

Town of North Topsail Beach, NC 2019 CAMA Land Use Plan Update



Adopted by the North Topsail Beach Board of Aldermen: March 4, 2021
Certified by the Coastal Resources Commission: May 17, 2021





SECTION 1. INTRODUCTION

Plan Purpose 1-1
What is a Land Use Plan? 1-1
Plan Development and Oversight 1-2
Regional Setting and Context..... 1-3
History 1-5
Past Planning Efforts 1-6
Plan Overview 1-6

SECTION 2. COMMUNITY PROFILE

Introduction 2-1
Population 2-1
Regional Population Growth 2-1
Seasonal Population 2-2
Gender and Age Distribution..... 2-2
Racial Composition 2-3
Educational Attainment..... 2-3
Housing 2-4
Housing Unit Types..... 2-4
Housing Occupancy 2-5
Structure Age..... 2-5
Building Permit Activity 2-6
Housing Value..... 2-6
Property Tax Rates 2-7
Economy..... 2-7
Labor Force 2-7
Labor Force by Industry 2-8
Travel Time to Work 2-8
Overall Quality of Life 2-9
Median Household Income 2-10

SECTION 3. EXISTING CONDITIONS

Natural Systems Analysis 3-1
Climate..... 3-1
Topography..... 3-2
Flood Zones 3-2
Soils..... 3-8
Surface Waters 3-11
Areas of Environmental Concern..... 3-14
Estuarine Waters and Estuarine Shorelines (AEC) 3-14
Public Trust Waters 3-15
Coastal Wetlands 3-15
Non-Coastal Wetlands 3-18
Ocean Beaches/Shoreline and Areas of Excessive Erosion..... 3-18
Protected Lands and Natural Heritage Natural Areas 3-20
Inlet Hazard Areas..... 3-20
Slopes in Excess of 12%..... 3-22

TABLE OF CONTENTS



Areas of Resource Potential	3-22
Regionally Significant Parks	3-22
Marinas and Mooring Fields	3-22
Floating Homes or Structures	3-22
Primary Nursery Areas, Submerged Aquatic Vegetation, Shellfishing Waters, and Anadromous Fish Spawning Areas.....	3-23
Aquaculture.....	3-23
Water Quality.....	3-25
Community Facilities.....	3-26
Transportation.....	3-26
Health Care.....	3-27
Law Enforcement.....	3-28
Fire Services.....	3-28
Emergency Medical Services	3-29
Administration.....	3-29
Water System	3-29
Sewer System	3-29
Schools.....	3-30
Recreation	3-30
Stormwater Management.....	3-31
Solid Waste.....	3-31
Existing Land Use	3-32
Introduction.....	3-32
Existing Land Use Acreage.....	3-32

SECTION 4. PROJECTIONS/FUTURE DEMAND

Introduction	4-1
Future Development Trends.....	4-1
Build-Out Analysis	4-1
Residential/Non-Residential Growth	4-3
Population Projections	4-4
Future Community Facilities and Services Needs.....	4-6
Transportation.....	4-6
Health Care.....	4-8
Law Enforcement.....	4-8
Fire Department/EMS	4-9
Administration.....	4-9
Water System	4-9
Sewer System	4-10
Schools.....	4-10
Land Use Conflicts.....	4-11
Future Land Use	4-12
Introduction.....	4-12
Conservation	4-12
Mixed Use	4-12
Low Density Residential.....	4-13
Medium Density Residential.....	4-13
High Density Residential	4-14



Inlet Hazard Residential District..... 4-14
 Future Land Use Compatibility Matrix 4-14
 Future Land Use Acreage 4-16

SECTION 5. GOALS & IMPLEMENTING STRATEGIES

Introduction 5-1
 Public Input 5-1
 Project Website 5-2
 Community Survey 5-2
 Town Meeting Results 5-4
 Policies Regarding Land Use and Development in AECs 5-5
 Land Use Management Topics 5-6
 Introduction 5-6
 Impact of CAMA Land Use Plan Policies on Management Topics 5-7
 Public Access 5-7
 Land Use Compatibility 5-8
 Infrastructure Carrying Capacity 5-15
 Natural Hazard Areas 5-18
 Water Quality 5-20
 Local Areas of Concern 5-23

SECTION 6. TOOLS FOR MANAGING DEVELOPMENT

Introduction 6-1
 Existing Development Program 6-1
 Continuing Planning Process 6-1
 Land Use Plan Amendments 6-3
 Citizen Participation 6-3

MAPS

Map 1 Regional Location..... 1-4
 Map 2 Flood Hazard Areas with CBRA Zones..... 3-4
 Map 3 Fast Moving SLOSH 3-6
 Map 4 Slow Moving SLOSH 3-7
 Map 5 Soils 3-10
 Map 6 Surface Water Quality, Primary Nursery Areas, & Submerged Aquatic Vegetation 3-13
 Map 7 Wetlands 3-17
 Map 8 Natural Heritage Natural Areas and Protected Lands 3-21
 Map 9 Shellfishing Areas 3-24
 Map 10A Existing Land Use 3-33
 Map 10A Existing Land Use 3-34
 Map 11A Future Land Use 4-17
 Map 11B Future Land Use 4-18



TABLES

Table 1 Regional Population Change, 1980-2016	2-1
Table 2 Seasonal Population Estimates	2-2
Table 3 North Topsail Beach Gender and Age Distribution, 2000 to 2016	2-2
Table 4 North Topsail Beach Age Composition, 2010	2-3
Table 5 North Topsail Beach Racial Composition, 2000 to 2016	2-3
Table 6 North Topsail Beach Educational Attainment, 2000 to 2016	2-4
Table 7 North Topsail Beach Units in Structure, 2000 to 2016	2-4
Table 8 North Topsail Beach Housing Occupancy, 2000 to 2016	2-5
Table 9 North Topsail Beach Year Structure Built, 2000 to 2016	2-5
Table 10 Building Permit Activity, 2009-2018	2-6
Table 11 North Topsail Beach Owner-Occupied Dwelling Unit Value, 2000 to 2016	2-6
Table 12 FY2018 Property Tax Rates	2-7
Table 13 Employment by Industry, 2016	2-8
Table 14 North Topsail Beach Travel Time to Work, 2016	2-9
Table 15 Key Quality of Life Indicators	2-9
Table 16 North Topsail Beach Weather Averages	3-1
Table 17 Flood Hazard Areas	3-3
Table 18 Storm Surge Inundation	3-5
Table 19 Soils	3-9
Table 20 NC Division of Water Resources Water Body Classifications	3-11
Table 21 Waterbody Classifications	3-12
Table 22 Wetlands	3-16
Table 23 Protected Lands	3-20
Table 24 Natural Heritage Natural Areas	3-20
Table 25 Existing Land Use	3-32
Table 26 Increased Development by Zoning District	4-2
Table 27 2055 Population Projections	4-5
Table 28 Onslow County School System Capacity	4-10
Table 29 Future Land Use Plan Compatibility Matrix	4-15
Table 30 Future Land Use	4-16

APPENDICES

Appendix A. Citizen Participation Plan
Appendix B. Build-out and Non-Conforming Lot Study
Appendix C. Land Use Plan Survey Results
Appendix D. Definitions
Appendix E. Onslow County MJHMP Mitigation Strategies - NTB



PLAN PURPOSE

The Town of North Topsail Beach 2019 CAMA Land Use Plan was prepared as a guidebook to be utilized by the Town’s government officials, staff, citizens, and visitors – not a typical reference document which occupies space on a shelf, but a “playbook” manual to be opened frequently, dog-eared, and worn well. While it contains details about the community’s population, history, facilities, amenities, and other area characteristics and statistics, it also provides a strong foundation for future development regulations and offers a comprehensive listing of goals and strategies for implementing those goals. During the scope of this planning process, the drastic impacts of Hurricane Florence (which made landfall near Wrightsville Beach on September 14, 2018) will be considered. Although the storm did not make a direct landfall in North Topsail Beach, the Town experienced some extreme coastal storm surge, as well as Category 2 strength wind gusts. The Town has experienced the impact of hurricanes in the past; this storm is a timely reminder that appropriate planning and development practices can work to minimize the impacts of storm damage before and following a storm event.

The overriding message from this planning process is that the Town must achieve managed growth and such growth cannot be accomplished without following the principles embodied within this land use plan. This planning process, is intended to capture the existing conditions present throughout the Town and establish a path forward. As always, the Town must consider environmental conditions, natural hazard threats, and development pressures in an effort to promote sustainable growth and improve the quality of life for both permanent residents and visitors.

The Town of North Topsail Beach continues to experience slow and steady growth since development of the Town’s last CAMA Land Use plan in 2009. North Topsail Beach continues to manage growth in an effort to both protect natural resources and promote sound and sustainable coastal development. Balanced growth, density of development, and the protection of valuable coastal resources are primary concerns among residents. The purpose of this CAMA Land Use Plan update is to provide data for the Board of Aldermen and Planning Board, and a community-based vision for growth and development. The outcome of this process should assist the Town in making decisions regarding both development and capital investment.

WHAT IS A LAND USE PLAN?

Specifically, this process will result in the adoption of an updated CAMA Land Use Plan for the Town of North Topsail Beach. A land use plan is a long-range policy document with a particular time horizon – ten to fifteen years in the case of North Topsail Beach. It should be noted that the Town has revisited the CAMA Land Use Plan on an approximate update cycle of ten years dating back to the mid-1990s following incorporation in 1990 (the Town’s first Land Use Plan was developed and adopted in 1996).

SECTION 1. INTRODUCTION



The plan will include an assessment of existing conditions, a summary of public input, projection of future needs for topics relating to land use and development, and a comprehensive listing of goals, policies, and strategies. Because the Town of North Topsail Beach is located in one of the twenty Coastal Area Management Act (CAMA) counties, the plan will also address issues relating specifically to coastal growth and development.

In North Carolina, a land use plan is the legal foundation for development regulations. While the CAMA Land Use Plan is not a regulatory document, it does provide guidance relating to future land use and development changes in relation to the Town's Unified Development Ordinance (UDO). Specifically, the plan should be used whenever zoning decisions are made by the Planning Board and/or Board of Aldermen. More detail relating to these specifics is contained in the concluding section of the plan.

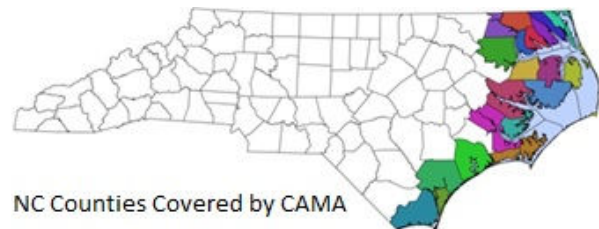
The following is included as part of the land use planning process:

- Community and Demographic Profile
- Assessment of Existing Conditions
- Projection of Future Population and Supporting Infrastructure Needs
- Future Land Use and Transportation Needs
- Goals and Implementing Strategies
- Recommendations for amendments to the Town's Unified Development Ordinance (UDO)

What is CAMA?

CAMA is the North Carolina Coastal Area Management Act (NCGS 113A-100, *et seq.*), which establishes a cooperative program of coastal area management between local and state governments. The Act, originally passed in 1974 and since amended, states that local governments shall have the initiative for planning, while the state government establishes areas of environmental concern. With regard to planning, the state government is directed to act primarily in a supportive, standard-setting, and review capacity, except in situations where local governments do not elect to exercise their initiative.

In addition, CAMA establishes the Coastal Resources Commission within the Department of Environmental Quality, whose duties include approval of Coastal Habitat Protection Plans and designation of Areas of Environmental Concern (AEC). After designation of these areas, the Commission is responsible for issuing all permits. *Source: National Oceanic and Atmospheric Administration. Coastal Services Center.*



NC Counties Covered by CAMA

PLAN DEVELOPMENT AND OVERSIGHT

The Town of North Topsail Beach Board of Aldermen appointed the Town's Planning Board to oversee development of the plan. The Town's Planning Board met regularly over a 12-month period to gather input, review data, and carry out discussions associated with the future of North Topsail Beach. The initial step in the process was the review and adoption of a Citizen Participation Plan (see Appendix A). This plan provides the basis for not only working with the Town's elected and appointed boards during plan development, but the involvement of the public at-large. Efforts to involve the public included



SECTION 1. INTRODUCTION

public notification of meetings through local media, notification through the Town's website, the use of social media outlets, and the development and maintenance of a project-based website (www.ntbplan.com).

The following provides a listing of the Planning Board members which participated in the development of the draft CAMA Land Use Plan:

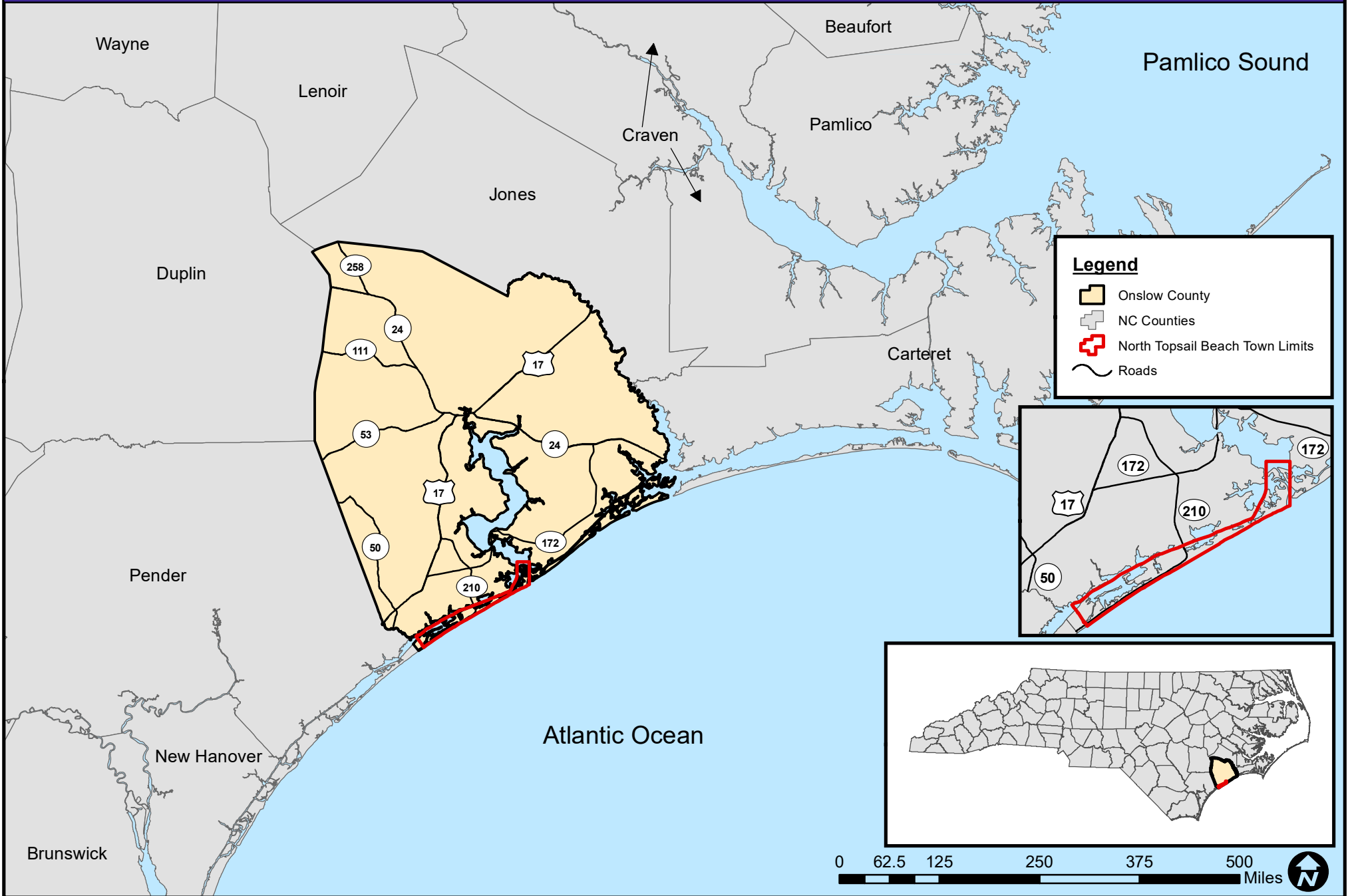
- Pat Stigall, Chair
- Paul Dorazio, Vice Chair
- Zubecca Bowman
- William Bowman
- Dr. John Harrington
- Gunnar Matthews
- Hanna McCloud
- Scott Morse, Alternate
- Mia Green, Alternate

REGIONAL SETTING AND CONTEXT

North Topsail Beach is located at the north end of Topsail Island within Onslow County, which is situated within the southeastern portion of the North Carolina Coastal Plain. This island is part of North Carolina's coastal barrier island chain which stretches from the Virginia border in Currituck County, to the South Carolina Line in southern Brunswick County. Onslow County is bordered by Carteret, Duplin, Jones, and Pender Counties, as well as the Atlantic Ocean to the east. North Topsail Beach is linked to the mainland by a high rise bridge located along NC Highway 210. NC Highway 210 continues southward throughout the Town's corporate limits, eventually leading to Surf City and Pender County. Access to the north end of the island is provided via New River Inlet Road (SR 1568). The New River Inlet is situated at the northern extent of the Town's corporate limits.

North Topsail Beach exists primarily as a residential/resort community catering to both permanent and seasonal residents. Land use within the Town is almost entirely comprised of single- and multi-family residential uses. Permanent and seasonal residents of North Topsail Beach rely heavily on retail establishments and services available at both Surf City (8 miles) to the south, Sneads Ferry (6 miles) to the northwest, and Holly Ridge located on the mainland east of town along NC Highway 210. The closest major cities to North Topsail Beach are Jacksonville (22 miles) and Wilmington (32 miles). Residents of North Topsail Beach rely on these two urban centers for a variety of services including access to various health service providers and regional hospital facilities. Map 1 provides a regional location map for North Topsail Beach.

Map 1. Regional Location





HISTORY

Topsail Island shares a rich and varied history. Local folklore claims the name, Topsail (pronounced Topsul), originated during the 1700s when pirate ships roamed the coastal waters. Local folklore claims that marauding pirates hid their ships in the channel behind the island and waited for passing merchant ships loaded with goods. The pirates would pursue and attack the merchants, claiming the cargoes as their own. Eventually the merchants became aware of this infamous hiding place and began to watch for the tops of the pirates' sails showing over the rolling dunes - hence the name Topsail Island.



Image Source: NC Department of Natural and Cultural Resources.



Prior to World War II, the only access to Topsail Island was by boat. Area residents frequently made the short boat trip and picnicked on the sandy shores of the Atlantic Ocean. Local farmers are said to have driven their pigs across the waterways to graze on wild grass. Treasure hunters searched for Blackbeard's infamous buried treasure throughout the maritime forests which covered the land.

Image Source: Onslow County Chamber of Commerce.

During the war, the US Navy took over the island and began a joint venture with Johns Hopkins University known as Operation Bumblebee. The waterway was dredged, roads were built, and fresh water was piped onto the island. Operation Bumblebee was the beginning of the space program for the United States Government. An arsenal center for the assembly and storage of rockets was built on the sound side of the island, and launching pads were constructed on the oceanfront. Concrete observation towers were built throughout the island to monitor the experimental launchings. Over 200 rocket launchings took place on the island between 1946 and 1948. When the testing program was dismantled, the government sold the island to the public. Many of the original military structures are still standing today.



Image Source: <https://portcitydaily.com/>.

Ocean City, which is centrally located within the Town's corporate limits, was created by white Wilmington attorney Edgar L. Yow, in the mid to late forties as a beach community where Blacks could have home ownership. Having bought areas of land on Topsail Island, Attorney Yow shared his idea with Dr. Samuel J. Gray, a Black physician in Wilmington, who was one of his clients. Dr. Gray and many of his friends ultimately bought tracts of land on the island. Wade Chestnut, one of the first homeowners, conceived the idea of naming this section of the island, Ocean City, as it is presently called.



The Topsail Island community has experienced much growth since the days of pig farmers and military maneuvers. The Town of Surf City, in the center of the island, was incorporated in 1949. The Town of Topsail Beach was incorporated in 1963, and the Town of North Topsail Beach located on the northern half of the island was incorporated in 1990. The Town of North Topsail Beach derived its name from its location at the north end of Topsail Island. The area used to be known as West Onslow Beach and North Topsail Shores.

PAST PLANNING EFFORTS

As part of the planning process, past policy documents, capital improvements plans, and CAMA Land Use Plans were analyzed for significant findings relating to North Topsail Beach's future. These past planning efforts help to provide a broader sense of understanding for the issues facing North Topsail Beach today. The following planning projects were utilized to gather information, research past public input priorities, and understand growth and development that has occurred over the past two decades.

- Town of North Topsail Beach 2009 CAMA Land Use Plan
- 2015 Unified Development Ordinance Update
- Town of North Topsail Beach Build Out and Non-Conforming Lot Study, 2010
- Onslow County Multi-Jurisdictional Hazard Mitigation Plan, 2015
- Onslow County Transportation Plan, 2009

PLAN OVERVIEW

The North Topsail Beach CAMA Land Use Plan is divided into six independent components that focus on various aspects of the community. The following provides a brief synopsis of what will be addressed within each plan element:

Section 1. Introduction

This plan element provides a general overview of the plan, planning process, and enabling legislation regarding the establishment and use of Comprehensive/Land Use Plans in local government decision making.

Section 2. Community Profile

This plan element provides a general overview of existing conditions throughout the Town of North Topsail Beach in regards to population, housing age and condition, and economic indicators. This section serves as a basic overview of the Town's current state of affairs and serves as a baseline for discussion regarding growth, development, and public policy.

Section 3. Existing Conditions

This plan element focuses on existing environmental and land use conditions throughout North Topsail Beach's planning jurisdiction including environmental factors, facilities and services, transportation and land use. This information provides the data and analysis necessary to make sound decisions regarding development of the Town's Future Land Use map.



Section 4. Future Demand/Projections

This section of the plan focuses on future growth and demand which may have an impact on land use and transportation. Forecasts of growth and demand are, at best, difficult. Constantly changing local, regional, national, and international factors significantly influence the Town of North Topsail Beach and the surrounding region.

Section 5. Goals and Implementing Strategies

The discussion of goals and implementing strategies will serve as a guide for the integration of the CAMA Land Use Plan into the Town's day-to-day decision-making process. The Future Land Use plan element defines the framework for future growth and development throughout the Town of North Topsail Beach. Citizen input garnered as a result of the plan is also summarized in this section. Additionally, the content defined within this plan element will establish an organized and thorough listing of implementation strategies intended to provide for sound principles relating to future growth, economic development, modifications of service delivery, and infrastructure expansion.

Section 6. Tools for Managing Development

This section of the plan provides narrative and tools for implementing the strategies outlined in Section 5 of the plan. It is intended that this document be an integral part of the North Topsail Beach decision-making process concerning future land use.



INTRODUCTION

The community profile section outlines various demographic information, including population, housing, and economic indicators. The North Carolina beach towns of Surf City and Topsail Beach, as well as Pender County and Onslow Counties are utilized for comparison under several of the demographic categories discussed. These two municipal jurisdictions, as well as the counties, have similar characteristics and face many of the same challenges as North Topsail Beach, making them ideal candidates for comparison. For the purposes of this plan, and for the sake of consistency, demographic data are sourced primarily from the US Census Bureau. It should be noted that unless expressly mentioned, all data and figures reference permanent residents. Detailed demographic information is not available for seasonal residents through the US Census; however, estimates have been provided based on the availability of transient lodging and public parking access.

POPULATION

Regional Population Growth

Table 1 provides a summary of population growth for the Town of North Topsail Beach and Onslow County, as well as other regional localities and the State. This section provides a brief snapshot of the population growth trends that have had an impact on the need for increased services and facilities, both at the local and regional level. It should be noted that the initial population count for North Topsail Beach as reported for 1990 (the year of its incorporation) is 947 individuals. Since 1990, the Town of North Topsail Beach has increased in population from 947 individuals to an estimated 1,104 persons in 2016 (an increase of 16.6%). In comparison, Onslow County grew by a rate of 23.9% and the population of North Carolina overall increased by 49.9%.

In comparison to neighboring jurisdictions, North Topsail Beach has increased in similar fashion. Between 2000 and 2016, North Topsail Beach grew by a percentage of 30.9%, while Onslow County’s permanent population grew by a rate of 23.5%. Neighboring Topsail Beach, however, experienced a decline in population over this period at a rate of -24.8%.

Table 1. Regional Population Change, 1980-2016									
Population	1980*	1990	2000	2010	2016	% Change '80-'90	% Change '90-'00	% Change '00-'10	% Change '10-'16
North Topsail Beach	---	947	843	743	1,104	---	-11.0%	-11.9%	48.6%
Surf City	421	970	1,393	1,853	2,618	130.4%	43.6%	33.0%	41.3%
Topsail Beach	264	346	471	368	354	31.1%	36.1%	21.9%	-3.8%
Onslow County	112,784	149,838	150,355	177,772	185,755	32.9%	0.3%	18.2%	4.5%
Pender County	22,262	28,855	41,082	52,217	56,358	29.6%	42.4%	27.1%	7.9%
North Carolina	5,880,095	6,632,448	8,046,313	9,535,483	9,940,828	12.8%	21.3%	18.5%	4.3%

**1980 Census data is not available for North Topsail Beach. The Town was not incorporated until 1990.
Source: US Census Bureau.*



Seasonal Population

Because demographic data is collected only for permanent residents, it can be difficult to determine a precise number for peak day population, which typically occurs in early July. Peak day population was calculated based on the availability of public access parking spaces, campsites, and seasonal housing units throughout the Town’s corporate limits. Currently, there are 1,212 public access spaces and it is assumed that these spaces will turnover once throughout the course of a day. The number of persons occupying cars, seasonal units, and campsites have been established through the planning process based on current average usage.

