capacity at the plant, but this will require additional engineering measures and a storage or discharge location for treated wastewater.
Table 4.2: Holly Ridge Wastewater Treatment Plant Sites
Source: ONWASA

<table>
<thead>
<tr>
<th>Month</th>
<th>Holly Ridge WWTP: 0.24 MGD</th>
<th></th>
<th>Summerhouse WWTP: 0.13 MGD</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Flow (MGD)</td>
<td>Max Daily Flow (MGD)</td>
<td>Average Flow (MGD)</td>
<td>Max Daily Flow (MGD)</td>
</tr>
<tr>
<td>Aug-18</td>
<td>0.16</td>
<td>0.30</td>
<td>0.10</td>
<td>0.13</td>
</tr>
<tr>
<td>Jul-18</td>
<td>0.17</td>
<td>0.40</td>
<td>0.09</td>
<td>0.10</td>
</tr>
<tr>
<td>Jun-18</td>
<td>0.18</td>
<td>0.31</td>
<td>0.09</td>
<td>0.10</td>
</tr>
<tr>
<td>May-18</td>
<td>0.14</td>
<td>0.39</td>
<td>0.09</td>
<td>0.10</td>
</tr>
<tr>
<td>Apr-18</td>
<td>0.14</td>
<td>0.33</td>
<td>0.09</td>
<td>0.10</td>
</tr>
<tr>
<td>Mar-18</td>
<td>0.13</td>
<td>0.22</td>
<td>0.09</td>
<td>0.10</td>
</tr>
<tr>
<td>Feb-18</td>
<td>0.14</td>
<td>0.31</td>
<td>0.10</td>
<td>0.11</td>
</tr>
<tr>
<td>Jan-18</td>
<td>0.18</td>
<td>0.41</td>
<td>0.10</td>
<td>0.13</td>
</tr>
<tr>
<td>Dec-17</td>
<td>0.08</td>
<td>0.22</td>
<td>0.11</td>
<td>0.13</td>
</tr>
<tr>
<td>Nov-17</td>
<td>0.06</td>
<td>0.18</td>
<td>0.12</td>
<td>0.13</td>
</tr>
<tr>
<td>Oct-17</td>
<td>0.08</td>
<td>0.20</td>
<td>0.12</td>
<td>0.13</td>
</tr>
<tr>
<td>Sep-17</td>
<td>0.11</td>
<td>0.23</td>
<td>0.12</td>
<td>0.13</td>
</tr>
<tr>
<td>Average</td>
<td>0.13</td>
<td>-</td>
<td>0.10</td>
<td>-</td>
</tr>
</tbody>
</table>

Both the Summerhouse WWTP and the Holly Ridge WWTP are at or near capacity when accounting for maximum daily flow rates. As a result, ONWASA has retained an engineering firm to develop recommendations to ensure wastewater capacity will be available for future development. However, there is no mandatory connection requirement thus allowing for the use of septic in the event no capacity is available or centralized wastewater service is undesired.

**Transportation Systems**

The Town of Holly Ridge is served by the Down East Rural Transportation Planning Organization (DERPO). The DERPO serves Carteret, Craven, Jones, Onslow, and Pamlico Counties. The RPO was formed in order to more effectively funnel transportation dollars to rural areas and engage the public in the transportation planning process. The Down East RPO is one of twenty such organizations in the state.

The Holly Ridge town center is located at the intersection of US 17 and NC 50. Over the last thirty years, traffic volumes have increased dramatically along the US 17 corridor. Exponential population growth and expanding residential development in Pender and Onslow County have led to substantial traffic volume increases in the area.

The annual traffic count used for planning purposes is called the Annual Average Daily Traffic Count (AADT). The AADT is the number of vehicles passing in both directions over a single point on a roadway over the course of a year divided by 365 days in a year. This tool is used to gauge increases in traffic flow over time. From 2007 to 2017, annual average daily traffic volumes on US 17 in Holly Ridge increased by approximately 30% (See Map 4.2)
for more information). Traffic volumes on NC 50 have also experienced a noted increase over the last ten years. Continued development, coupled with projected population increase, will likely result in continued traffic growth within the Town of Holly Ridge. Completion of the Hampstead Bypass will also encourage more commuting traffic to and from Wilmington as the resulting limited access highway will provide a direct route to the metro area thus reducing travel times and enticing more residents to live in the area.

**NON-MOTORIZED TRANSPORTATION SYSTEMS**

Non-motorized transportation is increasingly important nationwide and particularly for those communities that may attract coastal tourism or a retiree population such as Holly Ridge. Non-motorized transportation refers to alternative travel choices such as cycling or walking. While non-motorized transportation is often considered a leisure travel mode, it can also be utilized to travel from point A to B for utilitarian purposes. In the past, residents have expressed interest in expanding options for cycling and pedestrian travel in the Town.

Currently, there are limited bicycle and pedestrian facilities available for use within the Town. Sidewalks are available in several of the Town’s subdivisions, including Summerhouse and the Neighborhoods of Holly Ridge. However, there is no cohesive or connected sidewalk network available in much of the Town’s corporate limits. Bicycle facilities are also lacking in availability. The Town’s primary roadways – US 17 and NC 50 – have no dedicated facilities for cyclists or pedestrians. While US 17 does have a paved outside shoulder, the facility does not qualify as a dedicated bicycle lane.

At the intersection of NC 50 and 210, approximately 2 miles south of Town, sidewalk facilities are available and provide a continual connection to Topsail Island. Providing a complete non-motorized connection from the Town to this intersection would provide many residents with access to the beach without the use of a vehicle.

**ONSLOW COUNTY COMPREHENSIVE TRANSPORTATION PLAN**

Currently, the Onslow County Comprehensive Transportation Plan (CTP) is in development and should be released in 2019. This plan is a joint effort between Onslow County, the Town of Swansboro, the Town of Richlands, City of Jacksonville, Town of North Topsail, Town of Surf City, the North Carolina Department of Transportation (NCDOT), Jacksonville Metropolitan Planning Organization, and the Down East Rural Planning Organization. The CTP will address modes of transportation including highway, public transportation, rail, transit, as well as pedestrian.

The development of the Onslow County CTP coincides with and complements NCDOT’s prioritization process. The Strategic Transportation Investments (STI) law created a process to determine how NCDOT, in partnership with local governments, will fund and prioritize transportation projects in the state of North Carolina. Under STI, all modes compete for the same funding. This means that roadway projects compete with ferry
projects that will compete with public transportation projects, bicycle/pedestrian, aviation, and rail.

The Strategic Prioritization Office of Transportation (SPOT) develops quantitative scores for all projects. Only the highest scoring projects are selected to be included in the NCDOT Statewide Transportation Improvement Plan (STIP). The STIP, which identifies the transportation projects that will receive funding during a 10-year period, is a state and federal requirement. Federal law requires it to be updated at least every four years. NCDOT, however, updates it every two years. Currently, there are no projects within Holly Ridge that have been identified within the STIP. However, with the release of the Onslow County CTP, there may be transportation recommendations identified within Holly Ridge that will be sought through this process.

**Parks and Recreation Facilities**

The Town of Holly Ridge has two different parks and one public access site on the Intracoastal Waterway (ICWW) available to residents. These sites include the Holly Ridge Municipal Park, Liberty Fountain Park, and the public access site located at the end of Morris Landing Road. In addition to sites located within Holly Ridge, there are many additional public access sites located within Surf City to the south. See Map 4.3 for local parks and nearby public access sites.

**Holly Ridge Municipal Park**

Holly Ridge Municipal Park is located at North Hines Street and Kraft Street. This park spans approximately nine acres. Amenities at this site include a basketball court, baseball/softball field, soccer field, sheltered picnic areas, playground, and restrooms.