The following provides a summary of peak day population as of 2018. These figures account for increases in housing, as well as public parking access, since development of the 2009 CAMA Land Use Plan. According to these estimates, the peak day population for the Town during summer months is approximately 28,844 persons.

Occupancy Type	Number of Units	Persons Per Unit	Seasonal Population Estimate
Campground Sites	577	3.5	2,020
Public Access Parking Spaces	1,212	4.0	9,696
Seasonal Housing Units	2,003	8.0	16,024
Permanent Population*	N/A	N/A	1,104
Total	N/A	N/A	28,844

**Permanent population includes both owner-occupants and year-round renters.
Source: Town of North Topsail Beach, NC Coastal Management, US Census Bureau American Community Survey.*

Gender and Age Distribution

Since incorporation, the gender and age composition for the Town of North Topsail Beach has remained fairly consistent. In 2000, the gender composition of the Town was roughly 52% male and 48% female. As of 2016, this trend has shifted slightly to 54% male and 46% female. The median age for the Town increased from 45.1 years to 46.1 years of age from 2000-2016. In comparison, the median age for North Carolina overall was 37.6 years. North Topsail Beach has a slightly younger population compared to other beach communities such as Emerald Isle (53 years) and Oak Island (52.7 years). The following table provides a summary of gender and age distribution from 2000-2016.

	2000	% of Total	2010	% of Total	2016	% of Total
Male	440	52.2%	413	55.6%	600	54.3%
Female	403	47.8%	330	44.4%	504	45.7%
Total	843	100.0%	743	100.0%	1,104	100.0%
Median Age	45.1		43.5		46.1	

Source: US Census Bureau.



SECTION 2. COMMUNITY PROFILE

The following table provides an overview of age composition within the Town of North Topsail Beach. This data provides an indication of how the Town’s population has aged since development of the 2009 Land Use Plan. Age composition has remained fairly consistent since 2009. The most substantial change that occurred was in the 35 to 54 age group. The population within this group declined by 81 persons or 33%. Additionally, the 15 to 34 age group increased by 7.1%. The Town’s age composition compares favorably to the state overall. As of 2010, approximately 45% of North Carolina residents fell between the ages of 18 and 44.

Table 4. North Topsail Beach Age Composition, 2010

	2010	% of Total
0 to 14 years	53	7.1%
15 to 34 years	272	36.6%
35 to 54 years	162	21.8%
55 to 64 years	130	17.5%
65 to 74 years	93	12.5%
75 and over	33	4.5%
Total	743	100.0%

Source: US Census Bureau.

Racial Composition

The racial composition of North Topsail Beach is generally comprised of Caucasians (roughly 92%). According to the US Census Bureau, there were 1,010 Caucasian individuals and 94 persons of other ethnicities with permanent residency within the Town of North Topsail Beach. Out of these individuals, 3.4% of the population are African American and 2.4% are Asian. The following table provides a summary of racial composition for the Town of North Topsail Beach.

Table 5. North Topsail Beach Racial Composition, 2000 to 2016

	2000	% of Total	2010	% of Total	2016	% of Total
White	777	92.2%	701	94.4%	1,010	91.5%
Black or African American	40	4.7%	13	1.8%	38	3.4%
American Indian or Alaska Native	4	0.5%	4	0.5%	0	0.0%
Asian	7	0.8%	10	1.3%	26	2.4%
Native Hawaiian or Pacific Islander	0	0.0%	3	0.4%	0	0.0%
Some Other Race	4	0.5%	8	1.1%	0	0.0%
Two or More Races	11	1.3%	4	0.5%	30	2.7%
Total	843	100.0%	743	100.0%	1,104	100.0%

Source: US Census Bureau.

Educational Attainment

Table 6 provides a summary of educational attainment. This data presents the overall educational attainment level for all North Topsail Beach citizens over the age of 25 years. As of 2016, over 55% of North Topsail Beach citizens had college degrees compared to roughly 36% for North Carolina overall. Of these individuals, approximately 22% had a graduate degree. This figure is drastically higher than

SECTION 2. COMMUNITY PROFILE



Onslow County which reported 30% of residents with a college degree, of which 6% had a graduate or professional degree. Only thirteen individuals in North Topsail Beach reported not having a high school diploma.

Table 6. North Topsail Beach Educational Attainment, 2000 to 2016

	2000	% of Total	2010	% of Total	2016	% of Total
Less than 9 th grade	2	0.3%	0	0.0%	3	0.3%
9 th to 12 th grade, no diploma	54	7.8%	28	3.5%	10	1.1%
High school graduate (includes equivalency)	138	19.9%	145	18.3%	145	16.0%
Some college, no degree	149	21.5%	217	27.3%	247	27.2%
Associate degree	49	7.1%	110	13.9%	76	8.4%
Bachelor's degree	181	26.1%	242	30.5%	229	25.2%
Graduate or professional degree	120	17.3%	52	6.5%	198	21.8%
Population 25 years and over	693	100.0%	794	100.0%	908	100.0

Source: US Census Bureau.

HOUSING

The discussion of housing includes a description of unit types, occupancy status, value, and year built. In North Topsail Beach, as in other coastal municipalities, it is important to include discussion of vacant housing units that may be seasonally occupied, giving a greater understanding of the conditions facing the community during the peak summer months.

Housing Unit Types

According to the US Census Bureau, the number of housing units within the Town of North Topsail Beach has increased by 508 units since the 2000 census was conducted. Table 7 provides an overview of the current housing stock and what type of structures this stock is comprised of. Housing within North Topsail Beach is comprised predominantly of single family detached/attached homes (46%). There are also a substantial number of units located within large multi-family condominium buildings. Approximately 31% of the Town's housing units are located within condo complexes with twenty or more units per building.

Table 7. North Topsail Beach Units in Structure, 2000 to 2016

	2000	% of Total	2010	% of Total	2016	% of Total
1-unit, detached	533	25.7%	678	29.8%	957	37.0%
1-unit, attached	262	12.6%	440	19.3%	236	9.1%
2 units	133	6.4%	70	3.1%	159	6.2%
3 or 4 units	94	4.5%	137	6.0%	149	5.8%
5 to 9 units	95	4.6%	58	2.6%	69	2.7%
10 to 19 units	12	0.6%	4	0.2%	25	1.0%
20 or more units	829	39.9%	830	36.5%	812	31.4%
Mobile home	116	5.6%	58	2.5%	177	6.8%
Boat, RV, van, etc.	2	0.1%	0	0.0%	0	0.0%
Total Housing Units	2,076	100.0%	2,275	100.0%	2,584	100.0%

Source: US Census Bureau.



Housing Occupancy

Within a coastal barrier island beach community, the housing stock is commonly utilized for temporary and/or seasonal rentals. This use of single- and multi-family homes has become even more popular since the advent of websites like Airbnb.com and VRBO.com. Table 8 provides a summary of how residential properties within the Town of North Topsail Beach are being utilized. As of 2016, roughly 11% of total housing units were occupied by year-round residents, with another 11% occupied by long-term renters. This amount leaves 2,003 housing units, or approximately 78% of homes, being vacant and potentially being utilized for short-term rentals. These rentals are generally utilized during peak summer months, which drastically increases the Town’s population as discussed on page 2-2 of the Plan. In comparison, the percentage of homes throughout the state that are currently vacant is approximately 13%. Additionally, the percentage of homes that are owner-occupied in North Carolina is approximately 58%, much higher than the 11% in North Topsail Beach.

Table 8. North Topsail Beach Housing Occupancy, 2000 to 2016

	2000	% of Total	2010	% of Total	2016	% of Total
Owner-Occupied	293	14.1%	264	11.6%	287	11.1%
Renter-Occupied	168	8.1%	218	9.6%	294	11.4%
Vacant	1,615	77.8%	1,793	78.8%	2,003	77.5%
Total Housing Units	2,076	100.0%	2,275	100.0%	2,584	100.0%

Source: US Census Bureau.

Structure Age

The following table provides an overview of the year that various housing structures were built within the Town of North Topsail Beach. According to the US Census Bureau, upon incorporation in 1990, the Town of North Topsail Beach had a housing stock of 1,656 structures. Between 1990 and 2015, an additional 928 housing units have been constructed throughout the Town’s corporate limits. Additional housing units constructed since 2015 are addressed in the following section.

Table 9. North Topsail Beach Year Structure Built, 2000 to 2016

	Number	% of Total
Built 2010 or later	39	1.5%
Built 2000 to 2009	475	18.4%
Built 1990 to 1999	414	16.0%
Built 1980 to 1989	1,317	51.0%
Built 1970 to 1979	172	6.7%
Built 1960 to 1969	138	5.3%
Built 1940 to 1959	29	1.1%
Built 1939 or earlier	0	0.0%
Total Housing Units	2,584	100.0%

Source: US Census Bureau.

SECTION 2. COMMUNITY PROFILE



Building Permit Activity

Building permit activity provides a true snapshot of the development activity that has occurred within the Town of North Topsail Beach. Prior to 1999, the Town does not have reliable records regarding building permit activity. As of the drafting of the Town's last land use plan in 2009, an additional 200 residential units have been constructed.

Table 10. Building Permit Activity, 2009-2018

Year	Total Housing Unit Count	Year	Total Housing Unit Count
2009	2,476	2014	2,582
2010	2,487	2015	2,594
2011	2,508	2016	2,614
2012	2,523	2017	2,655
2013	2,547	2018	2,676

Source: Town of North Topsail Beach.

Housing Value

Table 11 provides a summary of owner-occupied housing value as of 2016. These figures have been provided through the US Census Bureau, and therefore, should be considered averages. They are not based on actual real estate transactions that have closed. Based on these figures, roughly 72% of homes within the Town's planning jurisdiction are valued at over \$200,000, while over 14% have a value exceeding \$500,000. Since these figures only reflect owner-occupied units, it is not a true reflection of overall housing values throughout the Town. It does, however, provide a general baseline for considering housing affordability within North Topsail Beach. Based on the figures presented, the Town maintains a housing market that is still attainable to a broader market. This fact is indicative of many beach towns along the North Carolina coastline. Beach properties are still, depending on location, somewhat affordable; however, cost associated with insurance coverage and elevated maintenance cost certainly drives up the cost of ownership. As of 2016, the median home value in North Topsail Beach was \$273,000 compared to \$153,600 for North Carolina overall and \$390,600 for the beach town of Emerald Isle.

Table 11. North Topsail Beach Owner-Occupied Dwelling Unit Value, 2000 to 2016

	2000	% of Total	2010	% of Total	2016	% of Total
Less than \$50,000	3	1.7%	10	3.8%	0	0.0%
\$50,000 to \$99,999	48	26.4%	0	0.0%	23	8.0%
\$100,000 to \$149,999	44	24.2%	16	6.1%	35	12.2%
\$150,000 to \$199,999	17	9.3%	9	3.4%	21	7.3%
\$200,000 to \$299,999	46	25.3%	84	31.8%	87	30.3%
\$300,000 to \$499,999	17	9.3%	70	26.5%	80	27.9%
\$500,000 to \$999,999	5	2.7%	68	25.8%	36	12.6%
\$1,000,000 or more	2	1.1%	7	2.6%	5	1.7%
Total Owner-Occupied Units	182	100.0%	264	100.0%	287	100.0%
Median (Dollars)	\$137,500		\$321,300		\$273,200	

Source: US Census Bureau.



Property Tax Rates

For second homeowners, property tax rates can be a deterrent to investment, purchase, or construction of vacation units. Property tax rates are based on the total appraised value of land and buildings per \$100 of value. For incorporated municipalities, the property tax rate includes the base county rate in which the town is located. The average property tax rate for coastal municipalities within Onslow, New Hanover, and Pender counties is approximately 0.25 cents per \$100 of valuation. The following provides a breakdown of FY2018 tax rates for Onslow County and several municipalities located in the County.

Table 12. FY2018 Property Tax Rates	
Jurisdiction	Tax Rate (Per \$100 of Value)
Onslow County	0.705
City of Jacksonville	0.642
Town of Richlands	0.38
Town of Swansboro	0.35
Town of Holly Ridge	0.405
Town of Surf City	0.41
Town of North Topsail Beach	0.3435

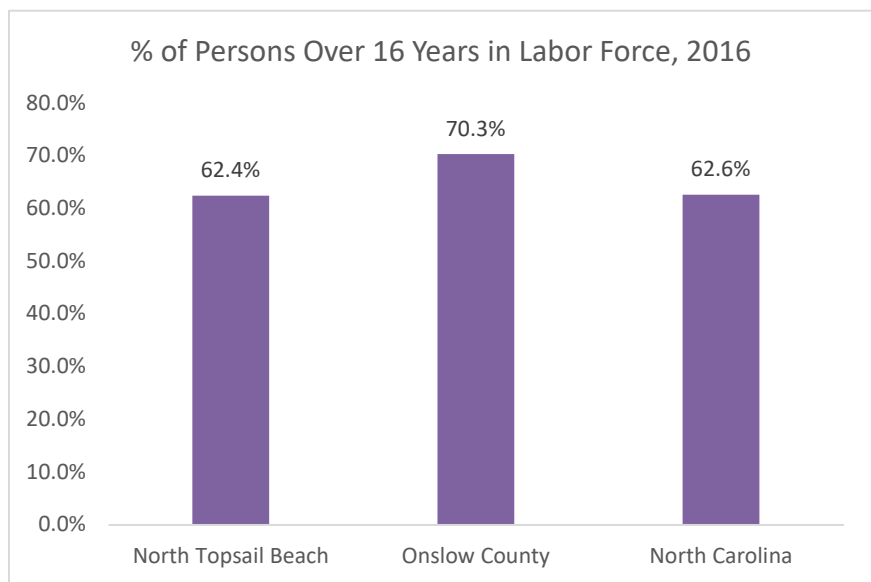
Source: Onslow County Tax Office.

ECONOMY

Data related to the North Topsail Beach’s local economy, including information detailing the labor force, employment by industry, and income is provided below.

Labor Force

According to Census data, more than 35% of North Topsail Beach’s year-round residents are not considered part of the labor force. This category consists mainly of students, homemakers, retired workers, seasonal workers, institutionalized people, and people performing incidental unpaid family work (less than 15 hours a week).



SECTION 2. COMMUNITY PROFILE



Labor Force by Industry

In North Topsail Beach, the Educational Services, and Health Care and Social Assistance industry provides the greatest percentage of employment to residents (21.1%). Across the state, the Educational Services, and Health Care and Social Assistance industry accounts for a similar percentage of employed persons at 23.4%. Other industries providing employment to a significant percentage of persons within North Topsail Beach include the Arts, Entertainment, and Recreation and Accommodation and Food Services industry (17.7%), Retail Trade industry (13.5%), and Construction industry (9.4%). Table 13 provides a summary of employment by industry for the Town of North Topsail Beach, Onslow County, and North Carolina overall.

Table 13. Employment by Industry, 2016

Industry	North Topsail Beach		Onslow County		North Carolina	
	2016	% of Total	2016	% of Total	2016	% of Total
Agriculture, forestry, fishing and hunting, and mining	0	0.0%	847	1.4%	60,928	1.4%
Construction	47	9.4%	5,637	9.1%	298,071	6.7%
Manufacturing	14	2.8%	2,224	3.6%	552,844	12.4%
Wholesale trade	11	2.2%	829	1.3%	117,781	2.6%
Retail trade	67	13.5%	9,103	14.7%	529,762	11.9%
Transportation and warehousing, and utilities	21	4.2%	1,985	3.2%	192,381	4.3%
Information	11	2.2%	785	1.3%	81,424	1.8%
Finance and insurance, and real estate and rental and leasing	40	8.0%	2,438	3.9%	282,244	6.3%
Professional, scientific, and management, and administrative and waste management services	26	5.2%	6,056	9.8%	461,340	10.3%
Educational services, and health care and social assistance	105	21.1%	13,193	21.3%	1,041,851	23.4%
Arts, entertainment, and recreation, and accommodation and food services	88	17.7%	8,337	13.5%	428,403	9.6%
Other services, except public administration	26	5.2%	3,162	5.1%	218,468	4.9%
Public administration	42	8.4%	7,338	11.8%	195,327	4.4%
Civilian employed population 16 years and over	498	100.0%	61,934	100.0%	4,460,824	100.0%

Source: US Census Bureau.

Travel Time to Work

Table 14 provides a breakdown of commuting times to work for North Topsail Beach residents. As shown on the existing land use map (see pages 3-33 and 3-34), there is very little commercial or non-residential property within the Town of North Topsail Beach. Due to this fact, the working age population must commute to jobs located off the island. According to 2016 US Census Bureau estimates, nearly 54% of working Town residents have a commute of over thirty minutes. There are a large number of residents within Town that are employed within the Jacksonville or Wilmington



SECTION 2. COMMUNITY PROFILE

metropolitan areas, which requires a commute of approximately thirty to forty-five minutes. Camp Lejeune, located in Jacksonville, is a substantial employer to the region overall. In comparison, the average commute time for the working age population for all North Carolina residents as reported by the US Census Bureau in 2016 was 26.1 minutes.

Table 14. North Topsail Beach Travel Time to Work, 2016

	2016	% of Total
Less than 10 minutes	48	9.0%
10 to 14 minutes	29	5.5%
15 to 19 minutes	63	11.9%
20 to 24 minutes	65	12.2%
25 to 29 minutes	40	7.5%
30 to 34 minutes	49	9.2%
35 to 44 minutes	96	18.1%
45 to 59 minutes	102	19.2%
60 or more minutes	39	7.4%
Workers 16 years & over who did not work at home	531	100.0%

Source: US Census Bureau.

Overall Quality of Life

There are many factors that contribute to improving quality of life within a community. Table 15 provides a summary of indicators that contribute to or are indicative of the community's quality of life. These factors include tax rates, the provision of childcare services, and the availability of healthcare facilities.

Table 15. Key Quality of Life Factors

Taxes	Onslow County
FY2018-19 Property Tax Rate per \$100 Value	\$0.7050
FY2017-18 Annual Taxable Retail Sales (\$mil)	\$2,043.2
2018 Tier Designation	2
Childcare	
2018Q3 Licensed Child Care Facilities	77
2018Q3 Licensed Child Care Enrollment	3,667
Healthcare Providers	
2017 Number of Physicians	179
2017 Physicians per 10,000 population	9.2
2017 RNs per 10,000 population	51.3
2017 Dentists per 10,000 population	4.4
2017 Pharmacists per 10,000 population	6.5

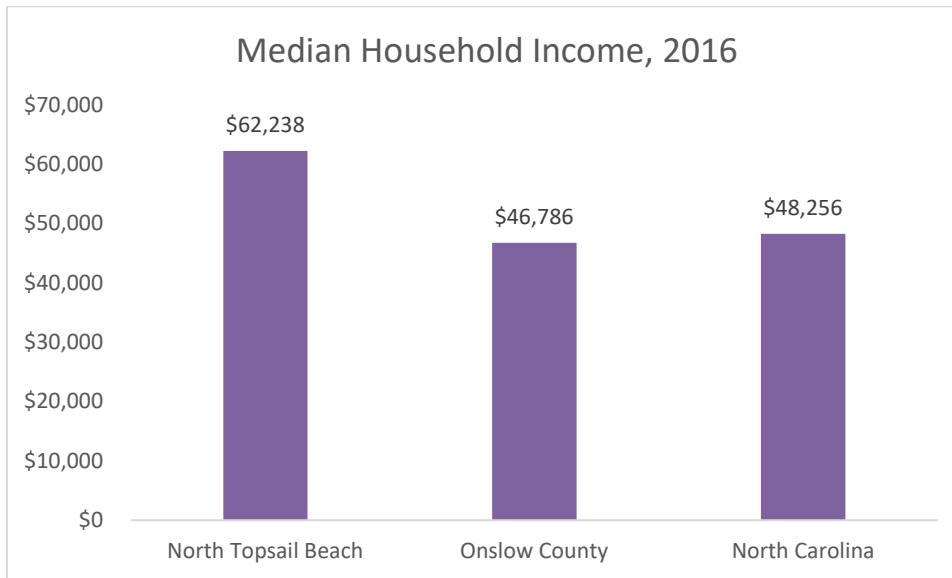
Source: NC Department of Commerce.

SECTION 2. COMMUNITY PROFILE



Median Household Income

The following graph provides a snapshot of median household income for North Topsail Beach, as well as Onslow County and North Carolina. North Topsail Beach maintains a median household income of approximately \$62,000, which compares favorably to Onslow County (\$46,786) and North Carolina Overall (\$48,256).





NATURAL SYSTEMS ANALYSIS

Climate

The Town of North Topsail Beach climate is marked by hot and humid summers, and cool winters with occasional cold spells. During summer months, the area is cooled by offshore breezes. Rain typically falls throughout the year and can be quite heavy at times. The Town is extremely vulnerable to tropical storms and the flooding associated with them because of the unique location of the barrier island. In the event of a cyclonic storm event, portions of the Town’s coastline suffer from substantial erosion. This is one of the most significant problems facing the Town and will be addressed within the policy development portion of this plan.

In winter, the average temperature in the County is approximately 45°F, and the average daily minimum temperature is 32°F. The coldest recorded temperature on record for the region was 2°F occurring in 1965. During summer months, the average temperature is 76°F. The highest temperature on record for summer months was 103°F. Approximately 60% of all annual precipitation within the Town typically falls between the months of April and September. Snowfall in the area is rare; however, snow and winter storm events do occasionally occur.

The following table provides an overview of average monthly weather conditions for the Town of North Topsail Beach.

Table 16. North Topsail Beach Weather Averages

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg. Temperature (°F)	45.0	47.3	54.0	62.1	69.6	76.5	80.2	79.0	74.3	64.2	55.9	48.2
Min. Temperature (°F)	34.3	36.1	42.4	50.2	59.0	66.9	71.2	70.2	64.6	53.2	44.2	37.0
Max. Temperature (°F)	55.6	58.5	65.5	73.9	80.4	86.0	89.2	88.0	84.0	75.4	67.6	59.4
Precipitation/Rainfall (mm)	107	100	100	77	110	133	188	172	143	81	81	94

Source: National Weather Service.

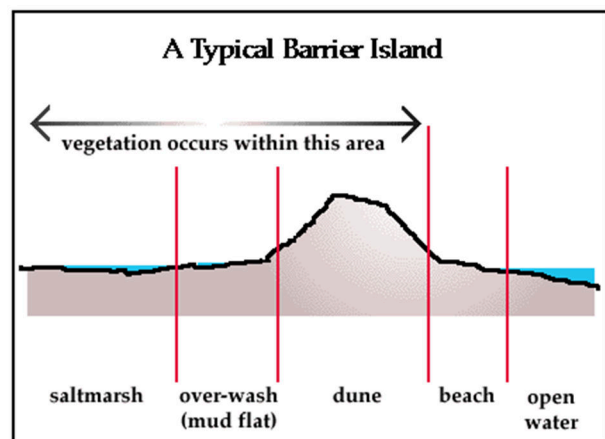
The most significant weather-related threat confronting the Town is related to tropical storm events. The Town has dealt with the aftermath of several storms since its incorporation, including Hurricanes Fran, Floyd, Isabel, Irene, and Matthew. The most recent tropical system to impact North Topsail Beach was Hurricane Florence in September 2018. This hurricane has had the most substantial impact on the island since Hurricane Fran in 1996. These tropical events continue to present a substantial threat to homes, property, and life safety. The Town will address vulnerabilities and community resource needs identified through impacts associated with Hurricane Florence as a component of this planning process.



Topography

North Topsail Beach is a semi-tropical barrier island located off the southern coast of Onslow County, North Carolina. North Topsail Beach is unique in that the town is home to many tropical plant species that generally do not thrive in an environment located this far north. Barrier islands are a phenomenon that are still not fully understood by scientists. Barrier islands are fragile, constantly changing ecosystems that are important for coastal geology and ecology. These islands are separated from the mainland by a shallow sound. Barrier islands are often found in chains along the coastline and are separated from each other by narrow tidal inlets. North Topsail Beach is separated from the mainland by the Intracoastal Waterway.

Barrier islands serve two main functions. First, they protect the coastlines from severe storm damage. Second, they harbor several habitats that are refuges for wildlife. In fact, the salt marsh ecosystems of the islands and the coast help to purify runoffs from mainland streams and rivers. North Topsail Beach fits this overall description of a barrier island system. The town is home to a wide variety of wildlife.



The structure of a typical barrier island system showing the five main parts, the open water, the beach, the dune, the mud-flat, and the salt marsh. *Image Source: US Geological Survey.*

Flood Zones

Over 97% of North Topsail Beach's corporate limits area is impacted by a Special Flood Hazard Area (SFHA). A SFHA is defined as a land area with a greater than 1% chance per year of flooding and is also known as a "floodplain." Special Flood Hazard Areas are indicated on Flood Insurance Rate Maps (FIRMs), which are considered the most reliable and consistent source for delineating SFHAs and are the source used to determine whether the purchase of flood insurance is mandatory for developed properties with a mortgage.

SFHAs are broken into "AE" zones and "VE" zones. "AE" zones, formerly known as the 100-year floodplain, are areas subject to risk of flooding by standing or relatively static flood waters, while "VE" zones are areas subject to wave action. "Shaded X" is a supplemental flood hazard area in which there is a 0.2% annual chance of flooding, also known as the "500-year floodplain." Land bordering the Atlantic Ocean is most susceptible to wave inundation, whereas land bordering the Intracoastal Waterway and other estuarine areas are most susceptible to flooding/rising waters. Approximately 19.2% of the Town's planning jurisdiction is impacted by the AE zone, while most of the Town (78.5%) falls within the VE zone. The geographic location of each flood hazard area is displayed on Map 2, and a summary of acreages is presented in Table 17. Digital FEMA Flood Insurance Rate Maps are available for review at www.ncfloodmaps.com.



SECTION 3. EXISTING CONDITIONS

Table 17. Flood Hazard Areas

Flood Zones	Acres	% of Total Corporate Limits
X (0.2% Annual Chance)	0.37	0.01%
AE	1,389.20	19.23%
VE	5,669.56	78.49%
Total	7,059.13	97.73%

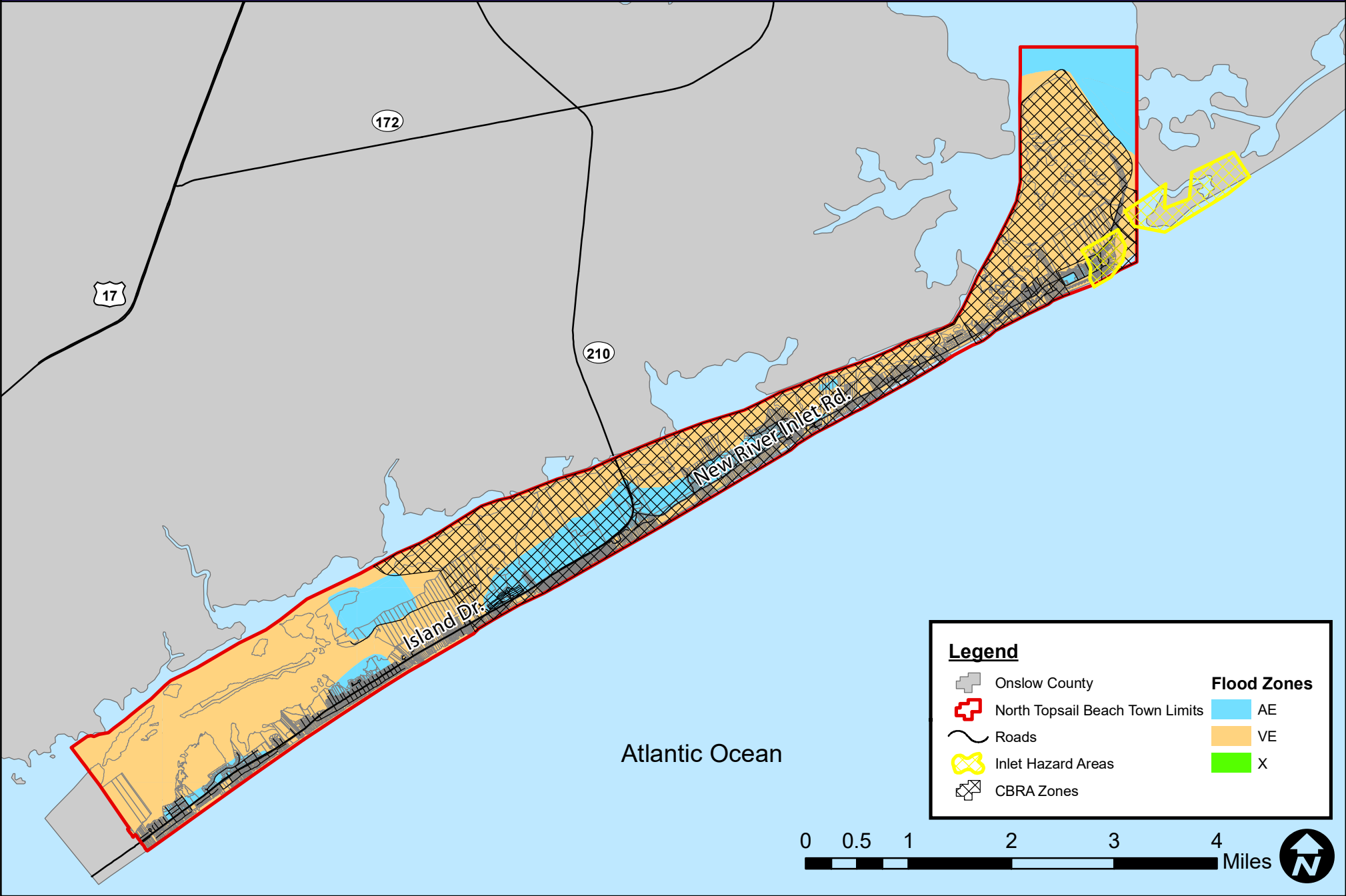
Source: Federal Emergency Management Agency.

In addition to defined Special Flood Hazard Areas within the Town of North Topsail Beach, property owners must also deal with the Coastal Barrier Resources Act (CBRA) defined areas. The CBRA protects coastal areas that serve as barriers against wind and tidal forces caused by coastal storms, and serve as habitat for aquatic species. The CBRA protects coastal areas from development by limiting Federal financial assistance for development-related activities in designated areas within the Coastal Barrier Resources System (CBRS). To manage development, limit property damage, and preserve wildlife and natural resources, CBRA restricts Federal financial assistance, including disaster relief assistance provided by the Federal Emergency Management Agency (FEMA) under the Robert T. Stafford Act and the National Flood Insurance Program (NFIP).

The following provides a synopsis of what impacts the CBRA zone has on a property owner's ability to secure flood insurance. Map 2 provides an overview of areas within the Town of North Topsail Beach that are impacted by the CBRA restrictions, which encompasses roughly 56% of the Town's overall corporate limits.

- The NFIP cannot provide flood insurance coverage for structures built or substantially improved after the area is designated as a CBRS unit.
- The NFIP may provide flood insurance for units built or substantially improved before the subject property is included in a designated CBRS unit.
- If an NFIP-insured building within the CBRS unit is substantially improved or substantially damaged, the NFIP policy will be cancelled.
- NFIP flood insurance can be provided within CBRS units for new structures supporting conservation uses.
- Minimum NFIP floodplain management standards do not prohibit the rebuilding of substantially damaged buildings in CBRS units. However, such structures must meet the community's floodplain management regulations, and NFIP coverage is not available for such structures.

Map 2. Flood Hazard Areas with CBRA Zones





SECTION 3. EXISTING CONDITIONS

Maps 3 and 4 display areas of North Topsail Beach that may be impacted by a hurricane-generated storm surge based on the SLOSH (Sea, Land, and Overland Surges from Hurricanes) model developed by the National Oceanic and Atmospheric Administration (NOAA), which computes storm surge heights from tropical cyclones, such as hurricanes.

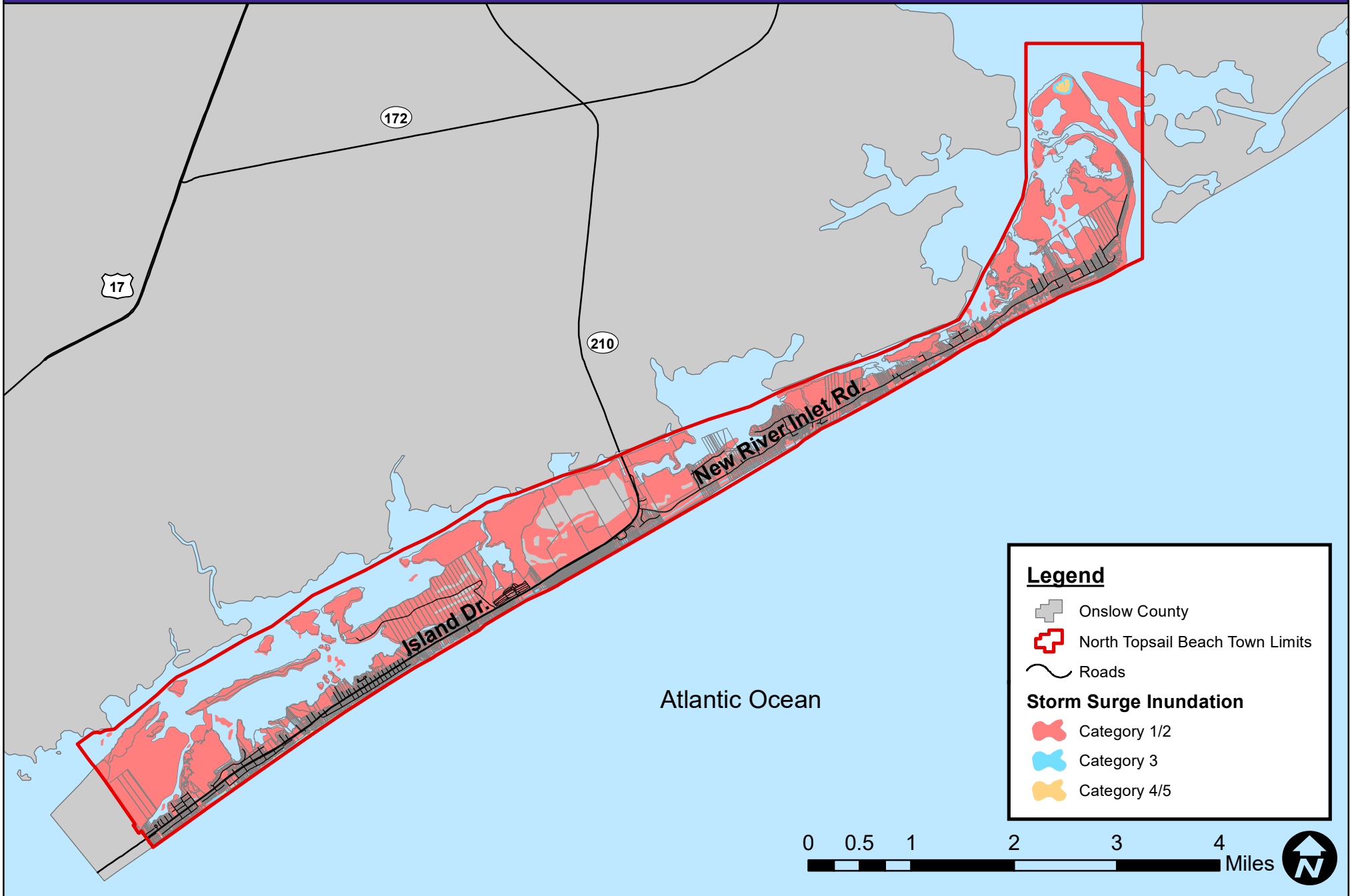
The SLOSH model estimates the extent of storm surge inundation for “fast-moving” storms (forward velocity greater than 15 miles per hour) and for “slow-moving” storms (forward velocity less than 15 miles per hour). Storm surge inundation from a fast-moving storm would result in the greatest potential damage to property in North Topsail Beach. Nearly the entire Town would be impacted by a fast-moving Category 5 hurricane. It should be noted that Hurricane Florence, which impacted the Town in September of 2018, was an extremely slow-moving storm. Upon landfall, Hurricane Florence was moving at a rate of 3 miles per hour. In comparison, Hurricane Fran in 1998 made landfall moving approximately 17 miles per hour. The damage experienced from Hurricane Florence associated with storm surge could have been much worse if this had been a faster moving storm.

The following tables provide a summary of storm surge inundation for fast- and slow-moving hurricanes.

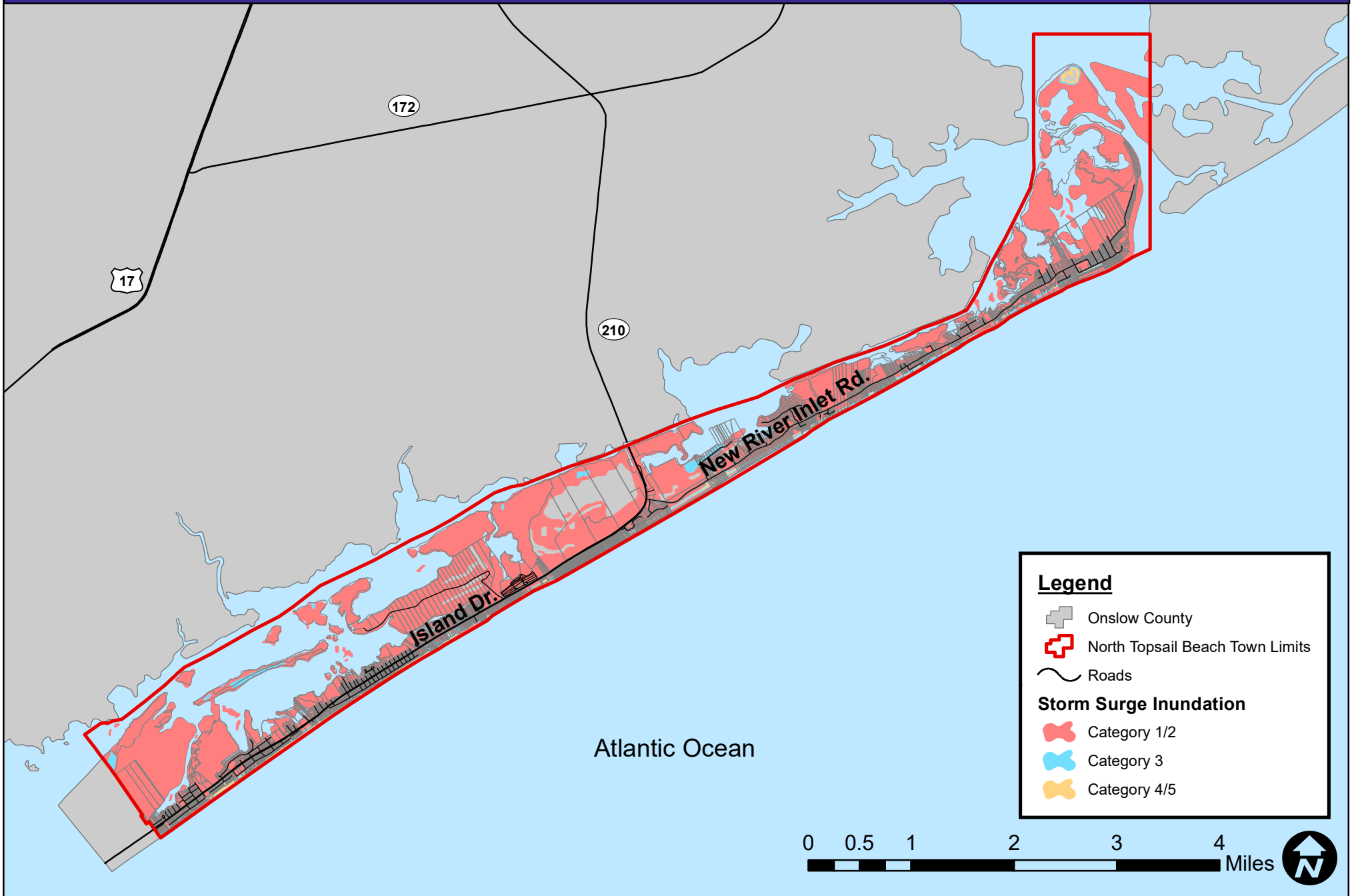
Fast Moving Storm	Acres	% of Town Acres
Category 1 & 2	4,059.14	92.8%
Category 3	4,159.97	95.1%
Category 4 & 5	4,181.4	95.6%
Slow Moving Storm	Acres	% of Town Acres
Category 1 & 2	3,915.0	89.5%
Category 3	4,093.23	93.6%
Category 4 & 5	4,164.75	95.3%

**Storm surge inundation acreage does not include portions of the Town’s corporate limits covered by water.
Source: National Oceanic and Atmospheric Administration.*

Map 3. Fast Moving SLOSH



Map 4. Slow Moving SLOSH



SECTION 3. EXISTING CONDITIONS



The following provides a listing of all hurricane events that have impacted North Topsail Beach since 1996. A more comprehensive overview of storm history is available in the Onslow County Multi-Jurisdictional Hazard Mitigation Plan (HMP) which was adopted by the Town on April 12, 2016. Additionally, storms impacting the Town since adoption of the HMP have also been included.

- Hurricane Bertha (July 12, 1996)
- Hurricane Fran (September 5, 1996)
- Hurricane Bonnie (August 27, 1998)
- Hurricane/Tropical Storm Dennis (September 7, 1999)
- Hurricane Floyd (September 14, 1999)
- Hurricane Isabel (September 18, 2003)
- Hurricane/Tropical Storm Charley (August 14, 2004)
- Hurricane Ophelia (September 13, 2005)
- Tropical Storm Ernesto (August 31, 2006)
- Hurricane Irene (August 27, 2011)
- Tropical Storm Andrea (June 7, 2013)
- Hurricane/Tropical Storm Arthur (July 3, 2014)
- Hurricane Matthew (October 8, 2016)
- Hurricane Maria (September 2017)
- Hurricane Florence (September 7, 2018)



Storm surge as a result of Hurricane Florence in September 2018. *Image Source: Town of North Topsail Beach.*

Soils

There are twelve different soil series within the Town of North Topsail Beach's jurisdiction. Observations regarding the soils and soils conditions were taken from the Soil Survey of Onslow County, North Carolina, which was issued in November 1986. All of the 12-soil series identified within the Town are considered to have severe conditions for use as a septic tank absorption field. When making determinations regarding the installation of septic tanks, the County soil survey should not be utilized. The soil survey is intended for use only as a general reference, and not for site specific determinations. Slight elevation and soil condition changes can have a drastic effect on the permeability of soils, and in turn the suitability for septic tank installation. There are still a fairly significant number of individual septic tank systems installed within the Town of North Topsail Beach. Expansion of the Town's central sewer system has been constrained due to a lack in available capacity. The Town is currently in the process of addressing this issue, and hopes to see further expansion of the central system, ultimately eliminating all septic tanks within Town.

Of the 12-soil series identified, four are comprised entirely of hydric soils. The definition of a hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. The concept of hydric soils includes soils developed under sufficiently wet conditions to support the growth and regeneration of hydrophytic vegetation. Soils that are sufficiently wet because of artificial measures are included in the concept of



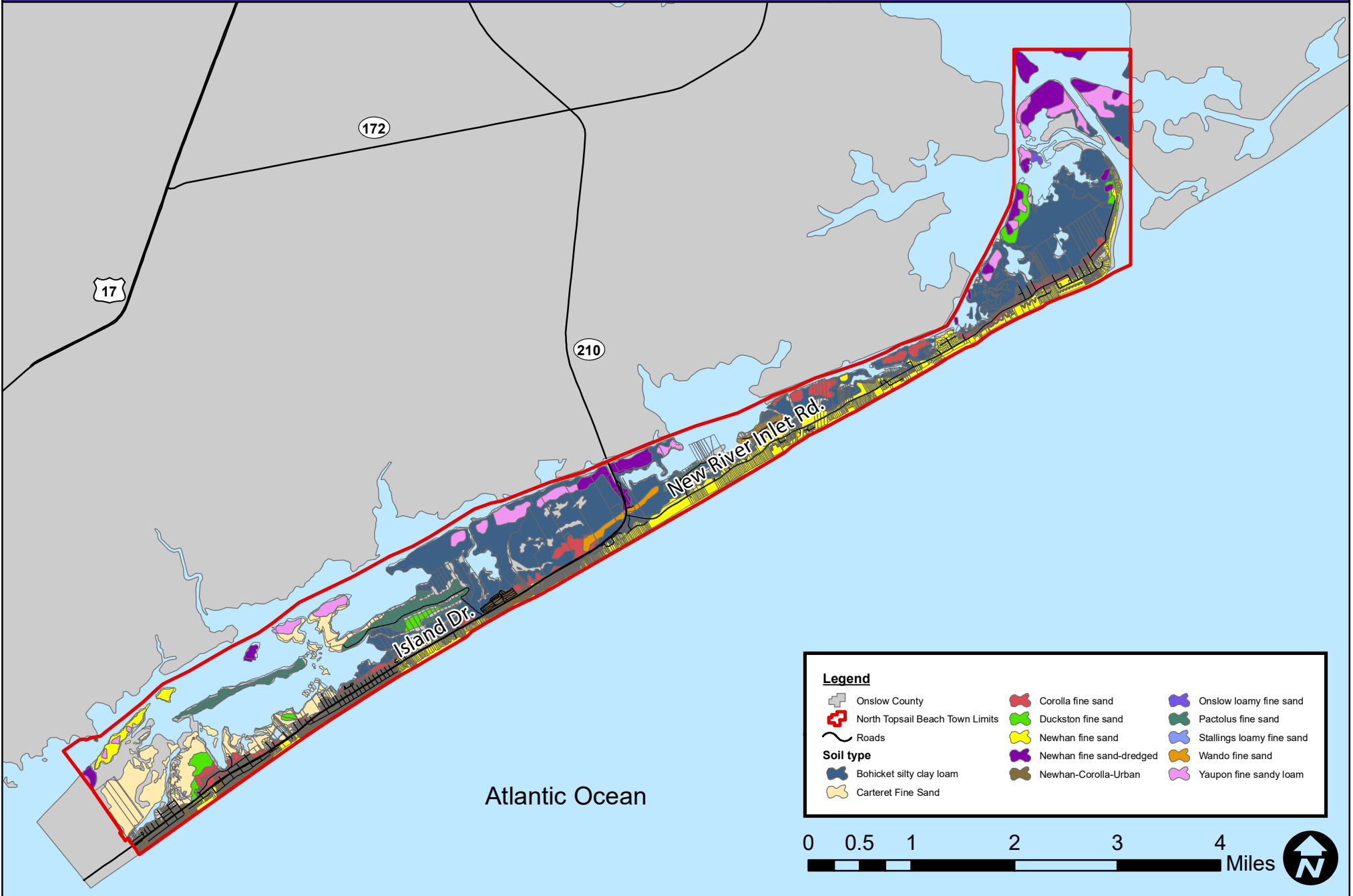
SECTION 3. EXISTING CONDITIONS

hydric soils. Also, soils in which the hydrology has been artificially modified are hydric if the soil, in an unaltered state, was hydric. Some series, designated as hydric, have phases that are not hydric depending on water table, flooding, and ponding characteristics. The presence of hydric soils is significant since these soils are typically poorly suited for development. Additionally, these soils may meet the definition of 404 wetland areas if found in combination with certain 404 vegetation and require permitting by the U.S. Army Corps of Engineers' Wilmington office prior to any disturbance. Table 19 and Map 5 provide a summary of all soil types within the Town of North Topsail Beach.

Soil Name	Acres	% of Town Acres
Bohicket silty clay loam*	1,583.88	21.9%
Carteret fine sand*	404.70	5.6%
Corolla fine sand	245.23	3.4%
Duckston fine sand*	93.48	1.3%
Newhan fine sand*	274.77	3.8%
Newhan fine sand – dredged	668.59	9.3%
Newhan-Corolla-Urban	245.35	3.4%
Onslow loamy fine sand	6.23	0.09%
Pactolus fine sand	167.71	2.3%
Stallings loamy fine sand	0.6	0.008%
Wando fine sand	61.37	0.8%
Yaupon fine sandy loam	231.91	3.2%
Water	2,850.67	39.5%
Right-of-way	388.18	5.4%
Total Corporate Limits	7,222.67	100.0%

**Hydric soils.
Source: USDA Natural Resources Conservation Service.*

Map 5. Soils





SECTION 3. EXISTING CONDITIONS

Surface Waters

Each stream mile of water in North Carolina is evaluated and rated by the NC Division of Water Resources (formerly the Division of Water Quality). The classifications are based upon the existing or contemplated best usage of the various streams and segments of streams within a basin, as determined through studies, evaluations, and comments received at public hearings. The state water classification system is summarized in the following table.

Table 20. NC Division of Water Resources Water Body Classifications	
PRIMARY FRESHWATER AND SALTWATER CLASSIFICATIONS*	
Class	Best Uses
C and SC	Aquatic life propagation/protection and secondary recreation
B and SB	Primary recreation and Class C uses
SA	Waters classified for commercial shellfish harvesting
WS	<i>Water Supply Watershed.</i> There are five WS classes ranging from WS-I through WS-V. WS classifications are assigned to watersheds based on land use characteristics of the area. Each water supply classification has a set of management strategies to protect the surface water supply. WS-I provides the highest level of protection and WS-V provides the least protection. A Critical Area (CA) designation is also listed for watershed areas within a half-mile and draining to the water supply intake or reservoir where an intake is located.
SUPPLEMENTAL CLASSIFICATIONS	
Sw	<i>Swamp Waters:</i> Recognizes waters that will naturally be more acidic (have lower pH values) and have lower levels of dissolved oxygen.
Tr	<i>Trout Waters:</i> Provides protection to freshwaters for natural trout propagation and survival of stocked trout.
HQW	<i>High Quality Waters:</i> Waters possessing special qualities including excellent water quality, Native or Special Native Trout Waters, Critical habitat areas, or WS-I and WS-II water supplies
ORW	<i>Outstanding Resource Waters:</i> Unique and special surface waters that are unimpacted by pollution and have some outstanding resource values.
NSW	<i>Nutrient Sensitive Waters:</i> Areas with water quality problems associated with excessive plant growth resulting from nutrient enrichment.
*Primary classifications beginning with an "S" are assigned to salt waters. Source: NC Department of Environmental Quality.	

The waters bordering the Town's estuarine shoreline are classified as either HQW or ORW. Waters with these supplemental designations are intended to provide protection and awareness due to the area's unique characteristics and resource potential. These classifications are due to the presence of active shellfish saltwater areas that are conducive to commercial fishing, which carry a primary surface water classification of SA. SA waters are also suitable for all recreational uses, such as boating and swimming. Table 21 and Map 6 provide a detailed breakdown of surface water classifications for all stream segments falling within the Town of North Topsail Beach.

As noted in the table above, there are five water supply watershed classes ranging from WS-I through WS-V. WS classifications are assigned to watersheds based on land use characteristics of the area. Each water supply classification has a set of management strategies to protect the surface water supply. There are no water supply watersheds or wellhead protection areas located within North Topsail Beach.