*Figure 4.1: Holly Ridge Municipal Park*
LIBERTY FOUNTAIN

Adjacent to the Holly Ridge Municipal Park, lies Liberty Fountain. A recent addition to the Town, the site provides a memorial for fallen service members. The viewing/sitting area consists of benches located around the Holly Ridge Liberty Fountain.

Figure 4.2: Liberty Fountain

MORRIS LANDING PUBLIC ACCESS SITE

At the end of Morris Landing Road, there is a public access site at the Intracoastal Waterway. This site has a boat landing as well as observation and fishing pier. Parking is available near this site along the side of Morris Landing Road.

Figure 4.3: Morris Landing Public Access Site
COMMUNITY FACILITIES GOALS, OBJECTIVES, AND POLICIES

The Town has established a set of land use and development related policies to act as guidelines during any official decision making process. These policies and goals provide citizens, property owners, and developers with a predictability of official actions. Town policies in this chapter relate to community facilities and services. Two CAMA management topics are covered in the policy section herein: Infrastructure Carrying Capacity and Public Access. It should be noted that these topic areas are developed as part of the Division of Coastal Management’s 7B Land Use Planning Guidelines. In addition, transportation and recreation goals and polices are provided.

Refer to Appendix A for Definitions of action words contained within the policy section.

INFRASTRUCTURE CARRYING CAPACITY

Goal 4.1: Ensure that public infrastructure systems are sized, located, and managed to provide service to residents and businesses and so the quality and productivity of Areas of Environmental Concern (AECs) and other fragile areas are protected or restored.

Objective 4.1: Ensure that the location and capacity of public infrastructure systems are consistent with the Town’s growth and development goals.

Policy 4.1.A: Economic Development: The Town supports ONWASA’s effort to provide sufficient water and sewer service to promote economic development and to alleviate public health problems.

Policy 4.1.B: Regional Coordination: The Town will continue to provide representation on the ONWASA Board of Directors.

Policy 4.1.C: Maintaining Adequate Fire Protection: The Town will continue to ensure that adequate water pressure is available to meet fire suppression as needed.

Policy 4.1.D Wastewater Capacity: The Town supports ONWASA efforts to expand wastewater capacity to serve new development in the Holly Ridge area.

TRANSPORTATION

Goal 4.2: Coordinate transportation improvements in accordance with development to ensure roadways are safe for all users, while providing an appropriate level of service.

Objective 4.2: Support activities that reduce traffic congestion and safety problems while enhancing facilities for non-motorized users.
Policy 4.2.A: Traffic Congestion: The Town encourages the NC Department of Transportation to alleviate traffic congestion on primary roadway thoroughfares by managing the number, design standard, and location of driveway access points for commercial, multi-family, or other large developments.

Policy 4.2.B: Street Design Guidelines: The Town encourages planned residential developments, mixed-use developments, and other applicable subdivision developments to implement street designs that maximize bike and pedestrian accessibility and safety (i.e. sidewalks, bike lane, crosswalks, etc.), incorporation of effective and aesthetically appropriate street calming devices, and interconnectivity with existing local streets, bike, and pedestrian pathways, as well as any abutting commercial and recreational areas.

**Recommended Action 4.2.B.1:** Evaluate the Town’s subdivision ordinance for consideration of street design guidelines that account for bicycle and pedestrian safety and aesthetics.

**Recommended Action 4.2.B.2:** Consider flexible road design standards, where consistent with minimum NCDOT safety standards, which incorporate low impact development and smart growth principles.

Policy 4.2.C: Safety: The Town supports safety as a primary concern for all transportation-related projects.

Policy 4.2.D: Regional Coordination: Ensure the Town's transportation needs are adequately addressed through the Down East RPO Transportation Improvement Program requests.

Policy 4.2.E: Entryway Corridors: The Town encourages the aesthetic enhancement of entryway corridors and recognizes the important economic, tourism, and community image benefits of attractive entryway corridors. Such entryway corridors should receive priority attention for improved appearance and development standards, including landscaping, signage, and tree preservation.

**Recommended Action 4.2.E.1:** Consider establishing landscape requirements or an overlay district to enhance entryway corridors.

Policy 4.2.F: NCDOT Design Guidelines: The Town shall continue to require all public streets be constructed in accordance with the most current NCDOT Subdivision Minimum Construction Standards manual and the NCDOT Guidelines for Drainage Studies and Hydraulic Design.

**Recommended Action 4.2.F.1:** Establish a formal protocol for inspecting new streets at various stages of completion to ensure all engineering and construction requirements are met prior to being accepted by the Town.
**Policy 4.2.G: Private Roads/Streets:** The Town shall continue to require that all private streets be constructed in accordance with the most current NCDOT Subdivision Minimum Construction Standards manual and the NCDOT Guidelines for Drainage Studies and Hydraulic Design.

**Recommended Action 4.2.G.1:** Update required certifications and disclosures contained in the Subdivision Ordinance regarding private roads to include language stating the roads have been constructed to the minimum standards of the of the NCDOT Subdivision Minimum Construction Standards manual and NCDOT Guidelines for Drainage Studies and Hydraulic Design. Specifically require all certifications/disclosures regarding private roads/streets be included with each approval.

**Recommended Action 4.2.G.2:** Consider limiting the number of lots that may be served by a private road to reduce the Town's long-term maintenance and ownership liabilities.

**Policy 4.2.H: Alternative Transportation for Recreation & Economic Development:** The Town encourages alternative means of transportation to reduce traffic, enhance economic development, and provide recreational opportunities for residents and visitors.

**Policy 4.2.I: Bicycle and Pedestrian Transportation:** The Town encourages all projects to consider pedestrians and cyclists for inclusion in all road construction, reconstruction, or maintenance projects.

**Recommended Action 4.2.I.1:** Pursue grant funds to complete an official NCDOT Comprehensive Bicycle and/or Pedestrian Transportation Plan. Such a plan should identify alternative funding methods, maintenance responsibilities, and prioritized facilities. Grant applications are typically due November/December of each year.

**Recommended Action 4.2.I.2:** Clarify sidewalk requirements for new development and subdivisions.

**PUBLIC ACCESS**

**Goal 4.3:** Maximize public access to the public trust waters of the coastal region for residents and visitors.

**Objective 4.3:** Implement policies and recommendations that assure satisfactory access to public trust waters for all Town residents, businesses, and visitors.
Policy 4.3.A: Public Water Access: The Town supports efforts to work with local groups and state and federal agencies to secure and maintain water access points within the Town and its nearby vicinity.

Recommended Action 4.3.A.1: Pursue funding under the North Carolina CAMA Shoreline Access funding program for other eligible projects that provide access for its citizens.

Policy 4.3.B: Public Water Access Amenities: The Town supports state and federal funding of piers for crabbing, fishing, or public estuarine access.

Policy 4.3.C: Waterfront Land Acquisition: The Town will encourage not only the State of North Carolina, but also area local governments to diligently pursue the acquisition and development of waterfront properties for public use, particularly regarding boating access.

Policy 4.3.D: Water-Based Tourism and Development: The Town supports development that promotes Holly Ridge as a tourism and recreation destination.

PARKS AND RECREATION

Goal 4.4: Increase the number of parks, recreation, and open spaces to serve current and future Town residents and visitors.

Objective 4.4: Ensure adequate, appropriately located parks, recreation, and open spaces are available to serve the needs of Town residents.

Policy 4.4.A: Parks and Recreation Open Space: The Town supports its legislative authority to require parks and recreation open space as part of the development approval process.