SECTION 3. EXISTING CONDITIONS



Table 21. Waterbody Classifications

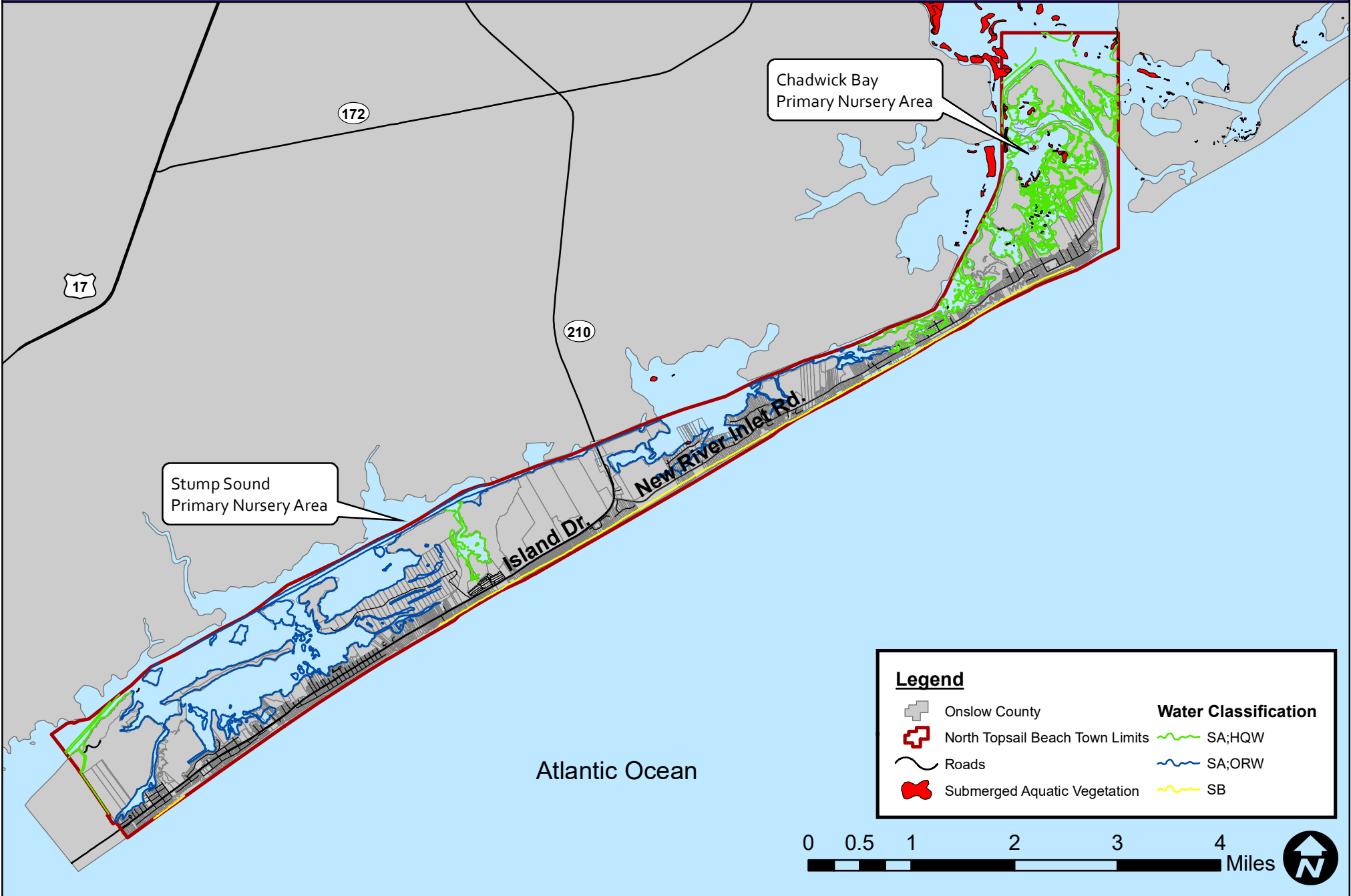
Waterbody	Description	Stream Index Number	Classification
Intracoastal Waterway	From Daybeacon #17 to New River including all unnamed bays, guts, and channels	19-39-(3.5)	SA; HQW
Everett Bay	Entire bay excluding that portion in King Creek Restricted Area	18-87-2	SA; ORW
Stump Sound	All waters between the southern edge of the White Oak River Basin to the western end of Permuda Island (a line from Morris Landing to Atlantic Ocean).	18-87-0.5	SA; ORW
Topsail Sound	Entire sound	18-87-10	SA; HQW
New River	From a line extending across New River from Grey Point to a point of land approximately 2,200 yards downstream from mouth of Duck Creek to Atlantic Ocean; including all unnamed bays, creeks, and other waters except restricted areas #1 and #2.	19-(27)	SA; HQW
Traps Creek	Entire bay	19-38	SA; HQW
Intracoastal Waterway	From northeastern boundary of Cape Fear River Basin to Daybeacon #17 including all unnamed bays, guts, and channels	19-39-(0.5)	SA; ORW
Rogers Bay	Entire bay	19-39-1	SA; HQW
Alligator Bay	Entire bay	19-39-3	SA; ORW
Chadwick Bay	Entire bay	19-39-4	SA; HQW
Hells Gate Creek	From source to Intracoastal Waterway	19-39-5	SA; HQW
Intracoastal Waterway	From northeastern boundary of Cape Fear River Basin to Daybeacon #17 including all unnamed bays, guts, and channels	19-39-(0.5)	SA; ORW

Source: NC Department of Environmental Quality.

In addition to standard water classifications, the 303(d) list is a list of waters that exceed water quality criteria, and are “impaired” as determined through the listing methodology as approved by the Environmental Management Commission, and need a TMDL. The name of list comes from Section 303(d) of the federal Clean Water Act (CWA), which requires States to identify and establish a priority ranking for intervention in an effort to improve water quality conditions.

As of 2016, the following waterbodies within North Topsail Beach were listed on the State’s 303(d) list: Hells Gate Creek, portions of Alligator Bay, portions of Chadwick Bay, and portions of Everett Bay.

Map 6. Surface Water Quality, Primary Nursery Areas & Submerged Aquatic Vegetation (SAV)





Areas of Environmental Concern

The shorelines within the Town of North Topsail Beach fall under the jurisdiction of the North Carolina Coastal Area Management Act (CAMA). CAMA establishes "Areas of Environmental Concern" (AECs) as the foundation of the Coastal Resources Commission's permitting program for coastal development. An AEC is an area of natural importance; it may be easily destroyed by erosion or flooding, or it may have environmental, social, economic, or aesthetic values that make it valuable.

The Coastal Resources Commission designates areas as AECs to protect them from uncontrolled development that may cause irreversible damage to property, public health or the environment, thereby diminishing their value to the entire state. Statewide, AECs cover almost all coastal waters and less than 3% of the land in the 20 coastal counties.

Fragile areas are those areas that are not explicitly defined as AECs but that could cause significant environmental damage or other diminution of quality of life if not managed. These include wetlands, natural heritage areas, areas containing endangered species, prime wildlife habitats, or maritime forests.

Estuarine Waters and Estuarine Shorelines (AEC)

An "estuary" can be defined as "a semi-enclosed coastal body of water which has a free connection to the open sea and within which sea water is measurably diluted with fresh water derived from land drainage." Estuaries basically serve as transition zones between fresh and saltwater and are protected from the full force of ocean wind and waves by barrier islands, mudflats, and/or sand. Estuaries provide significant environmental, recreational, and economic benefits to the Town of North Topsail Beach.

For regulatory purposes, the inland, or upstream, boundary of estuarine waters is the same line used to separate the jurisdictions of the Division of Marine Fisheries and the Wildlife Resources Commission. However, many of the fish and shellfish that spend parts of their lives in estuaries move between the "official" estuarine and inland waters.

Estuarine shorelines are land areas leeward of mean high tide that are immediately adjacent to or bordering estuarine waters. These areas support the ecological function of estuaries and are highly vulnerable to erosion caused by wind or water and to damage caused by boat wake and development.

Under CAMA rules, all lands 75 feet leeward from the mean high tide are classified as estuarine shorelines and are subject to CAMA development regulations. No domestic discharges are permitted in these waters. Boats are also not allowed to discharge in these waters. Within North Topsail Beach, this includes all lands adjacent to the Town's northern shoreline including those falling along Everett Bay, Alligator Bay, and Stump Sound.



SECTION 3. EXISTING CONDITIONS

Public Trust Areas

The North Carolina Division of Coastal Management (DCM) defines “Public Trust Areas” as the coastal waters and submerged lands that every North Carolinian has the right to use for activities such as boating, swimming, or fishing. These areas often overlap with estuarine waters, but they also include many inland fishing waters. The following lands and waters are considered public trust areas:

- All waters of the Atlantic Ocean and the lands underneath, from the normal high-water mark on shore to the state's official boundary three miles offshore;
- All navigable natural water bodies and the lands underneath, to the normal high watermark on shore (a body of water is considered navigable if you can float a canoe in it). This does not include privately-owned lakes where the public does not have access rights;
- All waters in artificially created water bodies that have significant public fishing resources and are accessible to the public from other waters; and
- All waters in artificially created water bodies where the public has acquired rights by prescription, custom, usage, dedication, or any other means.

Although public trust areas must be delineated by on-site analysis, all submerged lands defined as estuarine shorelines above and the Atlantic Ocean should be considered public trust areas.

Under CAMA regulations, all lands 30 feet leeward of public trust areas are subject to the restrictions for estuarine shoreline areas.

Coastal Wetlands

The Coastal Resources Commission rules define “Coastal Wetlands” as any marsh in the 20 coastal counties (including Onslow County and therefore, North Topsail Beach) that regularly or occasionally floods by lunar or wind tides, and that includes one or more of the following ten (10) plant species:

- *Spartina alterniflora*: Salt Marsh (Smooth) Cordgrass
- *Juncus roemerianus*: Black Needlerush
- *Salicornia spp.*: Glasswort
- *Distichlis spicata*: Salt (or Spike) Grass
- *Limonium spp.*: Sea Lavender
- *Scirpus spp.*: Bulrush
- *Cladium jamaicense*: Sawgrass
- *Typha spp.*: Cattail
- *Spartina patens*: Salt Meadow Grass
- *Spartina cynosuroides*: Salt Reed or Giant Cordgrass

Coastal wetlands provide significant environmental and economic benefits to North Topsail Beach. They protect against flooding, help maintain water quality, provide habitat to wildlife, and serve as part of the estuarine system.

SECTION 3. EXISTING CONDITIONS



In 2003, the Division of Coastal Management classified and mapped coastal wetlands based on an analysis of several existing data sets, including aerial photographs and satellite images of coastal areas in North Carolina. Even though the presence of wetlands must be established by an on-site delineation and investigation of plants, DCM produced an excellent representation of wetland throughout coastal North Carolina, including North Topsail Beach.

According to the Coastal Wetlands Inventory, approximately 38% of the Town's planning jurisdiction, or 2,687.3 acres, are coastal wetlands (see Table 21 and Map 7). Salt/brackish marsh comprise the largest category of wetlands in the planning jurisdiction, the majority of which are located along the Town's vast estuarine shoreline.

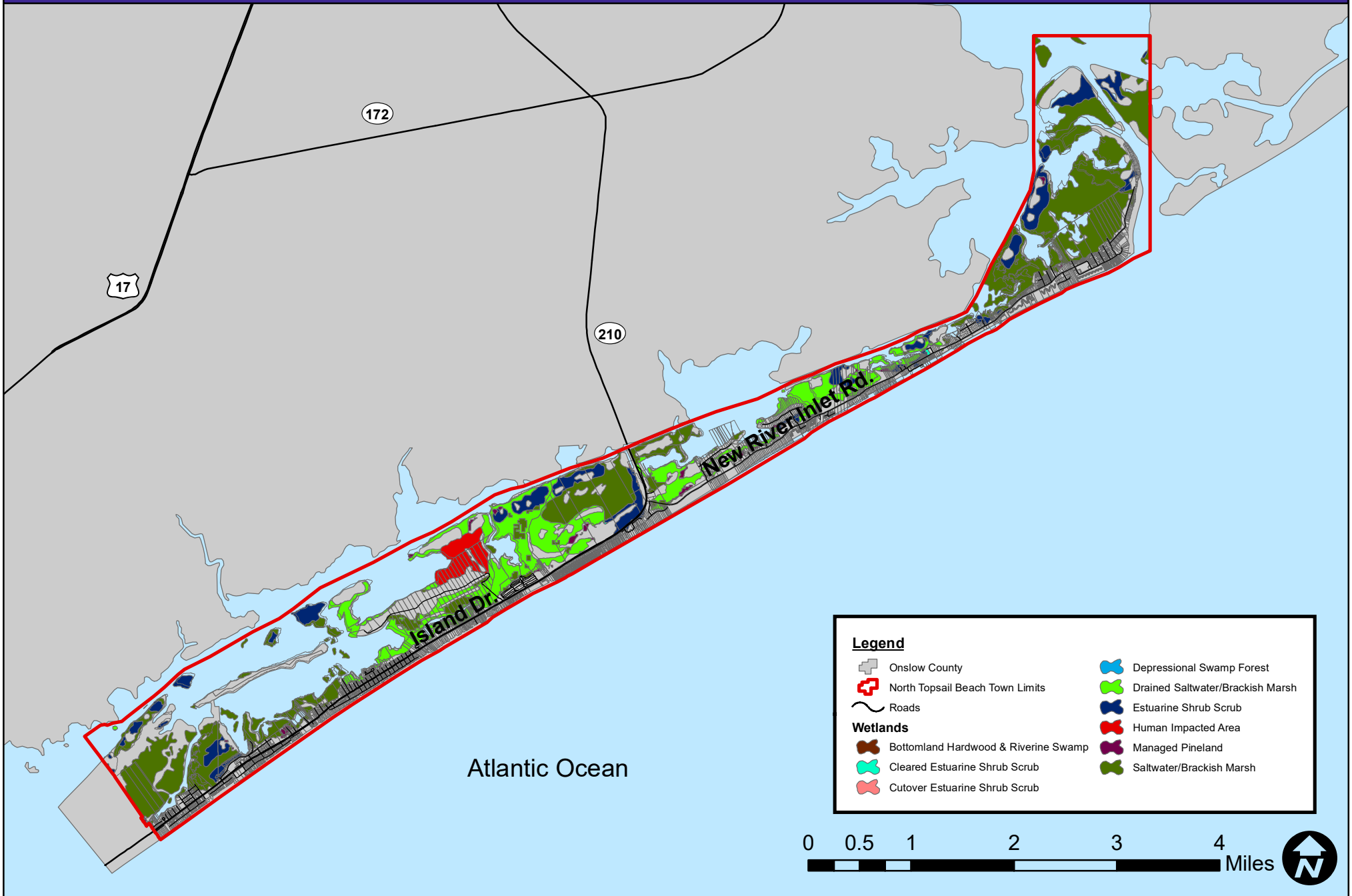
Wetland Type	Acres	% of Total Corporate Limits
Bottomland Hardwood & Riverine Swamp	0.14	0.002%
Cleared Estuarine Shrub/Scrub	2.54	0.04%
Cutover Estuarine Shrub/Scrub	1.84	0.03%
Depressional Swamp Forest	0.17	0.002%
Drained Saltwater/Brackish Marsh	705.15	9.76%
Estuarine Shrub/Scrub	382.4	5.29%
Human Impacted Area	96.57	1.34%
Managed Pineland	31.74	0.44%
Salt/Brackish Marsh	1,466.74	20.31%
Total	2,687.29	37.21%

Source: Federal Emergency Management Agency.

The following provides the DCM descriptions of the various wetland areas found in the Town of North Topsail Beach's planning jurisdiction:

- *Bottomland Hardwood and 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, 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.
- *Estuarine Shrub/Scrub.* Any shrub/scrub dominated community subject to occasional flooding by tides, including wind tides (whether the tidewaters reach these areas through natural or artificial watercourses). Typical species include wax myrtle and eastern red cedar.
- *Human Impacted Area.* 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.

Map 7. Wetlands





- *Managed Pineland.* Seasonally saturated, managed pine forests (usually loblolly pine) 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 Wetlands Inventory maps. These areas may or may not be jurisdictional wetlands. Since this category is based primarily on soils data and 30-meter resolution satellite imagery, it is less accurate than the other wetland categories. The primary criteria for mapping these areas are hydric soils and a satellite imagery classification of 'pine forest'.
- *Salt/Brackish Marsh.* Any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides (whether the tidewaters reach the marshland areas through natural or artificial watercourses), if this flooding does not include hurricane or tropical storm waters. Coastal wetland plant species include smooth cordgrass, black needlerush, glasswort, salt grass, sea lavender, salt marsh bulrush, sawgrass, cattail, salt meadow cordgrass, and big cordgrass.

The following provides the definition of the modifiers used in the wetlands table above:

- *Cleared Wetland.* Areas of hydric soils for which satellite imagery indicates a lack of vegetation in both 1988 and 1994. These areas are likely to no longer be wetlands.
- *Cutover Wetland.* Areas for which satellite imagery indicates a lack of vegetation in 1994. These areas are likely to still be wetlands; however, they have recently been cutover. The vegetation in cutover areas may be regenerating naturally, or the area may be in use for silvicultural activities (defined as the cultivation of forest trees).
- *Drained Wetland.* Any wetland system described above that is, or has been, effectively drained.

Non-Coastal Wetlands

Freshwater swamps and inland, non-tidal wetlands are not in the CAMA permit jurisdiction, unless the Coastal Resources Commission specifically designates them as AECs. However, these wetlands are protected by Section 404 of the Federal Clean Water Act. Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including freshwater wetlands. 404 wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Ocean Beaches/Shorelines and Areas of Excessive Erosion

Ocean beaches and shorelines are lands consisting of unconsolidated soil materials (i.e., sand) that extend from the mean low water line landward to a point where either: (a) the growth of vegetation occurs; or (b) a distinct change in slope or elevation alters the configuration of the landform, whichever is farther landward.

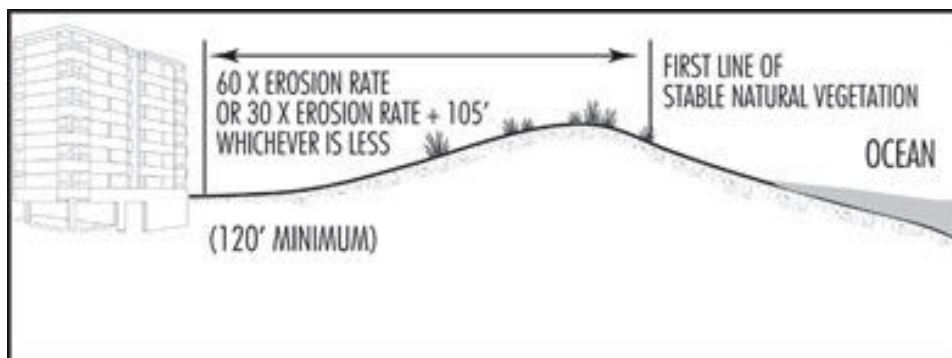


SECTION 3. EXISTING CONDITIONS

The entire southern boundary of the Town of North Topsail Beach - approximately 12.5 miles of shoreline - is an ocean beach. This entire area constitutes an Ocean Hazard AEC as defined by CAMA. The Ocean Hazard AEC covers North Carolina's beaches and any other oceanfront lands that are subject to long-term erosion and significant shoreline changes. The seaward boundary of this AEC is the mean low water line.

The landward limit of the AEC is measured from the first line of stable natural vegetation and is determined by adding a distance equal to 60 times the long-term, average annual erosion rate for that stretch of shoreline to the distance of erosion expected during a major storm.

Whereas the NC Coastal Resources Commission (CRC) has determined the average annual erosion rate in the Town of North Topsail Beach to be 2.0 feet per year, the approximate width of the AEC in North Topsail Beach is about 120 feet from the first line of stable, natural vegetation leeward of the shoreline. The specific location of the Ocean Hazard AEC must be determined by a CAMA permitting official.



Ocean Hazard AEC Setback Requirement Schematic Image Source: *NCDCM, "CAMA Handbook for Development in Coastal North Carolina," 2002.*

The CRC updates long-term erosion rates about every five years, using aerial photographs to examine shoreline changes. General maps of erosion rates are available free from the Division of Coastal Management (<https://deq.nc.gov/about/divisions/coastal-management/coastal-management-oceanfront-shorelines/oceanfront-construction-setback-erosion-rate>); detailed erosion rate maps are available for inspection at all Coastal Management field and local permitting offices.

SECTION 3. EXISTING CONDITIONS



Protected Lands and Natural Heritage Natural Areas

Protected Lands are areas dedicated to conservation and open space uses that are protected from development by regulation or by ownership by governments or non-profit organizations. The North Carolina Division of Coastal Management has identified these areas through the assistance of the NC Center for Geographic Information and Analysis (NCGIA). Four of these areas were identified by the state and are shown on Map 8. The largest protected area – New River Inlet Bird Nesting Area – is owned and managed by the state of North Carolina. It should be noted that other facilities, such as CAMA public access locations and Town parks, may also constitute protected lands.

Area Name	Acres
Camp Lejeune	122.73
Onslow County Open Space	2.98
New River Inlet Bird Nesting Islands	207.89
Permuda Island Coastal Reserve	62.97
New River Inlet Island RHA	12.83
Total	409.4
<i>Source: NC Division of Coastal Management</i>	

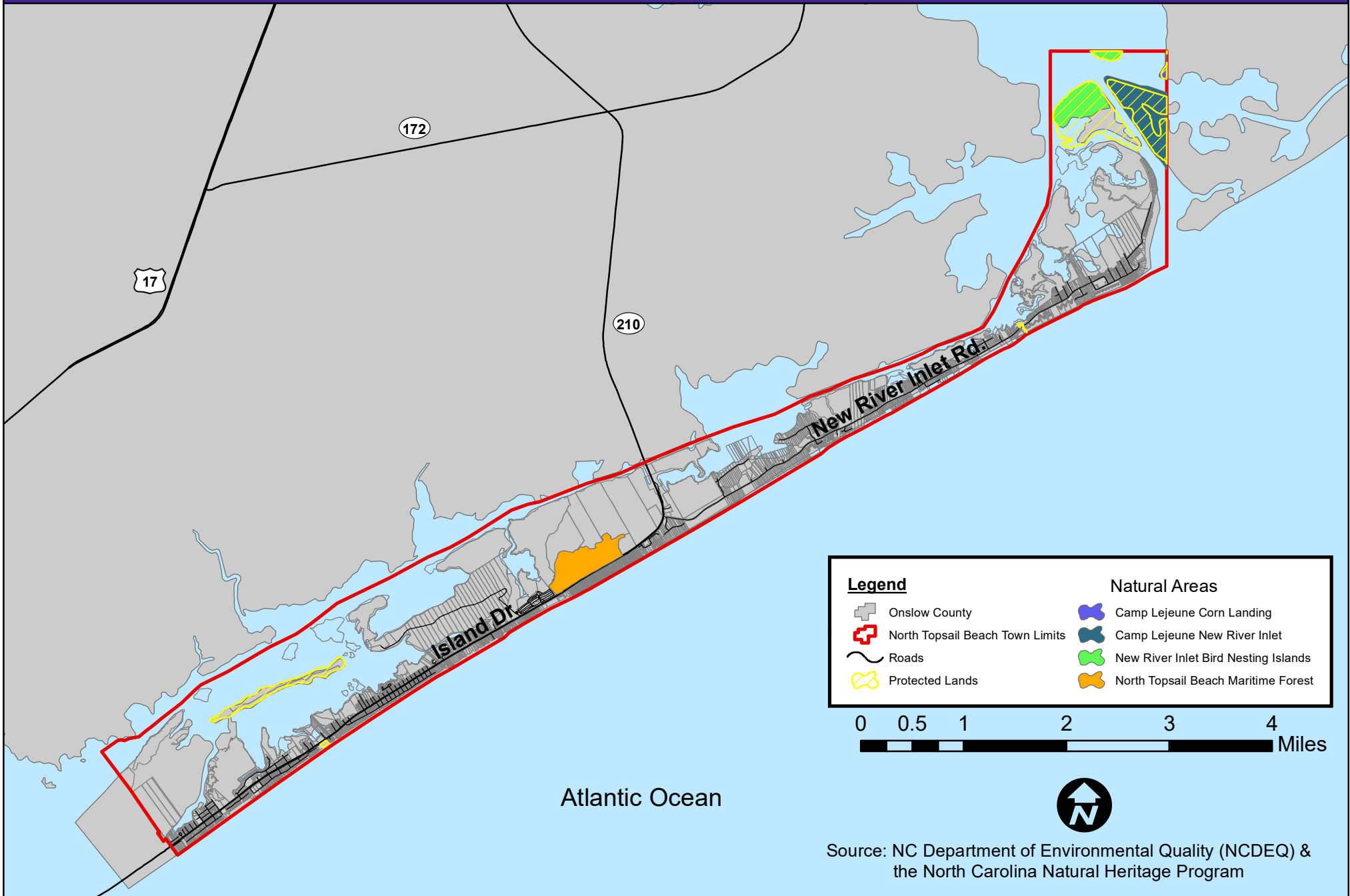
Natural Heritage Natural Areas (NHNA) are areas containing ecologically significant natural communities or rare species. The North Carolina Natural Heritage Program of the NC Department of Environmental Quality identifies and helps facilitate the protection of these areas. Table 24 provides the Natural Heritage Natural Areas located in North Topsail Beach (see Map 8).

Area Name	Acres
Camp Lejeune Corn Landing	5.43
Camp Lejeune New River Inlet	161.22
New River Inlet Bird Nesting Islands	99.73
North Topsail Beach Maritime Forest	122.91
Total	389.29
<i>Source: Natural Heritage Program</i>	

Inlet Hazard Areas

This AEC covers the land adjacent to the New River Inlet (refer to Map 2 Flood Hazards). The Inlet Hazard Area extends inland sufficient distance to encompass the area where the State reasonably expects the inlet to migrate. Development within inlet hazard AECs must comply with three key use standards: (1) comply with the setbacks for the ocean hazard area; (2) density for commercial and residential structures limited to no more than 3 units per acre; and (3) only residential structures of 4 units or less or commercial structures of 5,000 square feet or less are allowed.

Map 8. Natural Heritage Natural Areas & Protected Lands



SECTION 3. EXISTING CONDITIONS



Within North Topsail Beach, the portion of Town designated as inlet hazard area has been drastically impacted by the recent migration of the New River Inlet. This area impacts roughly 85 acres on the eastern extent of the island. This migration poses a threat to several homes and has necessitated intervention by the Coastal Resources Commission to temporarily stabilize the shoreline until a viable long-term solution is identified. A sandbag seawall was permitted and constructed in 2015 in an effort to protect the homes located along the shoreline adjacent to New River Inlet. These sandbags are still in place.

Slopes in Excess of 12%

Apart from intermittent slopes associated with the frontal dune system, there are no slopes in excess of 12% located within North Topsail Beach's corporate limits.

Areas of Resource Potential

Regionally Significant Parks

There are no regionally significant parks located in North Topsail Beach.

Marinas and Mooring Fields

Marinas are defined as any publicly- or privately-owned dock, basin, or wet boat storage facility constructed to accommodate more than ten boats and providing any of the following services: permanent or transient docking spaces, dry storage, fueling facilities, haulout facilities, and repair service. Not included in this definition are facilities that only allow boat access or temporary docking and that do not include the services provided by marinas specified above. There are currently no marina facilities located within North Topsail Beach; however, there is one public boat ramp located along Shrimp Lady Lane under the high-rise bridge.

A freestanding mooring is any means to attach a ship, boat, or other watercraft to a stationary underwater device, mooring buoy, buoyed anchor, or piling not associated with an existing or proposed pier, dock, or boathouse. When more than one freestanding mooring is used in the same general vicinity, it is known as a mooring field. CAMA has regulations for the safe siting and operation of moorings and mooring fields. There are currently no mooring fields in North Topsail Beach.

Floating Homes or Structures

A floating home or structure is any structure, not a boat, supported by means of flotation and designed to be used without a permanent foundation which is used for human habitation or commerce. A structure is considered a floating home or structure if it is inhabited or used for commercial purposes for more than 30 days in any one location. A boat may be deemed a floating structure if its means of propulsion have been removed or rendered inoperative and it contains at least 200 square feet of living area. There are currently no floating homes within North Topsail Beach's corporate limits.



SECTION 3. EXISTING CONDITIONS

Primary Nursery Areas, Submerged Aquatic Vegetation (SAV), Shellfishing Waters, and Anadromous Fish Spawning Areas

Primary Nursery Areas, as defined by the Marine Fisheries Commission, are those areas in the estuarine system where initial post-larval development takes place. These areas are usually located in the uppermost sections of a system where populations are uniformly very early juveniles. The Division of Marine Fisheries is responsible for preserving, protecting and developing Primary Nursery Areas for commercially important finfish and shellfish. There are several Primary Nursery Areas adjacent to North Topsail Beach's planning jurisdiction including: Chadwick Bay and large portions of Stump Sound. Refer to Map 6 for the locations of these areas. These areas are also classified as Coastal Wetlands and Areas of Environmental Concern.

Grasses that grow to the surface of but do not emerge from shallow water are called submerged aquatic vegetation (SAV). One of the most important ecosystem services of the shallow waters located throughout portions of Chadwick Bay is to provide refuge in which small fish and shellfish can hide from larger finfish predators. The habitat value of shallow water is greatly enhanced when it has structure that provides additional cover, and the structure provided by SAV provides some of the greatest habitat value for many species. Map 6, which also shows surface waters, provides locations of submerged aquatic vegetation.

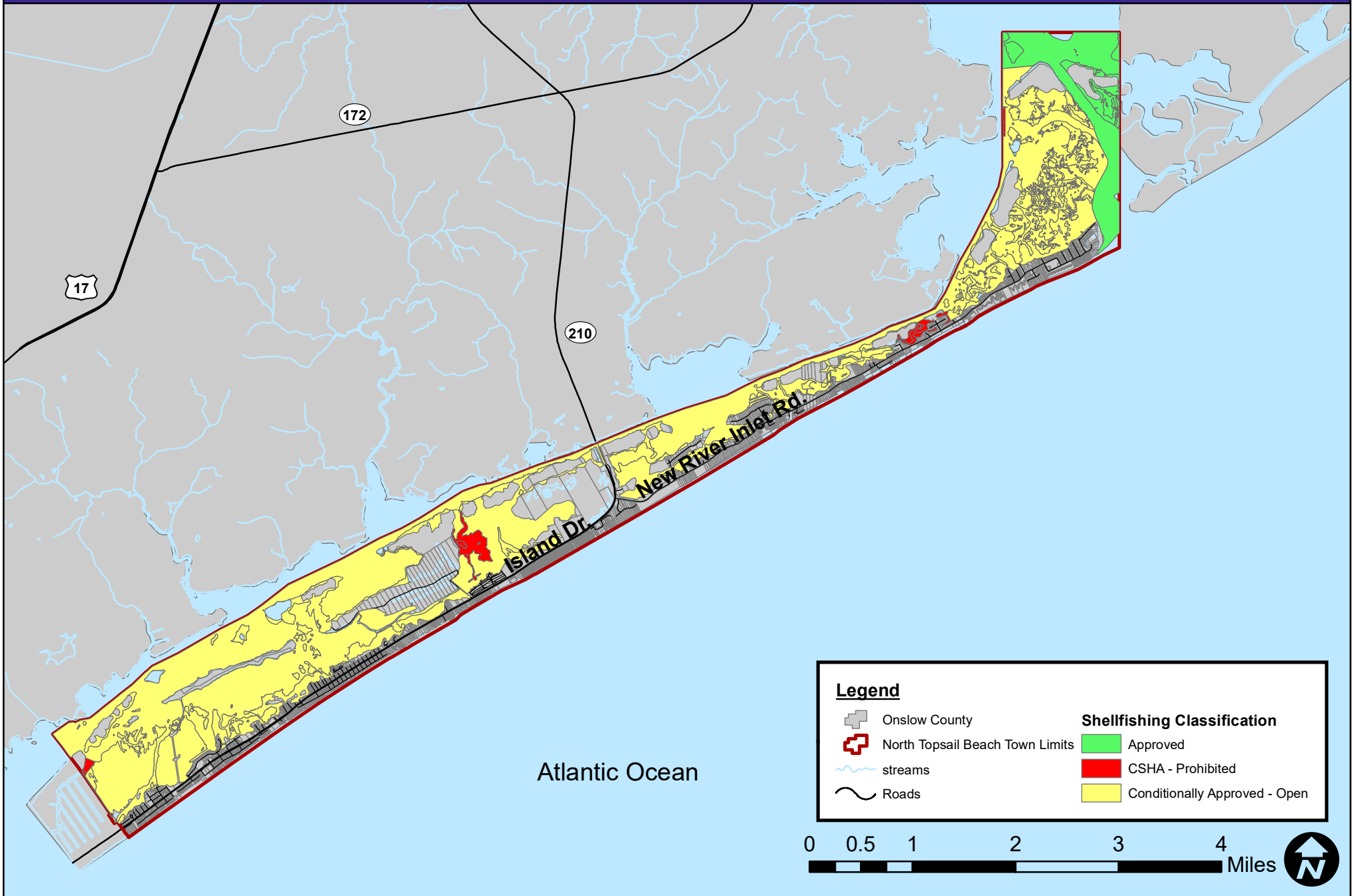
The Shellfish Sanitation Section is responsible for monitoring and classifying coastal waters as to their suitability for shellfish harvesting for human consumption. Recommendations are made to the Division of Marine Fisheries to close those waters that have the potential for causing illness and opening those that are assured of having clean, healthy shellfish. Much of the SA waters along the estuarine shoreline are open to commercial shellfishing. The location of shellfishing waters are depicted on Map 9. Up-to-date information about open and closed shellfishing areas is posted daily on the NC Division of Marine Fisheries website. As this information is always evolving, current closure locations have not been included in the plan.

Anadromous fish are those that migrate up rivers (or into estuaries) from the sea to breed in freshwater. The NC Marine Fisheries Commission (MFC) defines anadromous fish spawning areas as those where evidence of spawning of anadromous fish has been documented by direct observation of spawning, capture of running trip females, or capture of eggs or early larvae. There are no anadromous fish spawning areas located within North Topsail Beach's corporate limits.

Aquaculture

As defined under NC General Statute 106-758, aquaculture is the propagation and rearing of aquatic species in controlled or selected environments, including, but not limited to ocean ranching. There is no significant aquaculture in North Topsail Beach.

Map 9. Shellfishing Areas





SECTION 3. EXISTING CONDITIONS

Water Quality

Basinwide water quality plans are prepared by the NC Division of Water Resources (DWR) for each of the seventeen major river basins in the state. Each basinwide plan is revised at five-year intervals. While these plans are prepared by the DWR, their implementation and the protection of water quality entails the coordinated efforts of many agencies, local governments, and stakeholders in the State. The Town of North Topsail Beach lies within the White Oak River Basin (subbasin 03-05-02).

The White Oak River basin lies entirely within the outer coastal plain. The name of the basin is a bit of a misnomer in that it includes four separate river systems: the New River and its tributaries in the southwestern section; the White Oak River and its tributaries; the Newport River and its tributaries; and the North River in the eastern section. The basin also includes Bogue, Back and Core Sounds as well as significant portions of the Intracoastal Waterway. There are five subbasins within the White Oak River Basin. Each subbasin has a mix of freshwater and saltwater, high quality (Class HQW) and outstanding resource waters (Class ORW), recreational (Class B) and shellfish harvesting (Class SA) uses. Each subbasin has its own unique characteristics and water quality concerns. As noted, the Town of North Topsail Beach is centrally located within subbasin 03-05-02.

Subbasin 03-05-02 is on the western end of the White Oak River basin and lies entirely within Onslow County. It contains the New River (50 mi) and its tributaries plus several small coastal streams. Nearly one-half of this subbasin is estuarine, with estuarine waters in the New River reaching upstream to Jacksonville and tidal freshwaters reaching almost to Richlands. There are 720 acres of Outstanding Resource Waters (ORW) in this subbasin; the remaining waters are classified as Nutrient Sensitive Waters (NSW) and/or High-Quality Waters (HQW). Of the NSW, there are 630 acres and 137 miles of freshwaters.

This subbasin is the most densely populated area in the river basin. Most of the development in this subbasin is on the New River: the Town of Richlands near the headwaters, the City of Jacksonville and Camp Lejeune Marine Corps Base in the middle reaches, and Sneads Ferry near the mouth. Population at the Base is approximately 47,000 Marines and the City of Jacksonville has approximately 72,873 people with a total population in Onslow County of approximately 150,355 people according to the

Subbasin 03-05-02 at a Glance

Land and Water Area

Total Area:	462 mi ²
Land Area:	419 mi ²
Water Area:	43 mi ²

Land Cover (%)

Forest/Wetland:	67%
Surface Water:	9%
Urban:	4%
Cultivated Crop:	13%
Pasture/Managed Herbaceous:	7%

County

Onslow

Municipalities

Jacksonville, Richlands, Sneads Ferry, Camp Lejeune Marine Corps Base

Monitored Waterbody Statistics:

Aquatic Life

Total:	55.8 mi/15,226.6 ac
Supporting:	42.6 mi/14,468.3 ac
Impaired:	13.2 mi/758.3 ac

Recreation

Total:	49.9 mi/15,764.7 ac
Supporting:	41.6 mi/25,764.7 ac
Total Not Rated:	8.3 mi

Shellfish Harvesting

Total:	0.4 mi/11,466.3 ac
Supporting:	0.4 mi/8,686.6 ac
Impaired:	2,779.7 ac

Source: White Oak River Basinwide Water Quality Plan.



latest census data. Between 1990 and 2000, population in Richlands decreased by 7.3 percent, while the City of Jacksonville experienced accelerated growth of 58.3 percent. Outside the urban areas, rural residential properties and pasturelands are scattered throughout the watershed.

According to the Sanitary Survey of Chadwick Bay Area, water quality has improved in some areas and continues to decline in others. Shellfish production is fair to good for both oysters and clams. This growing area has approximately 13 square miles of drainage and 1,700 acres of water area. The communities of Carrel Chapel, Peru, Swan Point, Chadwick Acres and North Topsail Beach along with portions of Sneads Ferry, all border these waters. Permanent population (~6,500) continues to grow, with substantial seasonal tourist influxes.

Since 2001, a steady decline in water quality in Mill Creek has occurred and corresponds with the expansion of North Topsail WWTP upstream, a situation that warrants further investigation. Additional monitoring stations will allow for accurately extending shellfish closure lines to reflect the high fecal coliform counts. Wastewater for the area is provided by Pluris, which is expanding with an additional lagoon and sprayfield acreage. None of the lagoons or sprayfields for the utilities had any notable problems. Stormwater runoff from North Topsail Beach's ditches and culverts are considered to be one of the main sources of bacterial contamination for the estuarine waters within the 03-05-02 subbasin.

COMMUNITY FACILITIES

Transportation

NC Highway 210 is the main transportation route in and out of North Topsail Beach. The highway crosses the Intracoastal Waterway to enter Topsail Island at two points: North Topsail Beach and southeast of Surf City. The bridge at North Topsail Beach is a high-rise bridge. Secondary access to North Topsail Beach is provided via a swing bridge through Surf City. The swing bridge which has historically served Surf City is now being replaced with a high-rise bridge similar to the one in North Topsail Beach.

The North Carolina Department of Transportation (NCDOT) reported that, in 2004, the highest annual average daily traffic count (AADT) occurred along NC Highway 210 at a point just north of the North Topsail Beach-Surf City corporate limit line. The AADT for that area was 5,300, as of August 2017. NCDOT also reported a 2017 AADT of 4,800 for a point along NC 210 just north of Town Hall. This figure marks a 43% increase since the drafting of the 2009 Land Use Plan.

North Topsail Beach is located in NCDOT's Division 3. Currently, there are no projects proposed or under construction within the Town of North Topsail Beach. The Onslow County Comprehensive Transportation Plan Update is currently being drafted. This plan includes the Town, as well as the main thoroughfares providing access to the island. Improvements to the Town's transportation system will be discussed in detail within the Future Demands section of the plan.



SECTION 3. EXISTING CONDITIONS

Health Care

North Topsail Beach residents and visitors are served by Onslow Memorial Hospital. The hospital is located in Jacksonville, approximately 20 miles from the beach. Onslow Memorial has 162 beds, is staffed with over 100 physicians in twenty-five specialty areas, and is accredited by the Joint Commission on Accreditation of Healthcare Organizations. The hospital physicians have a wide range of specialties to better care for patients. Following are some of these specialties:



Onslow Memorial Hospital *Image Source:*
<https://www.onslow.org/>.

- Anesthesiology
- Cardiology
- Dermatology
- Emergency Medicine
- Family Practice
- Gastroenterology
- Internal Medicine
- Nephrology
- Neurology
- Oncology
- Ophthalmology
- Oral Surgery
- Orthopedics
- Otolaryngology
- Pain Management
- Pathology
- Pediatrics
- Plastic Surgery
- Podiatry
- Pulmonology
- Radiology
- Surgery
- Urology

In addition to Onslow Memorial Hospital, North Topsail Beach residents also rely on New Hanover Regional Medical Center located in the City of Wilmington. New Hanover Regional Medical Center is a not-for-profit health care system serving southeastern North Carolina and northeastern South Carolina. A teaching hospital and regional referral center, the network is dedicated to providing a wide range of health care services including, but not limited to, the following:

- Heart Center
- Imaging/X-ray-CT-PET
- Orthopedics
- Emergency/Level II
- Trauma
- Pulmonary Program
- Women's Services
- Children's Services
- Behavioral Health
- Rehabilitation Services
- Cancer Services
- Ambulatory Surgery
- Vascular Services

SECTION 3. EXISTING CONDITIONS



Law Enforcement

Law enforcement is provided by the Town of North Topsail Beach Police Department. There are thirteen full-time and five sworn reserve officers and one office staff employee. Two officers are on duty during the day and two officers are on duty at night. Additionally, there is one swing shift officer that is on duty from 3 PM to 3AM.

All emergency response calls to the department are routed through the Onslow County Emergency 911 Call Center. The department responds to approximately 3,750 calls per year, which does not include traffic tickets, check points, and DWIs. The police department performs one beach patrol per shift in the winter and three per shift during the summer months. The department currently maintains 15 squad patrol vehicles and two all-terrain vehicles. Jet skis are utilized by the department but are obtained through a rental agreement.



NTB Police Department Vehicle Image Source: *Town of North Topsail Beach.*

Currently, the Police Department utilizes approximately 800 square feet in the Town Hall with no garage or storage facility. Hurricane Florence caused significant damage to Town Hall, forcing the Police Department to relocate to a temporary facility off the island. Plans for addressing future facility needs will be discussed further in the Future Demands Section of the Plan. All the vehicles are stored outside and often times off-site at the police chief's residence.

Fire Services

The North Topsail Beach Fire Department is located at 2049 New River Inlet Road (Station 1) with an additional location at 3304 Gray Street (Station 2). The department is served by 14 paid full-time personnel and 14 volunteers. It is one of 19 volunteer fire departments in Onslow County. All volunteer departments maintain an ongoing contract with the county for mutual aid services. Automatic mutual aid sends multiple departments to a fire call. Mutual aid occurs when the fire departments that respond to a call ask for additional assistance by other departments. Emergency response calls are received through the Onslow County Emergency 911 Call Center. Following is a list of the equipment available to the firefighters at North Topsail Beach.



NTB Fire Department – Station 1 Image Source: *Town of North Topsail Beach.*

- 2 Fire Engines
- 1 Ladder Truck
- 1 Tanker
- 1 Brush Truck
- 1 Service Truck
- 2 Chief Officer vehicles 4X4
- 2 Medical First Responder Trucks 4X4
- 1 Jet Ski
- 1 17-Foot Zodiac Rescue Boat



SECTION 3. EXISTING CONDITIONS

Emergency Medical Services

North Topsail Beach is served by the Emergency Medical Services division of the Onslow County Department of Emergency Services. The County EMS station is located at 3304 Gray Street in North Topsail Beach and provides Medical First Response at the EMT level. The EMS station is staffed with two Onslow County paramedics 24 hours a day, 7 days a week.

Administration

The Town of North Topsail Beach is governed by a Council-Manager form of government. There are five departments that provide service to the Town. The following provides a list of those departments and the number of employees in each.

- Administration – 3
- Planning and Zoning – 1
- Building Inspections – 2
- Police – 14
- Fire – 14
- Public Works – 4

*The Fire Chief and the Public Works Director are the same person.

Water System

Central water service throughout the Town of North Topsail Beach is provided by the Onslow Water and Sewer Authority (ONWASA). ONWASA has a total of 50,770 customer accounts, of which 2,690 are in the Town of North Topsail Beach. There are no wells for the ONWASA system located in Town; all wells are currently located on the mainland. There are currently 174,000 linear feet (33 miles) of water line located throughout Topsail Island.

Currently, the ONWASA system is operating at 90% capacity. During peak summer months, the Town of North Topsail Beach utilizes approximately 4.3% of ONWASA's system capacity. This figure drops to 1.8% during the winter off-season. Future water service needs are discussed in Section 4 of the plan.

Sewer System

Central sewer service is predominantly provided by Pluris, LLC, throughout a majority of North Topsail Beach. There are still a few properties within Town that are either served by private on-site septic systems or privately held package treatment plants. When the Town's 2010 CAMA Land Use Plan update was drafted, Pluris (formerly North Topsail Utilities) was dealing with capacity limitations and the issuance of sewer taps were under a moratorium.

Currently, Pluris provides sewer service to North Topsail Beach, as well as developments on the mainland side of the County. Pluris has a total permitted operating capacity of 1,542,635 gallons per day (gpd) and is currently operating at 75%. Future service needs for North Topsail Beach are discussed in Section 4 of the plan.

SECTION 3. EXISTING CONDITIONS



Schools

North Topsail Beach is served by the Onslow County School System. Dixon Elementary School located at 130 Betty Dixon Road in Holly Ridge serves grades K-5. Dixon Middle School located at 200 Dixon School Road in Holly Ridge serves grades 6-8. Dixon High School located at 160 Dixon School Road in Holly Ridge serves grades 9-12.

Higher education is offered at Coastal Carolina Community College (CCCC). The college is located at 444 Western Boulevard in Jacksonville and is a public institution supported by tax dollars. Originally established as Onslow County Industrial Education Center in July 1965, the center became Onslow Technical Institute in May 1967, and Coastal Carolina Community College in July 1970. The College has the following mission statement:

“As a member of the North Carolina Community College System, Coastal Carolina Community College provides opportunities for quality post-secondary education, workforce training and lifelong learning for the civilian and military population of Onslow County, within the limits of available resources. Coastal values academic excellence, focuses on learning outcomes and student success, provides leadership for community cooperation and actively promotes the economic development of Onslow County.”

The community college operates classes on a semester schedule and offers online courses and a variety of programs that lead to degrees, diplomas, or certificates. Additional higher education opportunities are also available in nearby Wilmington at Cape Fear Community College and the University of North Carolina at Wilmington. Cape Fear Community College also offers classes at the Surf City Community Building. Additionally, several degree programs are available through Camp Lejeune’s MCAS New River Campus.

Recreation

Currently, the Town does not operate a Parks and Recreation Department. However, the Town does operate and maintain several park facilities as follows:

- North Topsail Beach Town Park is located at 465 New River Inlet Road. The park is opened from 8:00 am to 10:00 pm daily during summer months and includes the following facilities:
 - Soundside gazebo (available for rent)
 - Soundside pier
 - Kayak launch
 - Nature trail
 - Tot lot
 - Volleyball court
 - Basketball court
 - Tennis court
 - Picnic shelters (available for rent)
 - Charcoal-ready grills





SECTION 3. EXISTING CONDITIONS

- W. Rodney Knowles Park is located at 3623 Island Drive and includes the following amenities:
 - Kayak launch
 - Soundside observation deck
 - Picnic shelter
 - Charcoal-ready grill
 - 10 parking spaces



In addition to these public parks, North Topsail Beach has a total of 1,212 public beach access sites including local, neighborhood, and regional sites.

Stormwater Management

The Town of North Topsail Beach enforces both local and State-mandated stormwater management regulations. The current regulations require that all residential and non-residential development address on-site management of non-point source runoff from a respective project site. The standards and best management practices required/recommended vary according to the proposed development site. In addition to local stormwater management standards, the Town also works with NCDEQ to enforce NC State Coastal Stormwater Management Regulations.

Solid Waste

Solid waste and recycling services are provided by Waste Industries. Solid waste pickup is on Wednesdays & Saturdays during the summer (first week in May through last week in October). Recycling is picked up on Wednesdays year-round.



EXISTING LAND USE

Introduction

The following provides a summary of North Topsail Beach’s existing land use. Existing land use conditions provide a snapshot of the existing urban condition. Land use patterns with maps and associated data enable policy makers to make more informed decisions about future service needs and future land use demands. This effort, in turn, assists elected officials, Planning Board members and citizens at-large in making educated decisions about rezoning cases (map amendments), quasi-judicial hearings, and zoning ordinance text amendments.