Recommended Action 4.4.A.1: Consider requiring the allocation of parks and recreation open space or fee-in-lieu transfers for certain development types or subdivision sizes.

Recommended Action 4.4.A.1: Work with the Planning Board to establish ordinance language for the requirement of passive and/or active recreation spaces as part of the development approval process.

Policy 4.4.B: Comprehensive Parks and Recreation Master Plan: The Town supports comprehensive parks and recreation planning to enhance and maintain a high quality of life for Town residents

Recommended Action 4.4.B.1: Prepare a Comprehensive Parks and Recreation Master Plan.
Recommended Action 4.4.B.2: Ensure the plan adequately reflects current and future recreation needs. Adopt implementation measures to acquire and develop parks, recreation areas, and open spaces.
Town of Holly Ridge

2019 Land Use Plan
Map 4.3
Public Access and Parks

Legend

- Corporate Limits
- ETJ
- County Boundary
- Local Parks Point
- Morris Landing Public Access
- Public Beach Access

Map is to be used for general purposes only. Spatial data used to generate this map was gathered from disparate sources and represent a condition at a fixed period in time. 100% accuracy of spatial data to current circumstances cannot be guaranteed. The Cape Fear Council of Governments is not legally responsible for the misuse of this map.

Map prepared by Cape Fear Council of Governments. Data sources: Onslow Co., NC Floodmaps, NCDEQ, NCDOT, USGS.
CHAPTER 5: LAND USE AND GROWTH MANAGEMENT

This chapter outlines existing development patterns in the Town of Holly Ridge planning jurisdiction and further classifies what is on the ground today. In addition, the chapter provides a brief build-out analysis and delineation of available vacant land in the planning jurisdiction. To conclude, the future land use map and narrative outline desired growth patterns and guidance for land use decisions over the next ten to twenty years. Goals, policies, and recommended actions are provided relating to land use and development at the end of the chapter.

EXISTING LAND USE ANALYSIS

This section provides the local elected officials, appointed boards, citizens and local planning staff with an overview of existing land use patterns in the planning jurisdiction. An assessment of these patterns, and the identification of available areas for development, can help forecasting where, what type, and how much development may occur in the future.

This section will also assist in identifying current and potential land use conflicts, such as residential uses in close proximity to environmentally sensitive areas or intense commercial areas. In addition, vacant land where new development is expected and areas where in-fill or redevelopment is feasible and/or desirable will be identified. The information in this section will also assist in establishing the Town’s Future Land Use Map.

SOURCE OF EXISTING LAND USE ANALYSIS AND MAP

The Existing Land Use Map and tables were created by the Cape Fear Council of Governments using Onslow County Tax Records. Review of the previous land use plan also informed the existing land use survey.

LAND USES IDENTIFIED IN THE PLANNING JURISDICTION

The existing land uses in the planning jurisdiction include:

- Commercial
- Industrial
- Residential
  1. Single-Family (Duplex included)
  2. Multi-Family (3 or more dwelling units attached)
  3. Manufactured home
  4. Rural residential
- Utilities and Stormwater
- Civic and Institutional
- Parks and Recreation
- Vacant (undeveloped land)
EXISTING LAND USE IN THE PLANNING JURISDICTION

The Existing Land Use Table (Table 5.1) provides a breakdown of the planning jurisdiction by each particular land use category. The land use classifications are summarized by the acreage in each respective use class within the corporate limits and the ETJ. The existing land use categories are also classified throughout the entire planning jurisdiction.

Table 5.1: Existing Land Use in the Planning Jurisdiction
Source: Cape Fear Council of Governments GIS, Onslow County Tax Records

<table>
<thead>
<tr>
<th>Existing Land Use (ELU) by Type</th>
<th>Planning Jurisdiction</th>
<th>Acres</th>
<th>Percent Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td></td>
<td>96.23</td>
<td>1.67%</td>
</tr>
<tr>
<td>Industrial</td>
<td></td>
<td>218.89</td>
<td>3.80%</td>
</tr>
<tr>
<td>Multi-family Residential</td>
<td></td>
<td>22.31</td>
<td>0.39%</td>
</tr>
<tr>
<td>Manufactured Home</td>
<td></td>
<td>204.76</td>
<td>3.55%</td>
</tr>
<tr>
<td>Single-family Residential</td>
<td></td>
<td>506.07</td>
<td>8.78%</td>
</tr>
<tr>
<td>Rural Residential</td>
<td></td>
<td>413.65</td>
<td>7.18%</td>
</tr>
<tr>
<td>Utilities and Stormwater</td>
<td></td>
<td>276.98</td>
<td>4.81%</td>
</tr>
<tr>
<td>Civic and Institutional</td>
<td></td>
<td>51.37</td>
<td>0.89%</td>
</tr>
<tr>
<td>Parks and Recreation</td>
<td></td>
<td>12.49</td>
<td>0.22%</td>
</tr>
<tr>
<td>Vacant</td>
<td></td>
<td>3,960.97</td>
<td>68.72%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5,763.73</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Within the corporate limits and the ETJ, vacant land accounts for almost 70% of the acreage in the planning jurisdiction. These lands are currently undeveloped. As such, this represents an opportunity for continued growth and development to support the projected population increase. Most of the vacant land can be found in the ETJ, with small pockets distributed throughout the incorporated area.

As for developed land, single-family residential is the most common use. Single-family residential development accounts for more than 500 acres of land in the planning jurisdiction. Rural residential development accounts for second largest percentage of developed land, with just over 410 acres of land inside the Holly Ridge planning jurisdiction. (See Map 5.1)
BUILD-OUT ANALYSIS

Based on a schematic analysis of vacant land by zoning district, it is possible that within the Town’s planning jurisdiction (corporate limits & ETJ), an additional 5,123 dwelling units could be constructed within the residential zoning districts at build-out based on the Town’s current regulations. To establish the estimate, the total available vacant acreage was reduced by 30% to accommodate roads and infrastructure that would not be occupied by dwelling units. Map 5.2 displays vacant land by zoning district.

Table 5.2: Vacant Land by Zoning District
Source: Cape Fear Council of Governments GIS, Onslow County Tax Records

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Corporate Limits</th>
<th>Extra-Territorial Jurisdiction (ETJ)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acres</td>
<td>Potential Housing Units</td>
<td>Acres</td>
</tr>
<tr>
<td>Residential Zoning Districts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA: Rural Agriculture</td>
<td>270.92</td>
<td>413</td>
<td>819.08</td>
</tr>
<tr>
<td>R-30M: Residential</td>
<td>7.95</td>
<td>8</td>
<td>7.95</td>
</tr>
<tr>
<td>R-20: Residential</td>
<td>21.99</td>
<td>33</td>
<td>265.16</td>
</tr>
<tr>
<td>R-15: Residential</td>
<td>153.00</td>
<td>311</td>
<td>645.12</td>
</tr>
<tr>
<td>R-15A: Residential</td>
<td>43.59</td>
<td>88</td>
<td>182.60</td>
</tr>
<tr>
<td>R-10: Residential</td>
<td>31.59</td>
<td>96</td>
<td>31.59</td>
</tr>
<tr>
<td>R-10A: Residential</td>
<td>10.67</td>
<td>32</td>
<td>84.43</td>
</tr>
<tr>
<td>R-7.5: Residential</td>
<td>8.98</td>
<td>36</td>
<td>8.98</td>
</tr>
<tr>
<td>R-7.5A: Residential</td>
<td>3.28</td>
<td>13</td>
<td>3.28</td>
</tr>
<tr>
<td>R-5A: Residential</td>
<td>17.80</td>
<td>108</td>
<td>17.80</td>
</tr>
<tr>
<td>MFR: Multiple Family Residential</td>
<td>45.91</td>
<td>321</td>
<td>45.91</td>
</tr>
<tr>
<td>PUD: Planned Unit Development</td>
<td>617.46</td>
<td>953</td>
<td>617.46</td>
</tr>
<tr>
<td>Total</td>
<td>1,233.12</td>
<td>2,412</td>
<td>2,729.34</td>
</tr>
</tbody>
</table>

The C, NB, and LI zoning districts provide for the possibility of residential units under specific approval processes; however, those districts are normally reserved for commercial or industrial activities. Accordingly, the buildout analysis does not include the potential for new housing units in these districts.

If 5,123 dwelling units were constructed, at an occupancy of two persons per unit, it would equate to an additional 10,246 persons throughout the planning jurisdiction. Complete buildout within the Town’s corporate limits under existing zoning would account for slightly more than 2,400 new dwelling units or 4,800 new residents. It should be noted that it is unlikely the Town will experience housing unit growth such that build-out will be experienced anytime in the foreseeable future. As such, there is more than enough
available land to accommodate the population growth, as estimated in Chapter 2, of approximately 1,000 more persons by 2047. Furthermore, if the population projection were to hold true, then it is estimated that an additional 500 housing units would be constructed by 2045. As shown on Map 5.1, there are substantial tracts of vacant acreage that are ripe for future development. More dense/high impact development should be focused near and to the south of the intersection of N.C. 50 and U.S. 17, while low-density, single-family, and neighborhood business development should be encouraged in other portions of the planning jurisdiction.

**IDENTIFICATION OF LAND USE CONFLICTS**

This subsection identifies future land uses that may conflict with environmentally sensitive areas. Identifying potential conflict with sensitive areas is done by comparing the existing land uses identified in this Section with the natural features discussed in Chapter 3. As stated in Chapter 3, wetlands serve important and useful functions. Wetlands maintain water quality by filtering pollutants and sediments, prevent erosion and flooding from plant root systems that hold soils in place, and provide wildlife habitat and scenic areas that increase property values and quality of life. Wetlands also commonly follow, and are associated with, Special Flood Hazard Areas (SFHAs). Accordingly, where flood hazard areas are present additional constraints are placed on development. Being located within a floodplain does not prohibit development, but depending on the use and particular flood hazard zone, supplementary building costs may be incurred when flood proofing structures and/or elevating the first floor above the base flood elevation.

Areas within the planning jurisdiction that are most likely to face environmental constraints and future conflicts are located along the Intracoastal Waterway and in the Summerhouse Community. The land in this area is zoned for residential and outdoor recreational.

Other potential land use conflicts that are not a result of environmental constraints include the mixing of development at varying degrees of density and impact. For example, existing single-family residential uses along primary roadways/corridors are likely to be impacted by future commercial and/or multi-family development. Over time, many of these areas will likely transition to more intensive uses. This will be particularly true if roadway improvements cause right-of-way acquisition in certain locations. In order to lessen potential conflicts, the Town should continue to require buffering between uses that differ in intensity and ensure that predominantly single-family neighborhoods remain protected through zoning regulations.

Note: Wetlands discussed herein are not automatically designated 404 wetlands and regulated by the Army Corps of Engineers. A Jurisdiction Determination is required for such. However, if lands are designated as 404 wetlands, then costly mitigation measures must take place for those lands to be developed. In addition, there are no historic, cultural, or scenic areas designated by a state or Federal agency.
**FUTURE LAND USE**

The Future Land Use Classification Map is created to provide guidance for zoning and land use decisions. In Holly Ridge, the Future Land Use Classification Map (Map 5.3) largely resembles the Official Zoning Map and the existing land use pattern in the Town's planning jurisdiction. The map visually depicts the Town’s long range land use and development goals to be implemented by the Town. The map is intended to show the community’s planned future growth patterns in distinct areas (i.e. the “future land use classification areas”) within the Town’s planning jurisdiction. The map also shows the planned future boundaries of those respective areas to ensure that incompatible uses or types of development do not encroach.

The Future Land Use Classification Guidelines provide the desired land uses and development characteristics for each respective area, as well as the intensity and density goals for each area. While the Future Land Use Classification Map and Guidelines establish goals and policy direction for various areas in the Town's planning jurisdiction, it is the Town’s Official Zoning Map and Unified Development Ordinance that codifies the actual development regulations within the planning jurisdiction.

**FUTURE LAND USE CLASSIFICATION GUIDELINES**

This section defines the future land use classification guidelines for Holly Ridge. The future land use classification includes seven (7) land use categories. North Carolina General Statutes require that all rezoning decisions and ordinance amendments be reviewed for consistency with the Town’ Land Use Plan, including a statement by the Planning Board and Town Council as to whether the amendment is or is not consistent with the Land Use Plan.

Each future land use category includes a description, desired uses, and desired density. The following narrative outlines the key desired development guidelines for each individual future land use classification area depicted on the Future Land Use Classification Map.

**IMPLEMENTATION**

To implement the guidelines outlined in this chapter, ordinance amendments should be considered where the future land use classification description differs from the requirements of the Zoning Ordinance. It is important to remember that the Future Land Use Map and category descriptions are not regulatory in nature and are to be used as a tool for revising existing development standards and guiding zoning-related decisions. The Land Use Plan does not require that these changes be made, but rather offers guidance in the event that there is a desire to revise development regulations.

**HOW TO USE THE FUTURE LAND USE MAP AND GUIDELINES**

Upon adoption of this plan, the Planning Board, Town Council, and citizens of Holly Ridge should reference this chapter in reviewing land use and development related decisions and
policy implementation. The Future Land Use Classification Map should be amended if significant changes occur or are proposed to occur. This will aid in consistency with changes to the Town's Official Zoning Map.

Each future land use classification (note: “classification and “category” are used interchangeably throughout this chapter) contained in this chapter is described with a short narrative and supporting development guidelines. The color that identifies that future land use category on the Future Land Use Classification Map is also provided on the page containing the narrative and development guidelines.

COMMERCIAL

Commercial land uses in Holly Ridge’s planning jurisdiction are currently concentrated in close proximity to primary roadways. Future high-impact commercial development is intended to be located along major thoroughfares on N.C. 50 and U.S. 17 that have easy access for automobiles. More intense commercial uses requiring larger lots sizes, parking area, and stormwater infrastructure are permitted in this land use category.

Big box buildings, such as department stores, variety stores, warehouse retail centers, grocery stores, furniture outlets, and similar buildings shall be designed such that the exterior façade has the appearance of several smaller, human scale, buildings through the use of vertical treatments and elements that break up the horizontal wall.

Lower intensity commercial uses such as small offices and boutiques are also appropriate, as are appropriately sited high-density residences in limited circumstances. Manufacturing operations, detached single-family residences, and residential subdivisions are not appropriate.

Internal circulation patterns should create street-like spaces lined with on-street angled or parallel parking and parking areas should connect to adjoining sites. Sidewalks should connect all buildings within the site and to adjoining sites. Sidewalks should have street trees and pedestrian lighting.

Appropriate Uses:

- High intensity commercial, office, and institutional establishments
- Big box retail, such as grocery stores and building supply stores

Inappropriate Uses:

- Industrial uses
- Single-family residential uses & duplexes
**Mixed Use**

This future land use category should provide a concentration of commercial, service, institutional, and residential uses that will serve residents of Holly Ridge, seasonal visitors, and other permanent residents of Pender and Onslow Counties. The future land use classification is intended to promote social activity and the cultural value of the Town. The preferred land use mix is primarily commercial/retail and office with multi-family residential uses and vertical and horizontal mixed use development. Development within this category should provide ample landscaping and street trees to present an inviting environment to travelers passing through the Town. Shared and reduced parking standards should be encouraged in this future land use category. Standalone multi-family residential development should be buffered from conflicting uses and combability designed within the current neighborhood condition.