Existing Land Use Acreage

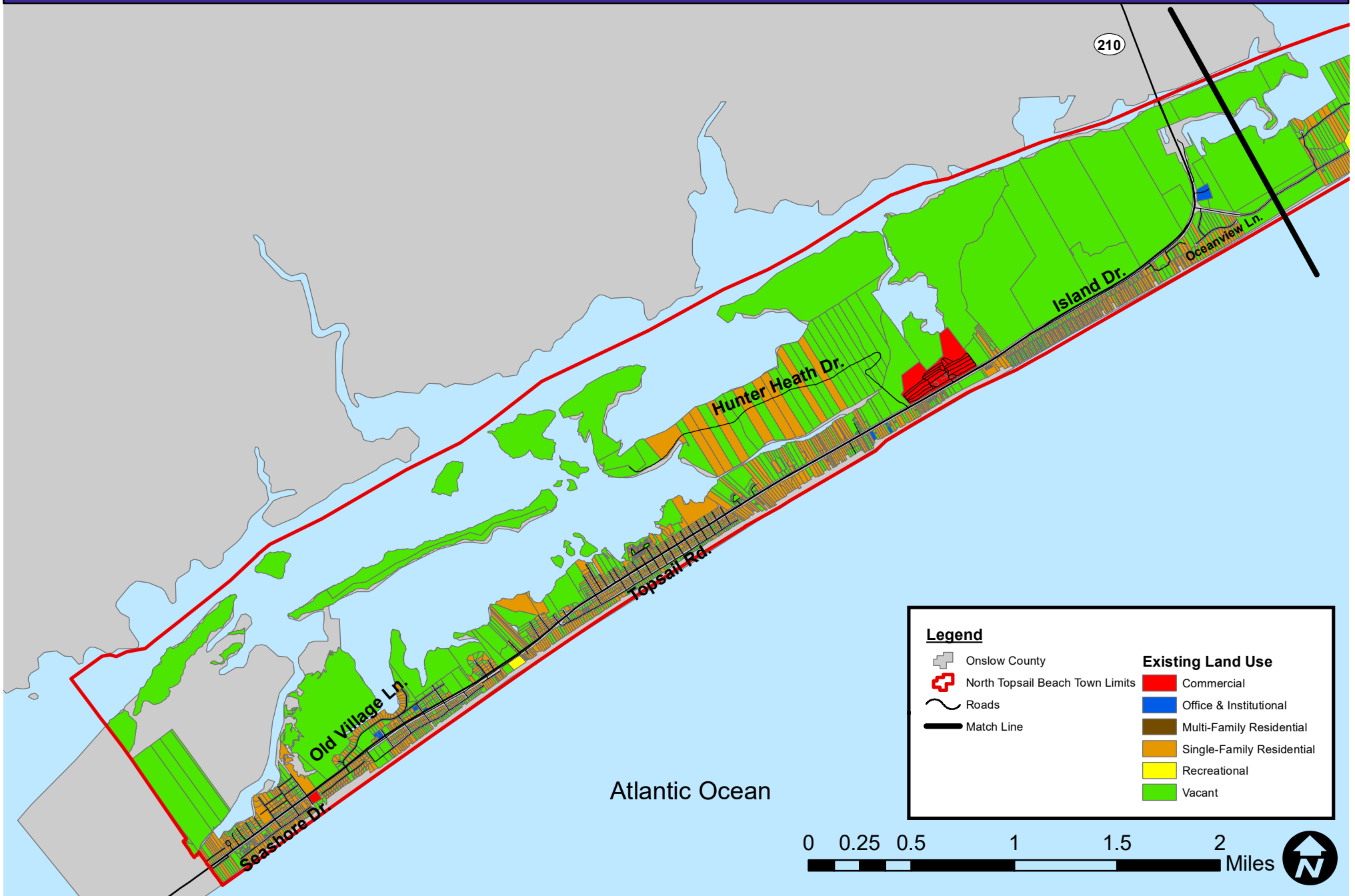
Existing land use should not be confused with zoning. Existing land use classifies the current land use, which may differ from current zoning. The Onslow County tax parcel file, in coordination with aerial photos, was used to determine the existing land use classification for properties in North Topsail Beach. Field surveys and Google’s street view were used to confirm the accuracy of the aerial photos and tax data. Further, property value was used to ensure whether parcels were unimproved. The following provides a summary of the existing land use categories utilized:

- Multi-Family Residential - Residential developments with greater than five units per acre on a single lot.
- Residential - All residential properties with four or fewer units on a single lot.
- Commercial - Retail, wholesale, and service establishments.
- Office and Institutional - Government, churches, offices, and schools.
- Camping - Portions of the Town in which traditional camping and/or travel-trailers are allowed.
- Recreational - Portions of Town dedicated to the provision of active and passive recreation.
- Vacant - Properties that are undeveloped/unimproved.

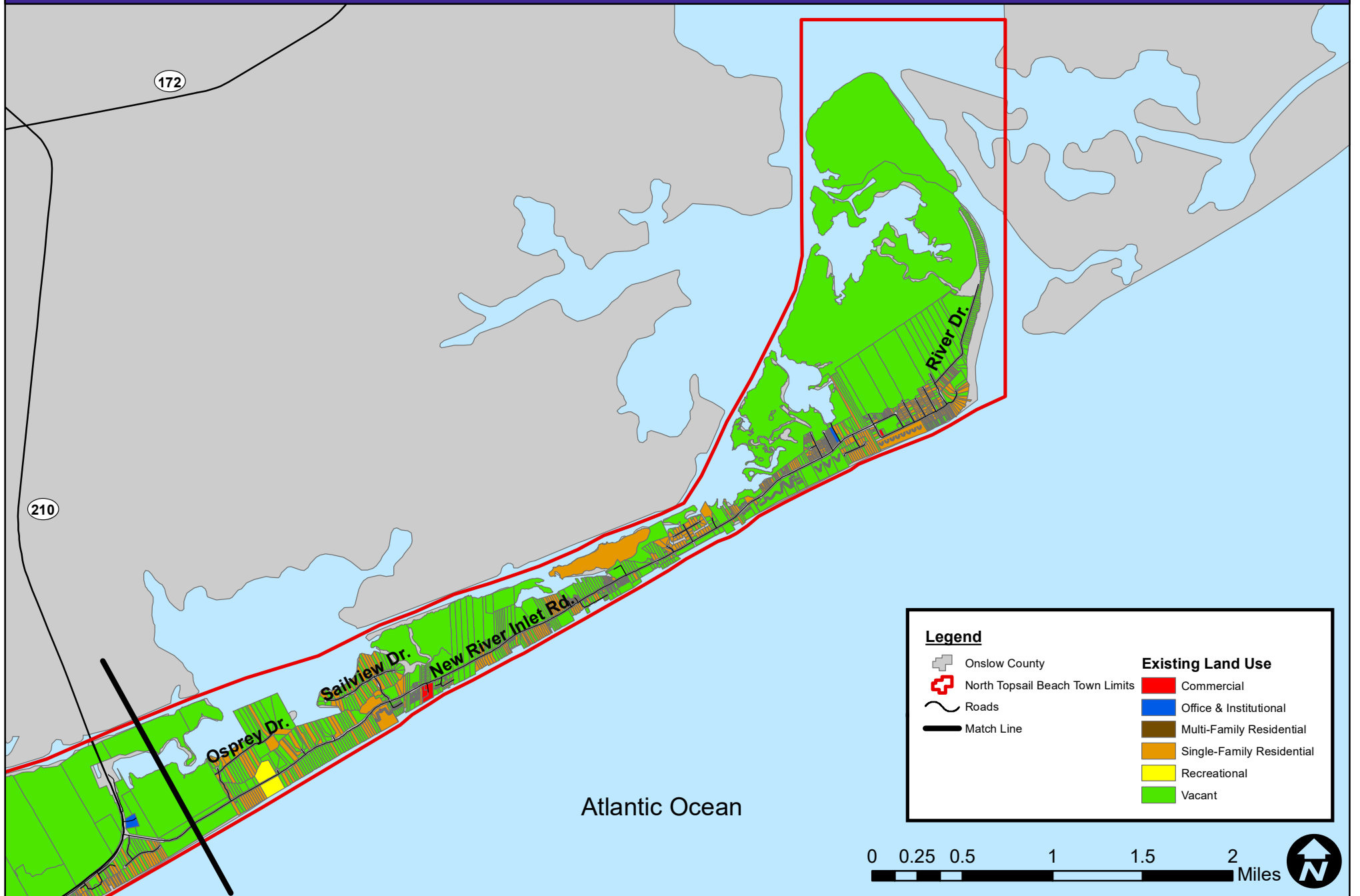
Table 25 and Maps 10A and 10B provide an overview of existing land use characteristics in North Topsail Beach.

Table 25. Existing Land Use		
Land Use	Acres	% of Total Corporate Limits
Commercial	41.94	0.58%
Office & Institutional	6.55	0.09%
Multi-Family Residential	6.67	0.09%
Residential	614.89	8.51%
Recreational	13.86	0.19%
Vacant	3,299.91	45.69%
Water	2,850.67	39.48%
Right-of-way	388.18	5.37%
Total	7,222.67	100.00%
<i>Source: Onslow County Tax Office, North Topsail Beach, HCP, Inc..</i>		

Map 10A. Existing Land Use



Map 10B. Existing Land Use





INTRODUCTION

This section of the Comprehensive Plan focuses on the future demand for North Topsail Beach. This discussion addresses a range of issues including the following:

- Build-Out Analysis
- Housing
- Commercial/Economic Development
- Population Projections
- Future Community Facilities and Services Needs
- Land Use Conflicts
- Future Land Use

The discussion of community facilities and services needs, and future land use is intended to provide a foundation for the development of implementing actions as a component of this plan. These sections provide a summary of need regarding community services and facilities, while also defining future growth and land use patterns. Additionally, permanent and seasonal population projections are provided as a baseline for determining the increased need for Town-sponsored programs, services, and community facilities.

FUTURE DEVELOPMENT TRENDS

Build-Out Analysis

There are a variety of methodologies available to forecast potential future growth within a community; however, the most effective method is to estimate growth according to established land use patterns and development trends. In 2010, the Town of North Topsail Beach commissioned a study which took these factors into consideration to forecast the total number of developed units, both residential and non-residential, which can be anticipated based on the overall availability of buildable land. Although the study was conducted roughly nine years ago, there has been negligible zoning changes that have compromised the results.

This Geographic Information System (GIS) based analysis identified the overall number of buildable acres using parcel data, aerial photography, and established zoning patterns. Development potential regarding vacant land was determined based on existing zoning standards. The study consisted of the following elements:

1. A determination of which existing lots are built, and of those that are built, determination of their existing density. This determination included both residential density (by dwelling unit) and commercial density (by floor area).
2. Potential residential density was calculated by using the maximum allowable density of the existing zoning district. For large parcels that may be further subdivided, estimation was made of the required infrastructure and open space and was not included in the residential

SECTION 4. FUTURE DEMAND/PROJECTIONS



calculation. The calculation of potential residential density excluded existing built single-family residential lots and multifamily units. Lots that were non-conforming as to area and cannot be built upon were also identified.

3. The potential additional commercial density was based on the maximum square footage that is permitted within the zoning district. A portion of the parcel area was allocated to parking, open space etc., and was not included in the density calculation in order to obtain a more accurate estimate. Existing sites that were built-out at maximum density were not included in the scenario.
4. An estimate of additional housing units and commercial square footage was reported based on the GIS model as well as a population increase estimate.

The results of the analysis are presented in the tables below. These tables provide a summary of both developed units and the resultant population increases. This information is being utilized to compile permanent and seasonal population estimates through the year 2050. The Town of North Topsail Beach Build-Out and Non-Conforming Lot Study is provided in full in Appendix B of this plan.

The following table outlines the total estimated increases in housing units and overall commercial square footage, as well as estimated population increase by zoning district. Population estimates were based on the Town's average household size of 1.87, as defined under the 2000 US Census. The summary of housing units includes single-family, duplexes, and multi-family structures depending on whatever the highest density use is permitted within a respective zoning district. Commercial projections are presented as the increase in total square footage.

Zoning District	Housing Units/Commercial	
	Floor Area (sq. ft.)	Population Increase
R-5	552	1,032
CUR-5	46	86
R-8	80	150
CUR-8	48	90
R-10	321	600
CUR-10	27	50
R-15	118	221
CUR-15	5	9
R-20	333	623
RA	24	45
MHR	195	365
B-1	280,648	N/A
B-2	151,170	N/A
Total	1,749 units/434,107 sq. ft.	3,271 persons

Source: North Topsail Beach Build-Out and Non-Conforming Lot Study.



SECTION 4. FUTURE DEMAND/PROJECTIONS

Residential/Non-Residential Growth

Table 26 above defines the total projected residential build-out for North Topsail Beach. As stated, these projections account for all buildable, conforming lots in relation to permitted densities under the Town's existing zoning code. When discussing future development trends within North Topsail Beach, the predominant land use is clearly expected to be residential in character. Currently, there are approximately 3,300 acres of vacant land situated throughout the Town's corporate limits. Nearly 72% of this acreage is zoned for either single- or multi-family development. Of the remaining vacant acreage, roughly 21% is zoned Conservation or CON-D deeming this acreage unbuildable. Based on these figures, all but roughly seven percent of the Town's remaining vacant acreage will either be preserved or residential.

Approximately 257 acres or seven percent of vacant land is currently zoned for commercial use. It is anticipated that this will result in an additional 433,000 square feet of non-residential floor space. It should be noted that this figure is an estimation of maximum allowable area and does not account for the potential for mixed use development projects. To put this figure in perspective, the average square footage of a gas/convenience store is around 2,800 square feet, a fast-food outlet 4,000 square feet, and a traditional grocery store 40,000 square feet.

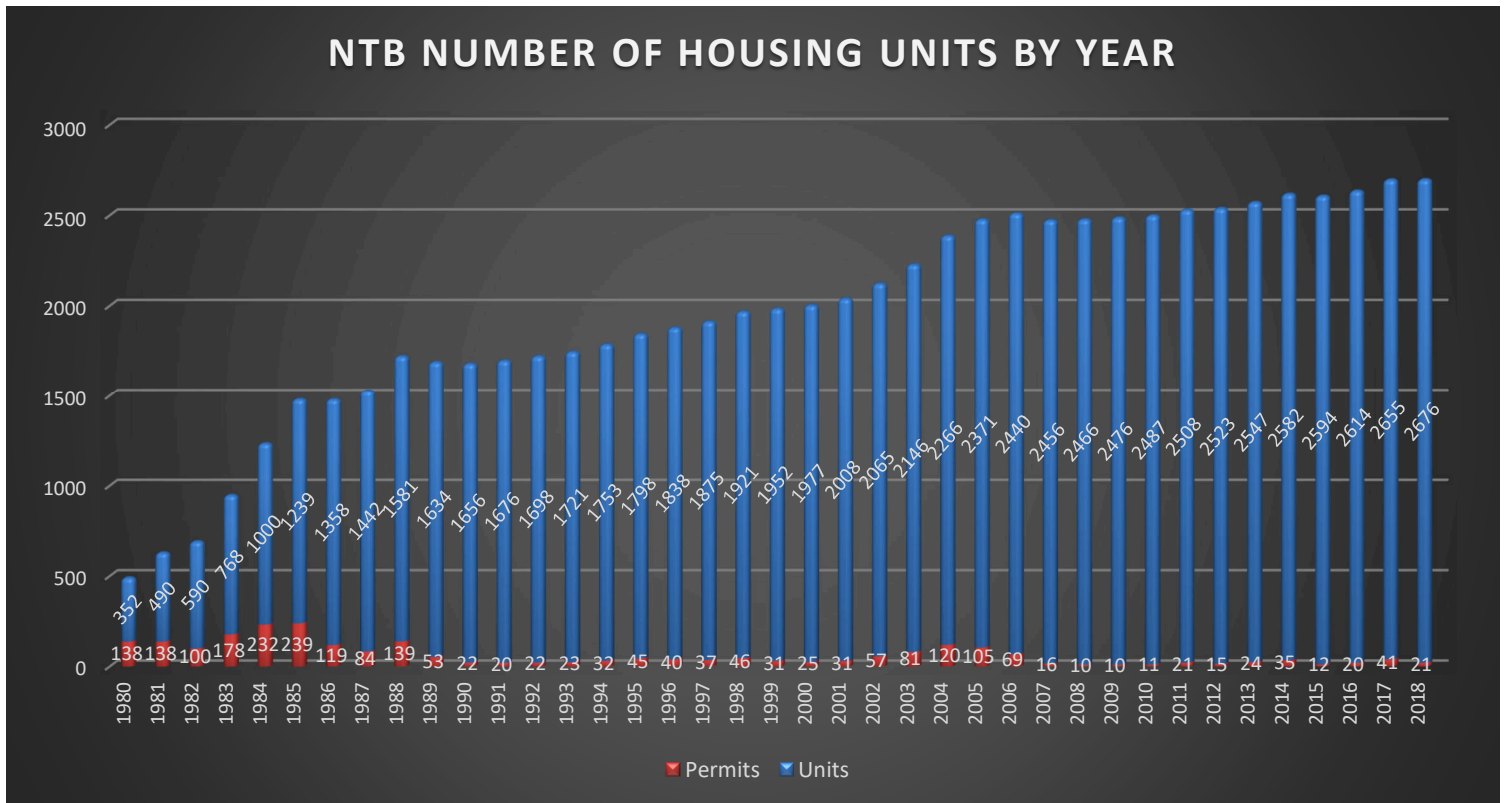
Most of this non-residential vacant land is situated in the vicinity of Rogers Bay Campground. The opportunities for non-residential development are predominantly comprised of large adjoining tracts providing the acreage necessary to build a viable commercial project inclusive of all required setbacks and the provision of adequate parking. The need for increased commercial development aimed at servicing the Town's substantial seasonal population was mentioned through both the survey effort and the Public Input Meeting associated with the development of this plan. In terms of permitted uses on these properties, the most appealing scenario would be the development of vertical mixed-use structures, whereby residential units are built over first floor retail or other non-residential uses. Projects like this have been discussed in recent past; however, to date these projects have not materialized. Regardless of how and where non-residential development occurs, the Town will focus on minimizing adverse impacts on environmental conditions, as well as adjacent residential development.

North Topsail Beach has, since incorporation, maintained a focus on moderate-density residential development in a manner that minimizes the impact on the Town's abundant natural resource areas. The Town's zoning regulations, as well as land use planning policy, support this goal. Residential growth is anticipated to continue at rates similar to development experienced over the last ten to twenty years. Since the year 2000, on average, forty residential units have been constructed annually. During this period, the number of units per year reached the highest point in 2004 when 120 new residential units were constructed. For the purposes of forecasting, an average of forty units per year will be utilized. Although this average includes the rapid growth experienced prior to the 2008 housing recession, this figure will account for fluctuations in the market through build-out of the Town.

SECTION 4. FUTURE DEMAND/PROJECTIONS



The following graph provides a snapshot of residential development trends dating back to 1980. Utilizing the average of forty units per year since the year 2000, build-out as defined in the table above will occur between 2055 and 2060.



Population Projections

Establishing future population forecasts for the Town of North Topsail Beach is essential to determining future impacts to infrastructure and community services/needs. However, calculating population projections is a difficult task and all forecasts are subject to a variety of unforeseen factors. Population forecasting is as much an art as it is a science.

“Straight-line” population growth trends over time are typically used to calculate population projections. Because of the unique nature of the Town’s seasonal population fluctuations, coupled with the fact nearly all remaining vacant land is expected to be residential in nature, traditional “straight-line” projections are not suitable. As an alternative, projections have been based on the anticipated housing units increases outlined in the previous sections. Table 27 provides a summary of population projections for the Town of North Topsail Beach through the year 2055.



SECTION 4. FUTURE DEMAND/PROJECTIONS

Table 27. 2055 Population Projections

2016 Total Number of Housing Units¹	2016 Total Housing Occupancy²	2055 Total Estimated Housing Units³	2055 Total Housing Occupancy⁴	2055 Total Seasonal Daily Visitors⁵				
2,614	17,128	4,174	24,456	11,716	2055 Total Daily Peak Population Estimate			
					36,172			
2016 Permanent Population Estimate	2020 Permanent Population Estimate	2025 Permanent Population Estimate	2030 Permanent Population Estimate	2035 Permanent Population Estimate	2040 Permanent Population Estimate	2045 Permanent Population Estimate	2050 Permanent Population Estimate	2055 Permanent Population Estimate
1,104	1,181	1,278	1,374	1,471	1,567	1,664	1,760	1,866
2016 Peak Seasonal Population Estimate	2020 Peak Seasonal Population Estimate	2025 Peak Seasonal Population Estimate	2030 Peak Seasonal Population Estimate	2035 Peak Seasonal Population Estimate	2040 Peak Seasonal Population Estimate	2045 Peak Seasonal Population Estimate	2050 Peak Seasonal Population Estimate	2055 Peak Seasonal Population Estimate
28,844	29,706	30,783	31,860	32,137	33,215	34,292	35,370	36,172

¹Total residential housing units as reported by the Town of North Topsail Beach.

²2016 total housing occupancy is based on 2016 estimates (see page 2-2).

³2055 total estimated housing units is based on an average of 40 additional housing units annually dating back to the year 2000.

⁴2055 total housing occupancy is based on a total of 1,560 additional housing units through 2055. Of these 1,560 units, 22.5% (351 units) are occupied by owner-occupants or year-round renters as reported for the Town under the 2016 American Community Survey. The remaining 77.5% (1,209 units) are vacant and utilized as seasonal rental units. The population increase for these units is based on 1.87 persons per household per year-round residents and 8 persons per household for seasonal rentals. These are the same figures utilized to establish a current seasonal population estimate (see Section 2, page 2-2).

⁵2055 total seasonal daily visitors is based on 2016 estimates (see page 2-2).

Source: US Census Bureau and HCP, Inc.



FUTURE COMMUNITY FACILITIES AND SERVICES NEEDS

Many factors have an impact on the land use, infrastructure, and transportation systems within a given jurisdiction. For North Topsail Beach, the primary impacts are related to a modestly growing permanent population, increasing development and use of seasonal vacation properties coupled with increasing seasonal visitation, and the desire for additional amenities.

While managing these impacts, the Town must stay true to its core identity, and recognize that North Topsail Beach succeeds in its desirability as a beach destination that embraces its traditional family beach image while vehemently protecting the area's vital natural resource areas. Community infrastructure and services such as utilities, beach nourishment, police, fire, emergency medical services, public services, and recreation will all be affected by these factors, as well as projected growth and development. Projected needs that will result from future development and changes to the land use pattern are discussed in this section, in addition to impacts on infrastructure and services.

Transportation

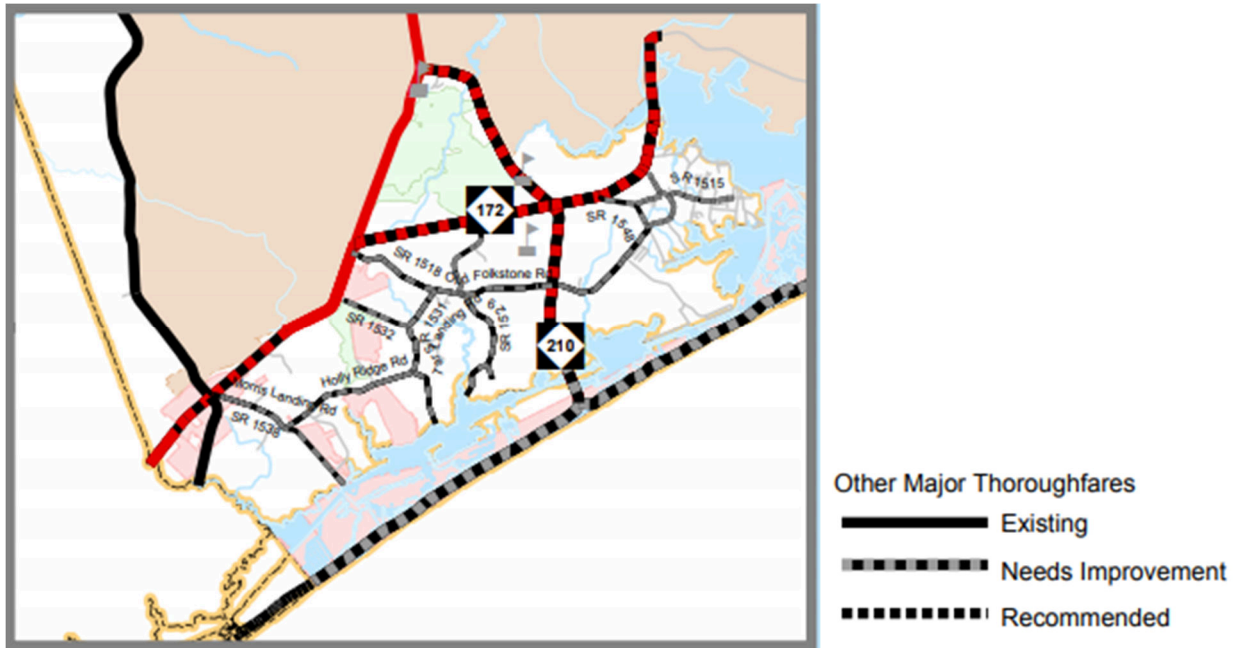
As discussed in Section 3, the Town of North Topsail beach is predominantly served by NC Highway 210 from the west and south, while access to the northern portion of Town is provided by State Road 1568. These two collector thoroughfares are maintained by NCDOT, as is the NC Highway 210 bridge leading into Town. The remainder of the Town's local access streets are maintained by the Town of North Topsail Beach. The only exception to this fact is the few private roads that exist throughout Town. Maintenance of private roads is the responsibility of the property owner; however, these individuals may request that the Town "accept" the private right-of-ways into the Town's system. The decision to accept private roads is made by the Town Board of Aldermen based on a variety of considerations, principally whether the road meets the Town's minimum design criteria.

Currently the Town owns and maintains 6.94 linear miles of public right-of-way. In order to maintain these streets, the Town receives annual Powell Bill Funding from NCDOT. For fiscal year 2018, the Town received \$26,184.17 in Powell Bill funds. Powell Bill funds shall be expended by said cities and towns primarily for resurfacing of streets within the corporate limits of the municipality but may be used for the purposes of maintaining, repairing, constructing, reconstructing or widening of any street or public thoroughfare including bridges, drainage, curb and gutter, and other necessary appurtenances within the corporate limits of the municipality or for meeting the municipality's proportionate share of assessments levied for such purposes, or for the planning, construction and maintenance of bikeways, greenways or sidewalks. The Town assesses street improvement needs annually and provides funding for improvements through the Town's operating budget.

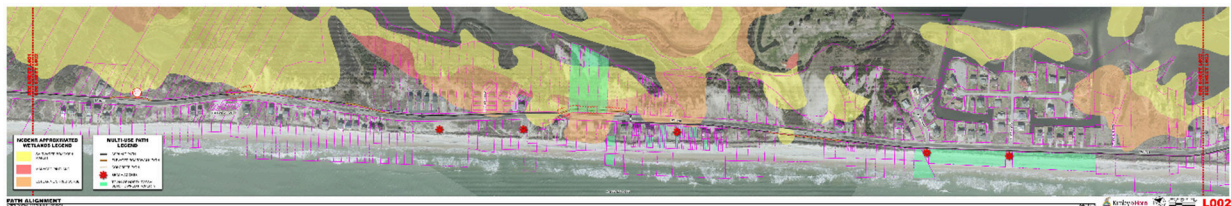
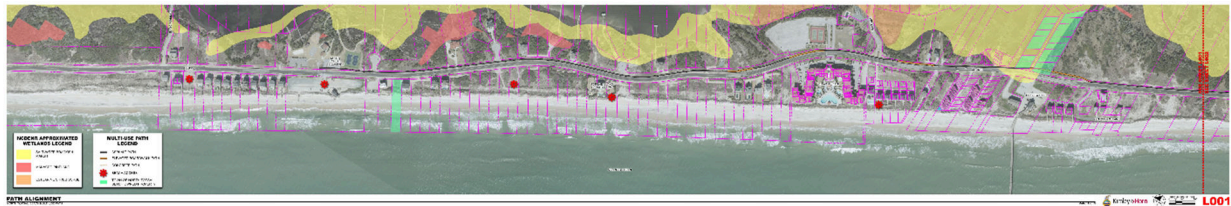
North Topsail Beach is currently working in conjunction with the Down East Rural Planning Organization (RPO) to develop the Onslow County Regional Transportation Plan. The draft plan identifies NC Highway 210 and NC State Road 1568 as corridors in Need of improvement.



SECTION 4. FUTURE DEMAND/PROJECTIONS



The Town of North Topsail Beach also maintains a multi-use path intended for both walking and biking which serves the Northern portion of the island. The following provides the location of proposed improvements to these facilities as developed within the North Topsail Beach Multi-Use Path Study, prepared by the Town in 2016 with the assistance of Kimley-Horn. The study is available for review at Town Hall.





Through this planning process, the need to expand upon this system and connect it to the Town's southern corporate limit boundary was identified through both plan survey results and the public input forum. Planning and construction involving development of the path along NC Highway 210 has been included as a strategy to be carried out during implementation of this plan.

Health Care

As noted in Section 3, North Topsail Beach residents rely predominantly on Onslow Memorial Hospital for their health care needs. However, residents also rely on New Hanover Regional Medical Center in Wilmington, NC. Onslow Memorial Hospital underwent a substantial renovation in 2008, which nearly double the availability of resources at the facility and prepared the facility for regional increases in development and the resultant population. In 2018, Onslow Memorial entered into an agreement with the UNC Health Care System. This agreement did not involve a transfer of assets, but rather an increase in operational capability and service delivery. According to Onslow Memorial officials, some of the primary benefits of this agreement include:

- Expansion of locally available hospital and community-based patient care services to enhance patient care.
- Improved patient experience and satisfaction.
- Enhanced operational efficiency and cost savings.
- Recruitment of locally based highly trained and skilled physicians.
- Access to innovative research and treatments at UNC health care.

Law Enforcement

As discussed in Section 3 of the Plan, the Town of North Topsail Beach's Police Department facilities were compromised when the Town Hall was deemed unfit for use following Hurricane Florence. Since that time, the Police Department has maintained operations within a temporary facility located in Sneads Ferry.

Optimal staff levels for the Town's police department should include thirteen full-time and five sworn reserve officers; however, the department currently employees eleven full-time and one reserve officer. In order to meet the demand necessary for North Topsail Beach's average annual call volume, the department needs to fill all current vacancies. In addition to current staffing levels, the department could further utilize two additional full-time staff officers. This addition would allow more time for the department's two detectives to investigate active criminal cases.

In terms of facilities and equipment needs, a variety of improvements are necessary. The current fleet of vehicles is sufficient at current staff levels; however, there are several vehicles that will need to be replaced through the planning period due to age. At the time that Hurricane Florence impacted the Town, the Department was in the process of developing a 25-year needs study. The results of this study determined that the department required approximately 9,000 square feet to operate properly. The location and context of the new facility will be determined as a component of the discussion regarding Town Hall.



SECTION 4. FUTURE DEMAND/PROJECTIONS

Fire Department/EMS

The Town of North Topsail Beach Fire Department maintains two stations as noted in Section 3. Station 1 is located at 2049 New River Inlet Road and Station 2 at 3304 Gray Street. For the department to meet service needs associated with increasing permanent and seasonal population, an additional six full-time firefighters will be necessary. Additionally, the department will need to replace one ladder truck and one fire engine over the next five to seven years. The department's Station 1 facility will be adequate through the planning period; however, Station 2 consists of a metal building established in 1987 and will need to be replaced over the next five to seven years. This structure also houses the EMS service serving the Town. The EMS system falls under the jurisdiction of Onslow County Emergency Services.

Administration

The Town Manager is responsible for reporting staffing and other administrative needs to the Board of Aldermen based on demand for services and continued growth. On an annual basis during each fiscal year's budget preparation cycle, the Board of Aldermen reviews staffing/administrative needs and makes adjustments as necessary to accommodate the current demand.

Water System

As discussed in Section 3, the Town of North Topsail Beach's water service is provided by the Onslow Water and Sewer Authority (ONWASA). As noted, there are no wells within the Town's corporate limits, but the Town's 2,690 customers are served by roughly 33 miles of water line. Currently, North Topsail Beach utilizes approximately 4.3% in high season and 1.8% in low season of ONWASA's 11.4 Million Gallons Per Day capacity. As of 2019, ONWASA is utilizing about 10.3 of this 11.4 MGD, which amounts to roughly 90% of the system's overall capacity.

Based on the build out analysis discussed earlier in this section, it is anticipated that an additional 1,749 housing units are anticipated until all available raw developable land is utilized. This potential development will result in an increased water system flow of 680,000 GPD. Currently, ONWASA has enough treatment capacity to provide this supply; however, the ability to do so is heavily dependent on two factors as follows:

1. Meeting increased demand throughout the rest of the water system as construction of new housing developments that will be served by ONWASA is ongoing in multiple areas of Onslow County.
2. The ability of the existing water system infrastructure to handle this additional demand. As an example, the entire ONWASA water system on the island is supplied from the mainland by two mains whose capacity governs how much water can be delivered to the island.

ONWASA is currently constructing two new groundwater supply wells and water piping to provide additional raw water supply to the Dixon Water Treatment Plant, which is the primary source of water for the Town. These supplies will be operational in early 2020. While not directly serving the Town,

SECTION 4. FUTURE DEMAND/PROJECTIONS



work is also underway on additional well sites and planning for a new treatment facility in Northwest Onslow County. No schedule for completion has been established at this time.

Sewer System

As noted in Section 3, a majority of North Topsail Beach is served with central sewer service by the private wastewater treatment company Pluris, LLC. Aside from the Pluris system, there are a few properties that are served by private septic, and three multi-family complexes that operate off package treatment plants.

Currently, North Topsail Beach utilizes approximately 35 percent of Pluris' 1.5 MGD capacity. Based on build-out projections, it is projected that the Town will require an additional 350,000 gallons per day in treatment capacity to serve the 1,749 additional units estimated through build-out. Build-out is expected to occur between 2055 and 2060.

Pluris' wastewater treatment plant is currently operating at roughly 75% of capacity during peak seasonal months, which leaves approximately 385,000 GPD of capacity for new development. This capacity is more than adequate to address the projected increased demand for North Topsail Beach; however, much like the ONWASA water system, development served on the mainland of Onslow County could potentially impact system availability. The Town will continue to monitor this issue throughout the planning period.

Schools

The Town of North Topsail Beach citizens are served by Dixon Elementary, Dixon Middle, and Dixon High school as a part of the Onslow County School System. The following table provides the projected capacity demands through the year 2025:

School	Current Campus Capacity	Projected 2025 Capacity
Dixon Elementary	895	1,357
Dixon Middle School	900	836
Dixon High School	1,123	1,038

Source: Onslow County School District.

Based on these projections, Onslow County Schools will need to address the capacity deficiency that is anticipated at Dixon Elementary School. Currently the County school system is working on development of a long-range needs plan. Upon completion, this plan will be implemented to not only address capacity issues, but also safety/security, communications, structural integrity, and recreational facility upgrades.



SECTION 4. FUTURE DEMAND/PROJECTIONS

LAND USE CONFLICTS

Land use conflicts often exist within a Town's planning jurisdiction resulting from a variety of circumstances. Issues leading to land use conflicts can result from a lack of proper land use controls, demand for increased development, and situations beyond the Town's control. The Town has been very conscious of these issues in the past and has addressed many problems related to land use conflicts through adoption of local ordinances and installation of infrastructure. Although steps have been taken to address potential problems that may be detrimental to environmental conditions, several conflicts still exist within the Town planning jurisdiction. These land use conflict issues can be summarized as follows:

- **Residential Development within Flood Hazard Areas.** The Town lies on a barrier island and is extremely vulnerable to coastal flooding associated with tropical storm events. The Town's vulnerability to flood hazards is discussed in detail beginning on page 24. As with other barrier island communities, this fact has not slowed development. The Town aims to ensure the safety of all property within the Town's jurisdiction through proper land use controls and enforcement of the Town's Flood Damage Prevention Ordinance. All residential structures are subject to requirements outlined in the Town's Flood Damage Prevention Ordinance, as well as the North Carolina State Building Code.
- **Development within the CBRA Zone.** The Coastal Barrier Resource Act of 1982 places additional constraints on development beyond those tied to standard FEMA flood zones. The CBRA zone was discussed within the natural hazards discussion earlier in the plan (pages 3-2 to 3-3). Some portions of North Topsail Beach that fall within the CBRA zone are not eligible for federal flood insurance, and limited federal assistance in the event of a natural disaster. These properties must rely on private flood insurance which is typically much more costly than the federally subsidized alternative. This issue became especially problematic subsequent to Hurricane Fran in 1997. However, the presence of the CBRA zone has not hampered development. Many property owners build within this area without a full understanding of the burden that this federal policy can ultimately have on them in the event of a natural disaster. The town has voiced concerns over educating property owners of this hazard. Efforts to lobby for the elimination of the CBRA zone have been included as an implementation strategy within this plan.
- **Encroachment of residential and urban type uses into forested/environmentally sensitive areas.** The Town is home to significant acres of maritime forest, and environmentally sensitive areas including estuarine marshes and wetlands. As discussed in the natural systems analysis portion of the plan, the Town is surrounded on the northwestern side by estuarine wetlands. From the Town's origin, there has been a focus on preserving these areas wherever feasible. The Town aims to protect the natural setting throughout Town by preserving the forest where possible, and promoting low density development in an attempt to maintain water quality. The issue of preserving the forest considering continued development pressures will be addressed in the policy statement section of the plan.



FUTURE LAND USE

Introduction

The Future Land Use Districts listed below provide a basis for zoning deliberations and redevelopment considerations. The Future Land Use Districts are delineated on Maps 11A and 11B. The future land use district summaries define suitable development patterns for all portions of the Town's corporate limits. The future land use districts are defined as follows:

Conservation

The Conservation district was established with a focus on preserving the environmentally sensitive portions of the Town. The boundaries of this district correspond to portions of town zoned as CON or CON-D. This area, as shown on the Future Land Use Map, is comprised largely of wetlands or other environmentally sensitive areas located throughout the town's planning jurisdiction. The town will continue to focus on preserving these areas.

Allowable Density: For portions of the conservation future land use district zoned CON-D, development will be prohibited and therefore, no density thresholds have been established. In portions of conservation future land use district where property is currently zoned for development or redevelopment, the density thresholds for the underlying zoning district shall apply.

Maximum Building Height: 48' (measured to roof peak).

Permitted Uses: Agricultural uses, utility-related uses, recreational walking paths, educational signage, wooden walkways (slatted), navigational signage (within wetlands); water dependent uses; where property is currently zoned for development or redevelopment, development regulations for the underlying zoning district shall apply.

Uses Not Permitted: Any construction involving the establishment of stick built/block structures and/or paved access paths.

Mixed Use

This district is located in areas where nonresidential development currently exists, including commercial, office/professional, and government uses. These are portions of the Town where existing zoning will permit this type of development. Currently, these sites are developed as non-residential sites; however, if they are redeveloped, the future land use map should be reviewed in an effort to rezone these properties in a manner that conforms with adjacent residential development. Due to the medium density residential character of the island, commercial development needs to be cluster into specific locations so that the impact on surrounding neighborhoods is minimal. Additionally, the increased traffic flow generated by nonresidential development needs to be directed towards major thoroughfares traversing through the Town, and away from local access streets.



SECTION 4. FUTURE DEMAND/PROJECTIONS

Allowable Density: 8,000 square feet per building (~5 units per acre)

Maximum Building Height: 48' (measured to roof peak).

Permitted Uses: light retail/commercial structures, mixed use development (i.e. residential above commercial/office space), government support services, recreational facilities, open space areas, transportation systems, parking areas.

Uses Not Permitted: heavy commercial uses, light industry, heavy industry, private campgrounds, private RV parks.

Low Density Residential

This district is intended to provide development opportunities for primarily single-family residential housing. This district is comprised of larger buildable lots and is more restrictive with respect to permitted uses.

Allowable Density: 2 units per acre

Maximum Building Height: 48' (measured to roof peak)

Permitted Uses: single-family residential housing, duplex residential housing (only within the RA zoning district), townhouse development, recreational facilities, public access facilities, infrastructure facilities, right-of-way development, emergency management facilities.

Uses Not Permitted: commercial uses, industry, private campgrounds, private RV parks, any other form of nonresidential development.

Medium Density Residential

This district is intended to provide development opportunities for primarily single- and multi-family residential housing. This district is comprised of moderately sized buildable lots.

Allowable Density: 4 units per acre

Maximum Building Height: 48' (measured to roof peak).

Permitted Uses: single-family residential housing, duplex residential housing, townhouse development, multi-family condominium housing, recreational facilities, public access facilities, infrastructure facilities, right-of-way development, emergency management facilities.

Uses Not Permitted: commercial uses, industry, private campgrounds, private RV parks, any other form of nonresidential development.

SECTION 4. FUTURE DEMAND/PROJECTIONS



High Density Residential

This district is intended to allow for development on smaller lot sizes. This district allows for a wider spectrum of development options and is intended to allow for the location of modular housing and single unit mobile homes.

Allowable Density: 8 units per acre

Maximum Building Height: 48' (measured to roof peak).

Permitted Uses: single-family residential housing, duplex residential housing, townhouse development, multi-family condominium housing, manufactured housing (where permitted by zoning ordinance), recreational facilities, public access facilities, infrastructure facilities, right-of-way development, emergency management facilities.

Uses Not Permitted: commercial uses, industry, private campgrounds, private RV parks, any other form of nonresidential development.

Inlet Hazard Residential District

This district falls within the boundaries of the defined inlet hazard areas (see page 73). Development within this district should be restricted to single-family housing. In the event of a catastrophic storm event, property owners within this district should be allowed to redevelop at pre-existing densities.

Allowable Density: 2 units per acre (15,000 square feet minimum lot size).

Maximum Building Height: 48' (measured to roof peak).

Permitted Uses: single-family housing; duplex housing will be permitted where they currently exist. This will only be permitted under conditions where the original structure has been damaged to 50% or greater of the structure's fair market value.

Uses Not Permitted: all uses not comprised of single-family housing

Future Land Use Compatibility Matrix

Each of the land use categories is supported by zoning districts contained in the Town's UDO. Table 29 provides a comparison of the land use categories and the Town's existing zoning districts. The reader is cautioned that this is an "overview" and detailed analysis must be based on careful review of the Town's UDO. The terms "generally consistent, conditionally consistent, and inconsistent" are intended to only be indicators of where revisions may need to occur for the Town's UDO to support implementation of this plan. The land use category descriptions express some "objectives" which may be inconsistent with the existing UDO.



SECTION 4. FUTURE DEMAND/PROJECTIONS

Table 29. Future Land Use Plan Compatibility Matrix

Zoning Districts	CON-D	RA	R-20	R-15	R-10	R-8	CU-R8	R-5	CU-R5	MHP	B-1	CU-B1	B-2	CU-B2
Min. Lot Size (SF)	N/A	130,680	20,000	15,000	10,000	8,000	8,000	5,000	5,000	5,000	8,000	8,000	8,000	8,000
Max. Bldg. Height (ft.)		48	48	48	48	48	48	48	48	48	48	48	48	48
Designations/Average Density (du per acre)														
Conservation	g	x	x	x	x	x	x	x	x	x	x	x	x	x
Mixed Use	x	x	x	x	x	x	x	x	x	x	g	c	g	c
Low-Density Residential	x	g	g	g	g	g	c	g	c	g	g	c	g	c
Medium-Density Residential	x	x	x	g	g	g	c	g	c	g	g	c	g	c
High-Density Residential	x	x	x	x	x	x	x	g	c	g	g	c	g	c
Inlet Hazard Residential	x	x	x	x	g	g	x	x	x	x	x	x	x	x

SECTION 4. FUTURE DEMAND/PROJECTIONS



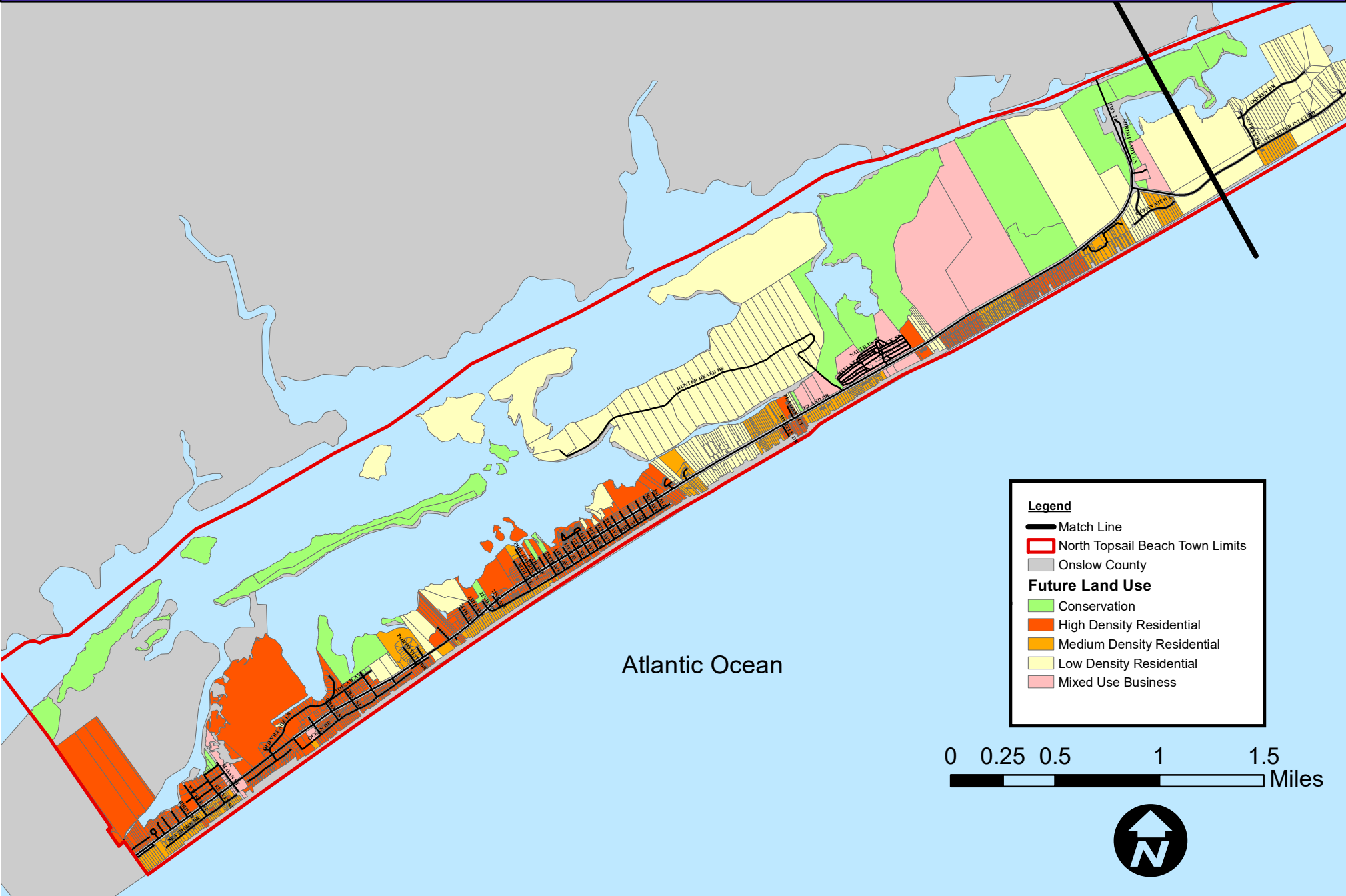
Future Land Use Acreage

Table 30 provides a summary of acreages associated with the future land use map (Maps 11A and 11B).

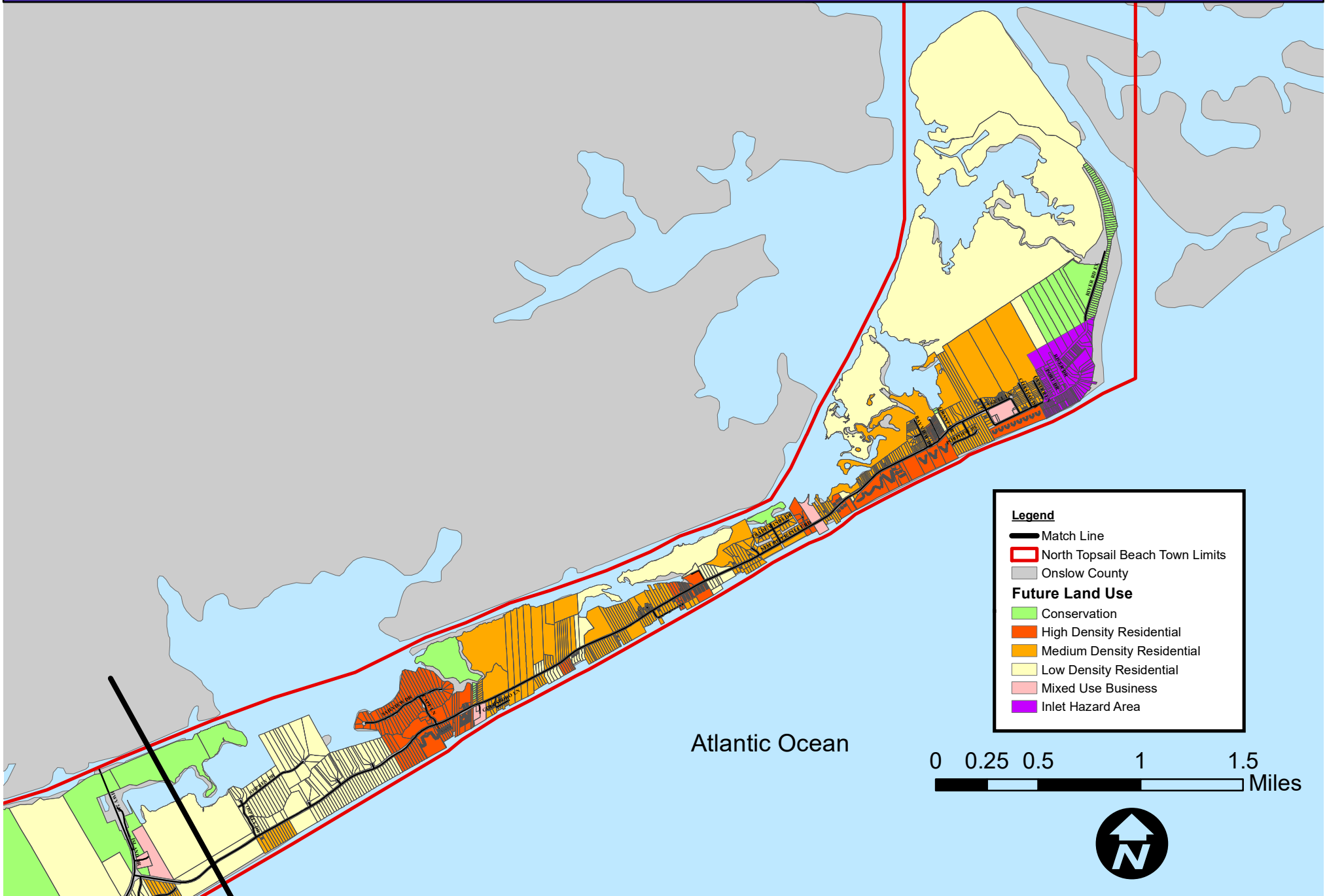
Table 30. Future Land Use		
Land Use	Acres	% of Total Corporate Limits
Conservation	665.4	15.6%
High-Density Residential	647.9	15.2%
Medium-Density Residential	600.5	14.1%
Low-Density Residential	1,691.6	39.6%
Inlet Hazard Residential	75.1	1.8%
Mixed Use Business	200.0	4.7%
Right-of-Way	388.2	9.1%
Total	4,268.7	100.0%

Source: HCP, Inc.

Map 11A. Future Land Use



Map 11B. Future Land Use





SECTION 5. GOALS & IMPLEMENTING STRATEGIES

INTRODUCTION

This plan establishes goals and implementing actions for the land use/quality of life issues that will affect North Topsail Beach's future. This section also responds to the NCAC 7B requirements for CAMA certified land use plans. The stated actions are designed to address issues which have been identified by the Planning Board, staff, elected officials, and citizens of North Topsail Beach.