Development within this land use category should be designed according to an integrated land use pattern with a focus on human scale architectural design features. Buildings should be constructed from a limited range of high-quality materials that create a cohesive design. Building facades should be composed of windows and doors that provide maximum transparency for the pedestrian. Blank walls should be discouraged. Surface parking lots should be heavily shaded and landscaped. Stormwater infrastructure should be located behind buildings or incorporated into the design of the development as an amenity. Brick, stone, stucco, and tinted, textured, or polished masonry units are the preferred building materials.

Appropriate Uses:
- Most commercial, retail, office, & institutional uses
- Multi-family Residential
- Small lot single-family and duplex residential uses
- Parks, recreation, and open space

Inappropriate Uses:
- Large lot single-family residential uses & duplexes
- Industrial uses
**INDUSTRY**

The purpose of this land use category is to establish and protect industrial areas for the use of industrial operations, heavy commercial uses, and other establishments with extensive outdoor storage or those that will have an impact on neighboring properties. These areas should have excellent transportation access (or potential access) and available essential infrastructure including water and sewer. These areas may be individual industrial sites or integrated industrial parks.

The land use plan supports the location of industrial development adjacent to major roadways. Industrial areas should be buffered with either Commercial or Open Space land uses as appropriate.

**Appropriate Uses:**
- Industrial
- Manufacturing
- Office
- Heavy Commercial

**Inappropriate Uses:**
- Residential Uses

**HIGH DENSITY RESIDENTIAL**

High density residential land uses are generally located adjacent to areas planned for commercial development and other services. Appropriate uses include small lot single-family and duplex residential uses and manufactured housing.

A mix of housing types is encouraged in these areas to promote affordability at a variety of price points. Where possible, high density residential development is encouraged to adopt a pedestrian-friendly urban development pattern with buildings fronting interconnected public streets with sidewalks. In general, commercial, office, and industrial uses are inappropriate.

**Appropriate Uses:**
- Attached single-family and small lot single-family residences
- Senior housing & Long-term Continuing Care Communities
- Manufactured Housing
- Recreation, parks, and open space
Inappropriate Uses:

- Multi-family Residential development
- Commercial development
- Industrial development

**Medium Density Residential**

Medium density residential land uses are located throughout the Town’s planning jurisdiction and are, for the most part, existing residential subdivisions and nearby vacant properties not designated for commercial use. Appropriate uses include single-family residences and subdivisions, community recreation and open space uses like golf courses and pools, and neighborhood-scale institutional uses such as religious and civic organizations.

Planned communities may also include well-integrated single-family attached residences and limited neighborhood-scale commercial and office uses. Industrial and manufacturing uses, as well as commercial and office uses not located within a planned community are inappropriate. Large institutional uses, such as high schools, community colleges, and mega-churches are also generally inappropriate.

Appropriate Uses:

- Single-family residential uses
- Age-appropriate retirement housing
- Recreation, parks, and open space

Inappropriate Uses:

- Multi-family residential uses
- Commercial, office, and institutional development
- Industrial development

**Low-Density Residential**

Low-density residential land uses are located at the fringe of the planning boundary, generally within the ETJ and in areas without direct access to primary roads. These areas are typically rural in nature with an existing low-density residential development pattern. Water and sewer services are often not available in these areas. Appropriate uses include single-family residences, manufactured homes, agriculture and forestry activities, and neighborhood-scale institutional facilities. Commercial and industrial uses are generally inappropriate in these areas, as are large institutions and other significant traffic generators.
Appropriate Uses:
- Single-family residential uses
- Recreation, parks, and open space

Inappropriate Uses:
- Non-residential development
- Multi-family residential uses
- Two-family residential uses

**Open Space**
This land use category includes federal lands, Town recreation facilities, and conservation trust lands. These lands serve as resources for the public at large through environmental education opportunities, recreational opportunities, natural aesthetic qualities, wildlife habitat, and stormwater drainage. Development is strongly discouraged within this future land use category. Appropriate uses include parks, passive/active open space, and nature centers. Residential, commercial, and industrial development are not appropriate.

Desired Uses:
- Nature trails
- Preserved open space
- Coastal educational uses that have limited environmental impact
- Forestry and agricultural uses
- Passive recreation areas

Inappropriate Uses:
- Non-residential development
- Residential development

**Goals, Objectives, and Policies**

**Introduction**
The Town has established a set of land use and development related policies to act as guidelines during any official decision making process. These policies and goals provide citizens, property owners, and developers with a predictability of official actions. Town policies in this chapter relate to land use and growth management. One CAMA management topic is covered in the policy section herein: Land Use Compatibility.

It should be noted that these topic areas are developed as part of the Division of Coastal Management’s 7B Land Use Planning Guidelines.

Refer to Appendix A for Definitions of action words contained within the policy section.
LAND USE COMPATIBILITY

**Goal 5.1:** Ensure that development and use of resources or preservation of land balances protection of natural resources and fragile areas with economic development, avoids risks to public health, safety, and welfare.

**Objective 5.1:** To provide policies with clear direction to assist local decision making and consistency findings for zoning, divisions of land, and public and private projects. The Town desires to balance the protection of natural resources and fragile areas with development.

**Policy 5.1.A: Development Compliance:** All development shall adhere to the Town’s building and development regulations set forth in the Code of Ordinances.

**Policy 5.1.B: Land Use Plan Consistency:** The Town generally requires that any official land use and development related actions (e.g. re-zonings, text amendments, and special use permits) remain consistent with the policies adopted in this plan and any other applicable plan. Any actions that are inconsistent with such plans shall require a statement from the Planning Board and Town Council approving such decisions, as to the conditions taken into account in amending the development ordinances to meet the development needs of the community, and why the action was reasonable and in the public interest.

**Policy 5.1.C: Land Use Plan Review:** The Town shall initiate review of the goals, policies, and contents of this plan on an annual basis. Such review will be conducted by the Planning Board one year following adoption. An informal presentation and report of the accomplishments completed as a result of the land use plan will be delivered to the Town Council by the Planning Board Chairman.

- **Recommended Action 5.1.C.1:** Prepare an implementation status report for the Division of Coastal Management every two years.
- **Recommended Action 5.1.C.2:** Update the Land Use Plan every 5-7 years to address changing dynamics, population growth, economic development, and housing needs.
- **Recommended Action 5.1.C.3:** In order to accommodate future changes in land use, the Planning Board should review all zoning districts for potential incompatible permitted uses to ensure land use conflicts do not arise in the future and recommend appropriate changes to the Town Council.

**Policy 5.1.D: Focused Growth and Development:** The Town supports a growth pattern that includes low-density single-family residential communities, but also allows for the strategic placement of higher density residential, mixed use, and commercial development to accommodate and support future population growth, where necessary infrastructure exists or is planned.
Policy 5.1.E: Compatible Development: The Town supports new commercial and multi-family developments that blend with surrounding neighborhoods and limit traffic, noise, and light impacts on existing residential uses.

Policy 5.1.F: Town Center: The Town desires to create a Town Center, which will be the civic and cultural hub of the community and attract seasonal visitor from area beach communities. Development of the Town Center should be designed to reduce vehicular trips and to encourage walking within the area to and from adjacent sites.

Recommended Action 5.1.F.1: Consider developing a downtown master plan or urban design plan to encourage desired development patterns.


Recommended Action 5.1.G.1: To encourage the installation of shade trees, the Town should consider establishing landscape guidelines.

Policy 5.1.H Industrial Uses and Business Development: The Town supports the recruitment and siting of compatible industrial, heavy commercial, and large-scale employment establishments in areas that are consistent with the Town's future land use map.

Policy 5.1.I: Single-family Residential Development: The Town shall maintain areas exclusively for conventional single-family development. Conversion of single-family homes to two-family and/or multi-family residential uses within established single-family neighborhoods shall be discouraged.

Policy 5.1.J: Housing Choice: The Town encourages both the development and preservation of a variety of housing types to meet the needs and desires of current and future citizens.

Policy 5.1.K: Workforce Housing: The Town supports the development of a variety of workforce housing options for teachers, fire fighters, police officers, seniors, and low-to-moderate income persons.

Policy 5.1.L: Planned Residential Development: The Town shall provide zoning accommodations for Planned Residential Developments where feasible. Such residential developments will allow for flexibility in design, while encouraging clustering and a preservation of natural areas.

Recommended Action 5.1.L.1: Consider creating provisions for conditional zoning or Planned Residential Development districts within the zoning ordinance.
Policy 5.1.M: Code Enforcement: The Town shall continue code enforcement to address and mitigate derelict and unkempt properties that pose impacts to property values.

Policy 5.1.N: Environmental Resources: The Town supports the preservation and maintenance of its environmentally sensitive areas while promoting and capitalizing on its natural resources.

Policy 5.1.O: Open Space: The Town supports the preservation of existing Open Space lands as depicted on the future land use map for educational opportunities, natural aesthetic qualities, wildlife habitat, and stormwater drainage. Development is not supported in these areas. Expansion of open space conservation lands by private property owners is supported by the Town.
Map is to be used for general purposes only. Spatial data used to generate this map was gathered from disparate sources and represent a condition at a fixed period in time. 100% accuracy of spatial data to current circumstances cannot be guaranteed. The Cape Fear Council of Governments is not legally responsible for the misuse of this map.
Map is to be used for general purposes only. Spatial data used to generate this map was gathered from disparate sources and represent a condition at a fixed period in time. 100% accuracy of spatial data to current circumstances cannot be guaranteed. The Cape Fear Council of Governments is not legally responsible for the misuse of this map.
CHAPTER 6: TOOLS FOR MANAGING DEVELOPMENT

This section of the land use plan describes Holly Ridge’s procedures for administering land development regulations and also provides a schedule for implementation of recommended actions. This section has three major parts that describe the:

- **Guide for land use decision-making:** It is intended that this document be an integral part of the Town of Holly Ridge’s decision making process concerning future land use. This document should be consulted prior to any decision being made by the Holly Ridge staff, Planning Board, and/or Town Council concerning land use and development.

- **Existing development management program:** The existing management program includes the Town of Holly Ridge Code of Ordinances and North Carolina Building Code.

- **Action plan and implementation schedule:** The priority policies and recommended actions that will be taken to implement the plan with a general schedule to accomplish these actions.

Collectively, these sections describe how Holly Ridge’s Comprehensive Land Use Plan will manage future land use and development.

**ROLE OF THE GUIDE FOR LAND USE DECISION-MAKING**

Holly Ridge's Comprehensive Land Use Plan serves a variety of functions and the plan for the future contains a broad range of:

- **Goals:** Desired ends toward which policies and programs of the Land Use Plan are directed. Many of the goals reflect requirements set forth in the Division of Coastal Management’s (DCM’s) Coastal Resource Commission (CRC) guidelines.

- **Objectives:** More specific and measurable than the general goals and in some cases a goal has multiple objectives.

- **Policies:** A consistent set of principles or guidelines for making a variety of local decisions designed to accomplish the goals and objectives. These policies guide decisions by the Town Council, its appointed boards, and staff.

- **Recommended Actions:** Specific actions that can be taken to implement and advance the plan’s policies. Many of these recommended actions are non-regulatory in nature and will be addressed through subsequent planning efforts.

The goals, objectives, policies, and recommended actions provide a long range planning function but they also help guide day to day operations. The daily functions relate primarily
to the decisions of actions of elected and appointed officials and the Town's administrative staff.

For the Town Council, the Comprehensive Land Use Plan contains Town policies and provides a guide when making decisions regarding future land use and development, public access, protecting the environment, mitigating natural and manmade hazards, or ensuring that the Town's infrastructure and services are adequate to serve its year round population and the influx of seasonal visitors. While the Comprehensive Land Use Plan's policies do not have the same status as a local zoning ordinance, except in matters related to development or land uses within Areas of Environmental Concern (AECs), the policies and recommended actions and the future land use map contained in the plan help guide decisions on future ordinances and zoning decisions. Moreover, general statutes require statements of consistency with comprehensive plans or any other locally adopted plan(s) before adopting or rejecting any development ordinance amendments and zoning map changes. Amendments to this plan will be initiated and approved by the Town Council and will occur in accordance with the guidelines for land use plan amendments under Subchapter 7B of the North Carolina Administrative Code. The land use plan can be amended as whole by a single resolution or in parts by successive resolutions and is subject to special state notice and advertising requirements for land use plan amendments.

In addition to guiding development decisions, The Town Council will also review the implementation strategy and make periodic adjustments based on budgetary considerations, emerging issues, problems or community needs, or to coordinate with future planning efforts and ongoing projects. All changes to the Comprehensive Land Use Plan’s policies and recommended actions and this implementation strategy will be forwarded to the DEQ’s Division of Coastal Management (DCM) for its subsequent approval.

The Town’s Planning Board will use the plan and its policies to determine the consistency of project plans and development proposals with community goals and objectives. For the Board of Adjustment, its policies and recommendations will also guide decisions on whether to grant or deny requests for such things as conditional use permits or the approval of statutory vested rights.

The Town’s administrative staff uses the plan’s policies and recommendations in a variety of ways. Staff in the Planning and Zoning Department will use the policies and recommendations when reviewing site plans and development proposals. Various Town departments will use the policies and recommended actions to guide proposals for development projects and plans for public services and facilities. Accordingly, Town staff will use the implementation strategy to guide budget preparation and make reference to the plan when applying for various sources of federal, state, and county grant funds.

The Town’s Comprehensive Land Use Plan will be used by other federal and state officials, in particular DEQ’s DCM. An important use of Holly Ridge’s Comprehensive Land Use Plan
is for consistency determinations by the DCM for major permits issued pursuant to CAMA regulations.

The Comprehensive Land Use Plan will be of use to a variety of community members. The plan is a useful tool for developers and property owners because it provides guidance on the types of land use and development that are desired within the community. The plan’s policies and recommendations will also help developers to craft proposals that are consistent with the Town’s goals and objectives, thereby increasing the likelihood that these projects will be approved. The plan also provides information that will help owners and developers to better understand the capabilities and limitations of their property. The plan also provides community members with information to reference when supporting or opposing projects within the community.

**EXISTING DEVELOPMENT MANAGEMENT PROGRAM**

The Town of Holly Ridge operates under the authority of a Mayor-Council form of government. There are five members on the Holly Ridge Town Council. The Town employs a Planner who oversees development-related issues within the planning jurisdiction. The Holly Ridge Inspections Department oversees construction inspections. The Town has a seven member Planning Board that reviews and comments on certain proposed developments. There is a five member Board of Adjustment that reviews appeals, special use permits, and variances.

The following provides a summary of the Town’s land use-related codes and regulations:

**HOLLY RIDGE’S LAND DEVELOPMENT REGULATIONS**

The Town of Holly Ridge Code of Ordinances contains several chapters relevant to development. Important portions include Chapter 02 – Planning Board and Board of Adjustment, Chapter 06 – Building Regulations, Chapter 07 – Zoning Ordinance, Chapter 08 – Subdivision, Chapter 09 – Water and Sewer ETJ, Chapter 15 – ETJ Ordinance, Chapter 20 – CAMA Ordinance, and Chapter 21 – Flood Damage Prevention Ordinance. These locally-adopted development regulations are supplements to the North Carolina State Building Code.

*Chapter 02 – Planning Board and Board of Adjustment:* This article defines the role, makeup, and rules governing the Planning Board and Board of Adjustments in Holly Ridge.

*Chapter 06 – Building Regulations:* This article outlines the responsibilities of the Town’s Building Code Enforcement Officer as well as local building requirements in addition to the North Carolina State Building Code.

*Chapter 07 – Zoning Ordinance:* This article provides details about the Town’s zoning districts, permitted uses, related approval processes, and other associated regulatory language.
Chapter 08 – Subdivision: This article details the requirements and processes involved in subdividing parcels of land.

Chapter 09 – Water and Sewer ETJ: This article outlines the requirements for expansion of water and sewer infrastructure in the Holly Ridge extraterritorial jurisdiction.

Chapter 15 – ETJ Ordinance: This article extends Town of Holly Ridge zoning, building, and subdivision regulations to the extraterritorial jurisdiction.

Chapter 20 – CAMA Ordinance: This article adopts a local Implementation and Enforcement Plan to comply with North Carolina’s Coastal Area Management Act.

Chapter 21 – Flood Damage Prevention Ordinance: This chapter provides additional guidance for development occurring within Special Flood Hazard Areas in both the incorporated area and extraterritorial jurisdiction.

North Carolina State Building Code: The North Carolina State Building Code is used to oversee the erection of all structures. The Town provides its own inspection services. The minimum use standards, provisions, and requirements for safe and stable design, methods of construction, and usage of materials in buildings and structures erected, enlarged, altered, repaired, moved, converted to other uses, or demolished, and the equipment, maintenance, use, and occupancy of all buildings and structures in the Town and its extraterritorial jurisdiction, are regulated in accordance with the terms of the North Carolina State Building Code.
ACTION PLAN AND IMPLEMENTATION SCHEDULE

The following table outlines a schedule to assist the Town in implementing the recommended actions of this land use plan. The implementation schedule is to be used as a resource for Town staff and officials. The schedule is not a mandate for the allocation of funding nor does it require such.

Table 6.1: Schedule for Implementing Recommended Actions

<table>
<thead>
<tr>
<th>Action Item</th>
<th>To be done in Fiscal Year</th>
<th>Department Responsibility</th>
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</thead>
<tbody>
<tr>
<td><strong>Water Quality and Natural Environment</strong></td>
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</tr>
<tr>
<td>3.1.D.1: Consider establishing local stormwater management controls to address such things as fill, individual lot development, and impervious coverage thresholds.</td>
<td>Ongoing</td>
<td>Planning &amp; Zoning, Public Works</td>
</tr>
<tr>
<td>3.1.D.3: Consider applying for funding to complete a Watershed Restoration Plan to encourage a reduction in stormwater runoff and a subsequent enhancement of surface water quality.</td>
<td>FY 2020 - 2021</td>
<td>Planning &amp; Zoning, Public Works</td>
</tr>
<tr>
<td>3.1.F.1: Consider wetland acquisition as a priority in future expansions of Holly Ridge parks and recreation areas.</td>
<td>Ongoing</td>
<td>Administration, Parks &amp; Recreation</td>
</tr>
<tr>
<td><strong>Natural Hazard Areas</strong></td>
<td></td>
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</tr>
<tr>
<td>3.2.A.1: Continue to participate in the National Flood Insurance Program and enforce the Flood Damage Prevention Ordinance.</td>
<td>Ongoing</td>
<td>Planning &amp; Zoning</td>
</tr>
<tr>
<td>3.2.C.1: Implement a public education program designed to help inform the public about their exposure to natural hazards and actions they can take to mitigate potential damage to public health, safety, and property from natural disasters. This includes, but is not limited to:</td>
<td>Ongoing</td>
<td>Administration, Planning &amp; Zoning</td>
</tr>
<tr>
<td>• Ensure the Town Hall maintains documents about flood insurance, flood protection, floodplain management, and natural and beneficial functions of floodplains. Many documents are available free of charge from the Federal Emergency Management Agency (FEMA);</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Item</td>
<td>To be done in Fiscal Year</td>
<td>Department Responsibility</td>
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<tr>
<td>• Encourage builders, developers and architects to become familiar with the NFIP’s land use and building standards; • Provide local real estate agents with handouts advising potential buyers to investigate potential flood hazards for the property they are considering purchasing; • Advertise the availability of flood insurance on an annual basis; and, • Place hazard-related information on the Town’s website and distribute appropriate educational materials.</td>
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<tr>
<td>Transportation</td>
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<tr>
<td>4.2.B.1: Evaluate the Town’s subdivision ordinance for consideration of street design guidelines that account for bicycle and pedestrian safety and aesthetics.</td>
<td>FY 2019 - 2020</td>
<td>Planning &amp; Zoning</td>
</tr>
<tr>
<td>4.2.B.2: Consider flexible road design standards, where consistent with minimum NCDOT safety standards, which incorporate low impact development and smart growth principles.</td>
<td>FY 2020 - 2021</td>
<td>Planning &amp; Zoning</td>
</tr>
<tr>
<td>4.2.E.1: Consider establishing landscape requirements or an overlay district to enhance entryway corridors.</td>
<td>FY 2019 - 2020</td>
<td>Planning &amp; Zoning</td>
</tr>
<tr>
<td>4.2.F.1: Establish a formal protocol for inspecting new streets at various stages of completion to ensure all engineering and construction requirements are met prior to being accepted by the Town.</td>
<td>FY 2020 - 2021</td>
<td>Planning &amp; Zoning</td>
</tr>
<tr>
<td>4.2.G.1: Update required certifications and disclosures contained in the Subdivision Ordinance regarding private roads to include language stating the roads have been constructed to the minimum standards of the NCDOT Subdivision Minimum Construction Standards manual and NCDOT Guidelines for Drainage Studies and Hydraulic Design. Specifically require all certifications/disclosures regarding private roads/streets be included with each approval.</td>
<td>FY 2019 - 2020</td>
<td>Planning &amp; Zoning</td>
</tr>
<tr>
<td>4.2.G.2: Consider limiting the number of lots that may be served by a private road to reduce the</td>
<td>FY 2020 - 2021</td>
<td>Planning &amp; Zoning</td>
</tr>
<tr>
<td>Action Item</td>
<td>To be done in Fiscal Year</td>
<td>Department Responsibility</td>
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<tr>
<td>Town’s long-term maintenance and ownership liabilities.</td>
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<tr>
<td>4.2.I.1: Pursue grant funds to complete an official NCDOT Comprehensive Bicycle and/or Pedestrian Transportation Plan. Such a plan should identify alternative funding methods, maintenance responsibilities, and prioritized facilities. Grant applications are typically due November/December of each year.</td>
<td>FY 2019 - 2020</td>
<td>Planning &amp; Zoning, Parks &amp; Recreation</td>
</tr>
<tr>
<td>4.2.I.2: Clarify sidewalk requirements for new development and subdivisions.</td>
<td>FY 2020 - 2021</td>
<td>Planning &amp; Zoning</td>
</tr>
<tr>
<td><strong>Public Access</strong></td>
<td></td>
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<tr>
<td>4.3.A.1: Pursue funding under the North Carolina CAMA Shoreline Access funding program for other eligible projects that provide access for its citizens.</td>
<td>Ongoing</td>
<td>Planning &amp; Zoning, Parks &amp; Recreation</td>
</tr>
<tr>
<td><strong>Parks and Recreation</strong></td>
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<tr>
<td>4.4.A.1: Consider requiring the allocation of parks and recreation open space or fee-in-lieu transfers for certain development types or subdivision sizes.</td>
<td>FY 2019 - 2020</td>
<td>Planning &amp; Zoning, Parks &amp; Recreation</td>
</tr>
<tr>
<td>4.4.A.1: Work with the Planning Board to establish ordinance language for the requirement of passive and/or active recreation spaces as part of the development approval process.</td>
<td>FY 2019 - 2020</td>
<td>Planning &amp; Zoning, Parks &amp; Recreation</td>
</tr>
<tr>
<td>4.4.B.1: Prepare a Comprehensive Parks and Recreation Master Plan.</td>
<td>FY 2020 - 2021</td>
<td>Parks &amp; Recreation</td>
</tr>
<tr>
<td>4.4.B.2: Ensure the plan adequately reflects current and future recreation needs. Adopt implementation measures to acquire and develop parks, recreation areas, and open spaces.</td>
<td>FY 2021 - 2022</td>
<td>Planning &amp; Zoning, Parks &amp; Recreation</td>
</tr>
<tr>
<td><strong>Land Use Compatibility</strong></td>
<td></td>
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<tr>
<td>5.1.C.1: Prepare an implementation status report for the Division of Coastal Management every two years.</td>
<td>Ongoing</td>
<td>Planning &amp; Zoning</td>
</tr>
<tr>
<td>5.1.C.2: Update the Land Use Plan every 5-7 years to address changing dynamics, population growth, economic development, and housing needs.</td>
<td>Ongoing</td>
<td>Planning &amp; Zoning</td>
</tr>
<tr>
<td>Action Item</td>
<td>To be done in Fiscal Year</td>
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<tr>
<td>----------------------------------------------------------------------------</td>
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<tr>
<td>5.1.C.3: In order to accommodate future changes in land use, the Planning Board should review all zoning districts for potential incompatible permitted uses to ensure land use conflicts do not arise in the future and recommend appropriate changes to the Town Council.</td>
<td>FY 2019-2020</td>
<td>Planning &amp; Zoning</td>
</tr>
<tr>
<td>5.1.F.1: Consider developing a downtown master plan or urban design plan to encourage desired development patterns.</td>
<td>FY 2020-2021</td>
<td>Planning &amp; Zoning</td>
</tr>
<tr>
<td>5.1.G.1: To encourage the installation of shade trees, the Town should consider establishing landscape guidelines.</td>
<td>FY 2019-2020</td>
<td>Planning &amp; Zoning</td>
</tr>
<tr>
<td>5.1.L.1: Consider creating provisions for conditional zoning or Planned Residential Development districts within the zoning ordinance.</td>
<td>FY 2019-2020</td>
<td>Planning &amp; Zoning</td>
</tr>
</tbody>
</table>
APPENDIX A:  DEFINITIONS AND ACRONYMS

DEFINITIONS OF ACTION AND DESCRIPTIVE WORDS USED IN POLICIES

The following is a list of definitions for the ‘action-words’ used in the Town’s policy statements. This list is used to help in clarifying a policy’s meaning and intent.

Consider: Implies permission to pursue a course of action or implies that a course of action is probable and likely.

Continue: Follow past and present procedures to maintain desired goal, usually with Town staff involved at all levels from planning to implementation.

Create: Bring about the desired goal, usually with Town staff and Planning Board involved at all levels from planning to implementation. This could include financial support by the Town.

Discourage: Inhibit an undesired course or action through Town regulation, staff recommendation and decisions.

Encourage: Foster the desired goal through Town regulation, staff recommendation and decisions.

Enhance: Improve current regulations and decisions towards a desired state through the use of policies and Town staff at all levels of planning. This could include financial support by the Town.

Ensure: To make certain or sure an action is implemented, usually with Town staff involvement. Financial support by the Town should be provided if needed.

Establish: To introduce through the creation thereof. Financial support by the Town may be provided if needed.

Identify: Catalog and confirm resource or desired item(s) through the use of Town staff and actions.

Implement: Actions to guide the accomplishment of the Plan recommendations.

Maintain: Keep in good condition the desired state of affairs through the use of Town regulations and practices by staff. Financial support by the Town should be provided if needed.

May: Implies permission to pursue a course of action or implies that a course of action is probable and likely. While “may” leaves room for flexibility for a range of choices, it does not imply a “may” or “may not” status as used in policy statements.

Prevent: Stop described event through the use of appropriate Town regulations, staff actions, Planning Board actions, and Town finances, if needed.
Appendix A: Definitions and Acronyms

Promote: Advance the desired state through the use of Town policies and codes and Planning Board and staff activity at all levels of planning. This could include financial support by the Town.

Protect: Guard against a deterioration of the desired state through the use of Town policies and regulations, staff, and, if needed, financial support by the Town.

Provide: Take the lead role in supplying the needed financial and staff support to achieve the desired goal. The Town is typically involved in all aspects from planning to implementation to maintenance.

Recommended Action: A statement outlining a specific course of action the Town may pursue to implement goals and policies. Recommended actions are not used in review of development proposals, text amendments, and/or rezoning requests.

Shall: An obligation to carry out a course of action.

Should: An officially adopted course or method of action intended to be followed to implement the community Goals. Though not as mandatory as "shall", it is still an obligatory course of action unless clear reasons can be identified that an exception is warranted.

Support: Supply the needed staff support, policies, and financial assistance at all levels to achieve the desired goal.

Sustain: Uphold the current state through Town policies, decisions, financial resources, and staff action.

Work: Cooperate and act in a manner through the use of Town staff actions, and policies to create the desired goal.

**Acronyms Used In the Report**

- AEC  Areas of Environmental Concern
- CAMA  Coastal Area Management Act
- COE  Corps of Engineers, United States
- CRAC  Coastal Resource Advisory Committee
- CRC  Coastal Resource Commission
- CRS  Community Rating System
- CZMA  Coastal Zone Management Act
DCM  Division of Coastal Management
NC DEQ  Department of Environmental Quality
DWR  Division of Water Resources
DWQ  Division of Water Quality
EMS  Emergency Medical Service
EMT  Emergency Medical Technician
ETJ  Extra-territorial Jurisdiction
FAR  Floor Area Ratio
FEMA  Federal Emergency Management Agency
GIS  Geographic Information System
HGW  High Quality Waters
ICWW  Intracoastal Waterway
LPO  Local Permit Officer
LUP  Land Use Plan
LUPSC  Land Use Plan Steering Committee
MG  Million Gallons
MGD  Millions of Gallons per Day
MHWL  Mean High Water Line
MLWL  Mean Low Water Line
MS4  Municipal Separate Storm Sewer System
N.A.  Not Applicable
NC  North Carolina
NCAC  North Carolina Administrative Code
NCDOT  North Carolina Department of Transportation
NFIP  National Flood Insurance Program
NPDES  National Pollutant Discharge Elimination System
Nonpoint Source
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>Nutrient Sensitive Waters</td>
</tr>
<tr>
<td>ORW</td>
<td>Outstanding Resource Water</td>
</tr>
<tr>
<td>OSDS</td>
<td>Onsite Sewage Disposal System</td>
</tr>
<tr>
<td>PL</td>
<td>Public Law</td>
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<tr>
<td>SW</td>
<td>Swamp Waters</td>
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<tr>
<td>U.S.</td>
<td>United States</td>
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