The goals and implementing actions will also assist Town officials in making long-range decisions in such areas as economic development, provision of community services and facilities, transportation planning, community preservation, environmental management, and CAMA regulatory requirements. This section of the plan includes specific implementing actions for each of the following areas of concern:

- Land Use Compatibility
- Public Access
- Infrastructure Carrying Capacity
- Natural Hazard Areas
- Water Quality
- Local Concerns

The responsibility for implementing the recommendations included in this plan belongs to the North Topsail Beach elected officials. The adoption of this plan is not the end, but rather the beginning of a continuous pragmatic process. Opportunity exists for the Town to provide positive direction to development as it continues to occur. How well this plan serves depends on the quality of the plan and how North Topsail Beach officials administer local land use ordinances and capital spending programs. Creating a plan, workable conditions, and capital spending programs is not overly difficult. The true test will come in putting the plan, ordinances, and programs into action on a day-to-day basis. Some of the actions stated in this plan may be implemented in months while others may require years to accomplish effectively. Planning is only as good as the commitment and abilities of the people responsible for implementing the plan. North Topsail Beach has been blessed with involved citizens, dedicated elected officials, and competent staff. It is expected that this practice will continue into future years.

Through implementation of this plan, the Town of North Topsail Beach will also address the issue of coastal resiliency and sustainability. The Town will work with the NC Resilient Coastal Communities Program which aims to facilitate a community-driven process for setting coastal resilience goals, assessing existing and needed local capacity, and identifying and prioritizing projects to enhance community resilience to coastal hazards. These efforts will be carried out through both the CAMA Land Use Plan and the current Hazard Mitigation Plan.

PUBLIC INPUT

A successful planning process must have comprehensive, inclusive, and constructive input from the public. The plan will serve the needs of North Topsail Beach's citizenry and should therefore, be written on their behalf. Throughout the planning process, a multitude of methods was used to solicit public input. The Town's Planning Board, made up of key community representatives and citizens, was tasked



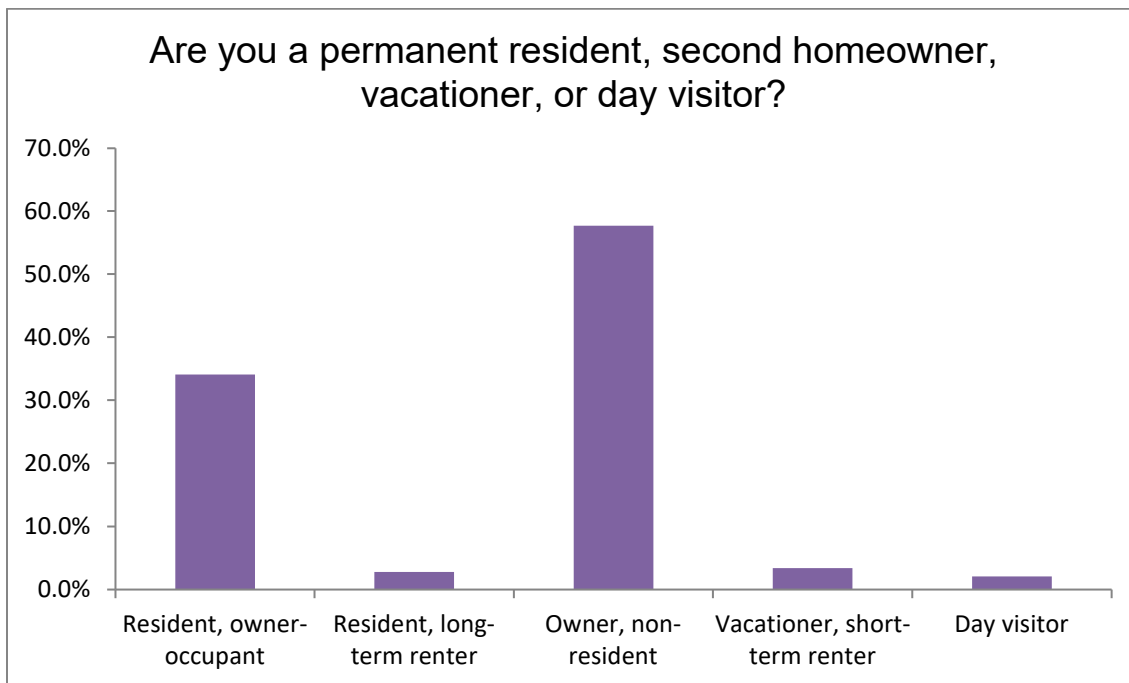
with steering the consultant throughout the process. To supplement input received from the Planning Board, a public input survey was distributed to all residents and property owners registered on the Town’s outreach network. Additionally, the survey was posted continuously on a dedicated project website and survey data from transient visitors were captured through the delivery of 1,000 flyers/handouts distributed among local businesses. Town-wide meetings were also used to gather citizen input. Survey results and information from the public meetings are summarized in this section. See Appendix C to view the community survey results in their entirety.

Project Website

At the outset of the project, a website dedicated to the preparation of the Comprehensive Land Use Plan was established (<http://www.ntbplan.com/>). All information concerning plan development was posted on the website. The website provided continuous access for the public to obtain information and provide input.

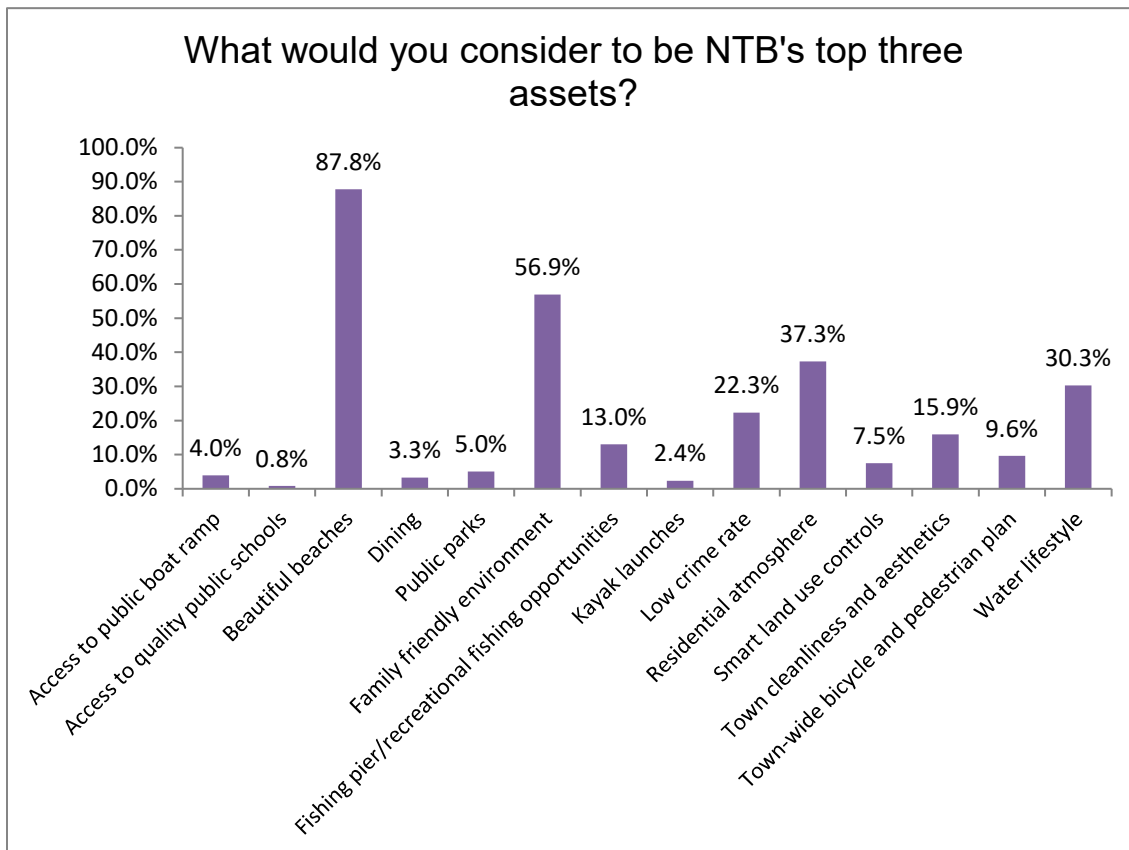
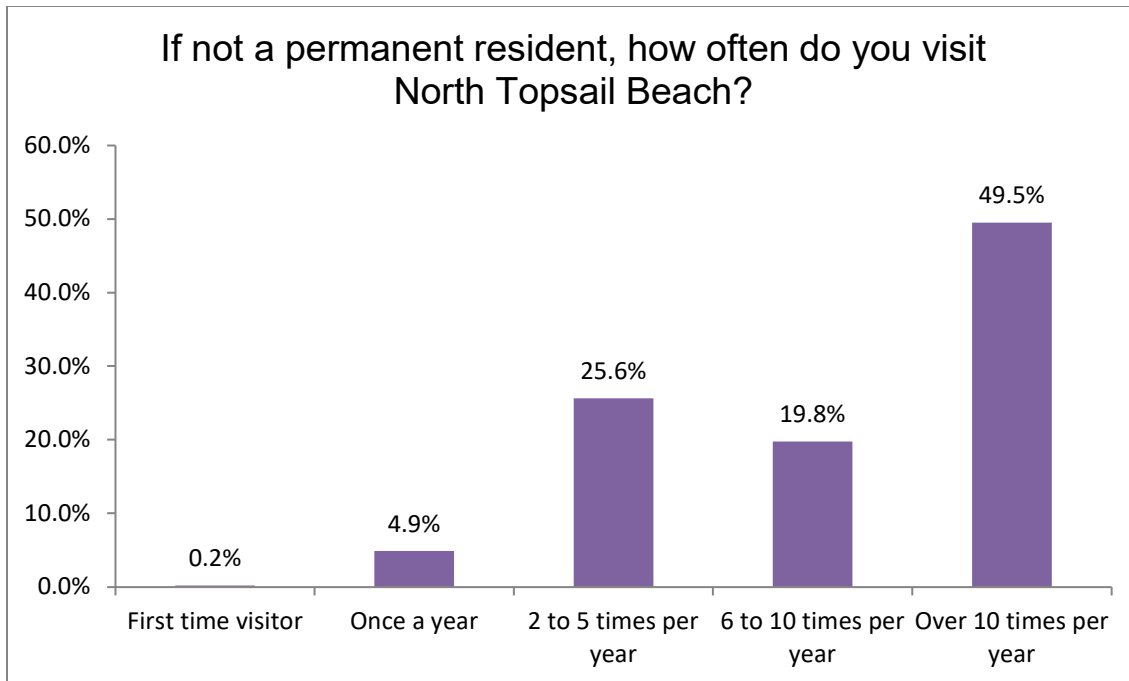
Community Survey

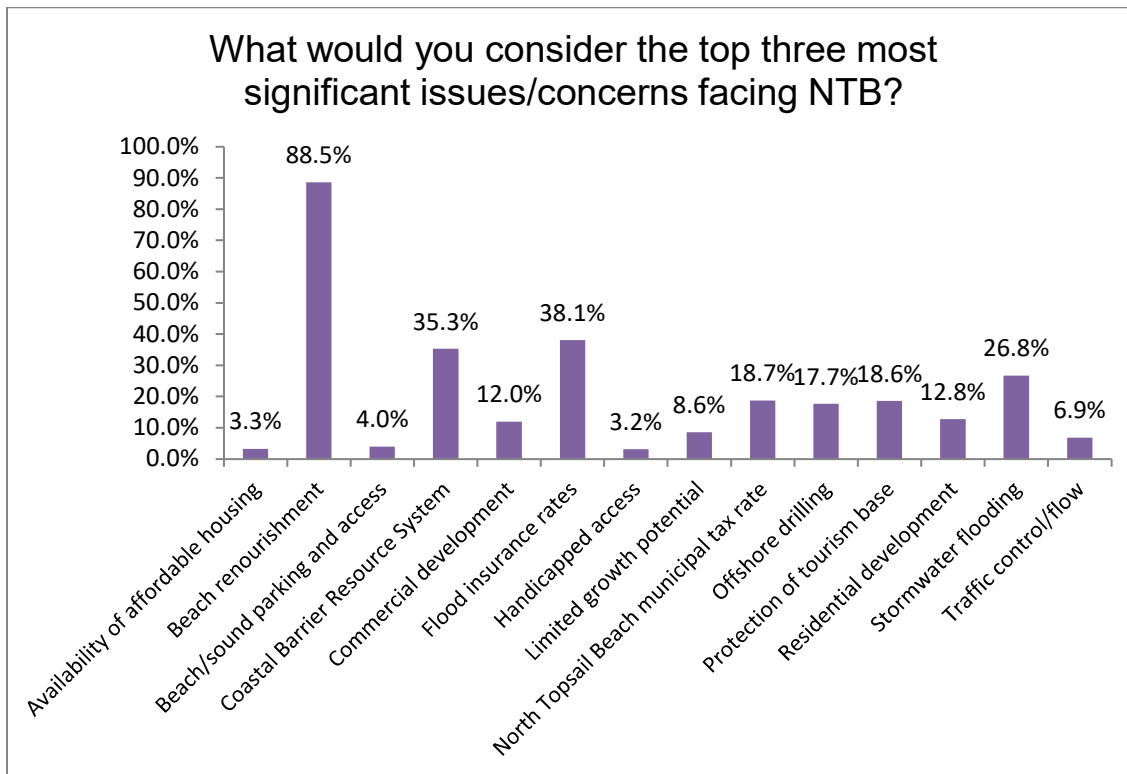
At the onset of the planning process, a community survey was created. The survey questions were drafted based upon stakeholder interviews conducted during project initiation. These interviews were conducted with various citizens, Town staff, and elected leaders. The survey was made available to residents online. The Planning Board members were instrumental in distributing flyers at various institutional and vendor locations throughout Town. From August 2018 to April 2019, 825 survey responses were collected (304, or 36.8%, were permanent residents). All input from citizens was provided to the Planning Board for review. The following summarizes the survey results:





SECTION 5. GOALS & IMPLEMENTING STRATEGIES





Town Meeting Results

In addition to the Planning Board input and outreach survey, a Town-wide public input meeting was conducted on February 16, 2019, to better understand the desires of residents. The meeting was advertised online, in the newspaper, and through posting of notices in public places. Approximately 30 people attended the meeting which focused on identification of future Town concerns/needs. The following provides a summary of the concerns/needs identified:

- Vegetation along coastal beaches; environmental/science based positive results
- Further information about the progress/actual implementation of the North End groin
- Bike lanes extended
 - More signage for drivers & bikers
 - Condition of existing lanes; potholes, sand, debris, too narrow
- Conservation-Protection
 - Marsh/wetlands/high ground
- Beach renourishment
 - Management
 - Height
 - Width
 - Monies
 - Timeline
- Maintain family atmosphere



SECTION 5. GOALS & IMPLEMENTING STRATEGIES

- Public parking
 - Parking in non-designated zones
 - Lack of enforcement from police (what are police instructed to do?)
- Sandbags or other reinforcement for houses (established) in dune where dune has been washed out in storm (i.e., Topsail Road)
- Cross walks/speed enforcement
 - Beach access sites
- Some commercial/food trucks; promenade
- Turtle environments – keep intact
- Protecting dunes; public access
- Playground in southern area
- Utilities
- No future parking lots, charge a reasonable fee for parking and encourage police enforcement of trash
- Make public notices, etc., easier to see and in a timely fashion
- More restaurants and specialty (non-souvenir) shops and paid parking

POLICIES REGARDING LAND USE AND DEVELOPMENT IN AEC'S

North Topsail Beach accepts state and federal law regarding land uses and development in AEC's (Areas of Environmental Concern), including all NCAC 7H standards. By reference, all applicable state and Federal regulations are incorporated into this document. No policies exceed the use standards and permitting requirements found in Subchapter 7H, State Guidelines for Areas of Environmental Concern. However, North Topsail Beach does not consider peat or phosphate mining's impact on natural resources to be relevant at this time within its planning jurisdiction.

The Areas of Environmental Concern and Fragile Areas within North Topsail Beach's planning jurisdiction include the following:

- Public trust areas
- 404 wetlands
- Inlet hazard area
- Ocean erodible area
- Outstanding resource waters (ORW)

For the issuance of CAMA permits within areas of environmental concern, the state's minimum acceptable use standards are defined by 15A NCAC 7H. A local unit of government must adopt policies which are, at a minimum, equal to and consistent with the state's minimum use standards.

The second area of land use plan application is that of establishing policies to guide the jurisdiction's local planning. This process may apply both within areas of environmental concern where CAMA regulations apply and in non-CAMA regulated areas of the Town's planning jurisdiction. Under North Carolina legislation, land use plans are not regulatory controls. Non-CAMA related recommendations



must be implemented with local land use ordinances such as a Unified Development Ordinance. If this plan recommends that the average residential density should be three dwelling units per acre within a particular area, then the density must be achieved through local regulatory controls.

The final area of application is that of “Consistency Review.” Proposals and applications for state and federal assistance, or requests for agency approval or projects, are normally reviewed against a jurisdiction’s land use plan to determine if the project is consistent with local policies. Inconsistencies of a project with local policies could serve as grounds for denial or revision of a project. For example, an individual or agency may request state or federal funding to construct a 30-unit assisted living housing project. If the proposed location of the project is within an area in which this land use plan states that the residential density should not exceed two dwelling units per acre, the project may be judged to be inconsistent with the local land use plan.

Note the following clarifications:

- No policy is subordinate to another.
- All management topics have equal status.
- The future land use map may show some areas in a developed category which may also include sensitive habitats or natural areas. Potential development should be designed/permitted to protect these areas through utilization of concepts such as specific in-field verification and mapping, on-site plans, and subdivision plats. Development/project approval should be based on project design which avoids substantial loss of important habitat/environmentally sensitive areas.

LAND USE MANAGEMENT TOPICS

Introduction

The purposes of the Coastal Resources Commission (CRC) management topics are to ensure that CAMA Land Use Plans support the goals of CAMA, define the CRC’s expectations for land use policies, and provide a basis for plan review and certification by the CRC. Each of the following management topics (Public Access, Land Use Compatibility, Infrastructure Carrying Capacity, Natural Hazard Areas, and Water Quality) include two components: a management goal and planning objectives. In addition to the management topics outlined in this section, plans may also include policies to address local areas of concern. All policies apply to the entire Town. Additionally, the survey results obtained through the property owner questionnaires were also taken into consideration. Most of the implementing actions are continuing activities. In most situations, specific timelines are not applicable. The policies and implementing actions frequently utilize the following words: should, continue, encourage, enhance, identify, implement, maintain, prevent, promote, protect, provide, strengthen, support, and work. The intent of these words is defined in Appendix D. Please note: Policies and Implementing Actions are numbered consecutively throughout this document with the letter “P” denoting a policy and the letter “I” denoting an implementing action. Throughout the policy and implementing action section of the plan, the word “Board” will refer to the Town of North Topsail Beach Board of Aldermen.



SECTION 5. GOALS & IMPLEMENTING STRATEGIES

Impact of CAMA Land Use Plan Policies on Management Topics

No negative impacts are anticipated by the implementation of the goals, objectives, and policies which are included in this plan. Note: It is intended that all policies are consistent with (do not exceed) applicable State and Federal requirements when State and Federal requirements apply. **If a policy exceeds State or Federal requirements, that fact will be noted.**

Public Access

Management Goal

Maximize public access to the beaches and the public trust waters of the coastal region.

Planning Objective

Policies that address access needs and opportunities, with strategies to develop public access and provision for all segments of the community, including persons with disabilities. Oceanfront communities shall establish access policies for beach areas targeted for nourishment.

Land Use Plan Requirements

The following are the Town's policies/implementing actions for waterfront access.

Policies:

- P.1 The Town supports Onslow County's economic development efforts and recreational-related developments that protect and preserve the natural environment while promoting the Town as a family vacation destination. The Town supports the private and public development of waterfront access through private funds, grant monies, and local investment.
- P.2 The Town supports providing shoreline access for persons with disabilities, and further supports the use of grant funding to retrofit existing beach access points in a manner that will address the issue of ADA compliance.
- P.3 The Town supports the frequency of shoreline access points as defined by 15A NCAC 7M, Section .0300, Shorefront Access Policies.
- P.4 The Town supports the development of estuarine and oceanfront access areas to ensure adequate shoreline access within all areas of the Town. Areas that have traditionally been used by the public or have been deemed unbuildable due to development criteria will be given special attention, such as the existing wildlife boat access.
- P.5 The Town supports the development of a Town-wide bicycle and pedestrian multi-modal system.
- P.6 The Town does not support the development of marinas or public boat ramp facilities within the Town's planning jurisdiction. The Town does support a "no net loss" policy with regards to existing boat access facilities. NOTE: This policy exceeds the minimum use standards.



- P.7 The Town supports efforts to increase awareness related to the location of Town-wide public beach access points through signage and information available at Town Hall as well as on the Town's website.

Implementing Actions:

- I.1 The Town will review and update the Town's existing shoreline access policy. This effort may involve the preparation of a Comprehensive Shoreline Access Plan. The Town will request Division of Coastal Management funding for the preparation of this plan. This effort will focus on establishing compliance with the US Army Corps of Engineers public access standards relating to funding associated with beach nourishment. ***Schedule: FY2020-2021; Funding Source: NC Division of Coastal Management, General Fund.***
- I.2 The Town will pursue funding, where practical and feasible, under the North Carolina CAMA Shoreline Access funding program to address new access points, as well as improvements noted in P.2 relating to ADA compliance. (15A NCAC 7M, Section .0300, Shorefront Access Policies). ***Schedule: Continuing Activity; Funding Source: NC Division of Coastal Management, General Fund.***
- I.3 The Town will pursue the private donation of land and/or easements that may be utilized for public beach access. The Town will consider revising the Town's subdivision regulations to require large subdivisions and/or large-scale multi-family developments to provide public access points in conjunction with the development of a potential project. ***Schedule: Continuing Activity; Funding Source: Private Donation, General Fund, NC Division of Coastal Management.***
- I.4 The Town will cooperate with state and federal agencies as well as private interests to secure estuarine access areas in order to ensure adequate shoreline access within all areas of the Town. This effort supports maintenance and continuity of the wildlife access boat ramp. ***Schedule: Continuing Activity; Funding Source: Private Donation, General Fund, NC Division of Coastal Management.***
- I.5 The Board of Aldermen will annually review beach access requirements defined for all funding programs and ensure that the Town is adequately addressing all program requirements relating to public access. If it is determined that there is a need related to public access, the Board will review all alternatives available to secure additional access sites. This review will involve requests for funding through the NCDCM Shoreline Access Program. ***Schedule: Review Annually; Funding Source: General Fund, NC Division of Coastal Management.***

Land Use Compatibility

Management Goal

Ensure that development and use of resources or preservation of land balance protection of natural resources and fragile areas with economic development, avoid risks to public health, safety, and welfare.



SECTION 5. GOALS & IMPLEMENTING STRATEGIES

Planning Objective

Polices that characterize future land use development patterns and establish mitigation criteria and concepts to minimize conflicts.

Land Use Plan Requirements

The following are the Town's policies/implementing actions for land use compatibility.

Policies - Residential:

- P.8 The Town discourages the re-zoning of existing residentially developed or zoned areas to a commercial land use classification in an effort to maintain the overall low density (see future land use classifications, page 4-13) residential character of the Town. Such re-zoning and amendments in classifications to the future land use map should be carefully balanced with a demonstrated need for such proposed development that will be the best overall land development policy for the Town.
- P.9 The Town supports future development reflecting the spectrum of housing needs ranging from single-family homes to multi-family development in the form of duplex and triplex housing constructed in accordance with the NC State Building Code to withstand a Category 3 hurricane. Although this policy reflects support for medium density development, the Town will not rezone any property to a density less than R-10 (10,000 square feet).
- P.10 The Town does not encourage the development of high-density multi-family housing complexes.
- P.11 The Town supports regulating growth to coincide with the provision of public facilities and services. This policy includes regulating development in a manner that will facilitate development in conjunction with available sewer capacity in an effort to minimize and ultimately eliminate the use of septic tank wastewater treatment systems throughout the Town's corporate limits.
- P.12 The Town supports vegetated buffers and/or landscaping along thoroughfares.
- P.13 The Town supports providing adequate conservation/open space buffers between areas designated for residential development as indicated on the future land use map and any adjacent non-residential land use, including commercial, utility, and office and institutional areas.
- P.14 The Town allows development within the defined inlet hazard areas, assuming the development is consistent with all local zoning and subdivision regulations, 15A NCAC 7H use standards, and the following use standards:
- (1) The only new structures allowed in inlet hazard areas shall be single-family structures.
 - (2) Established common-law and statutory public rights of access to the public trust lands and waters in inlet hazard areas shall not be eliminated or restricted. Development shall not encroach upon public accessways nor shall it limit the intended use of the accessways;



- (3) Shoreline stabilization structures shall be permitted in conjunction with NCDEQ permitting and policy standards;
 - (4) All other rules in this subchapter pertaining to development in the ocean hazard areas shall be applied to development within the inlet hazard areas;
 - (5) The following types of development shall be exempted from these inlet hazard area setback requirements:
 - parking areas with clay, packed sand, or similar surfaces;
 - beach accessways consistent with 15A NCAC 7H use standards;
 - temporary amusement stands; and
 - reconstruction of existing duplex residential structures deemed substantially damaged.
 - (6) In all cases, development shall only be permitted if it meets other applicable 15A NCAC 7H inlet hazard areas use standards; is landward of the vegetation line; and involves no significant alteration or removal of primary or frontal dunes or the dune vegetation.
NOTE: This policy exceeds the minimum use standards.
- P.15 The Town will continue to financially and politically support aggressive efforts to eliminate the presence of Coastal Barrier Resource System development constraints through the Town's municipal limits.
- P.16 The Town does not support the creation of new flag lots. Flag lots are, for the purposes of this plan, defined as follows: a large lot not meeting minimum frontage requirements and where access to the public road is by a narrow, private right-of-way or driveway.
- P.17 The Town will not support any commercial or residential development in a conservation classified area nor does it permit the rezoning of any lands designated as conservation district (CON-D).

Implementing Actions - Residential:

- I.6 All re-zoning and subdivision approvals will consider the future land use and land suitability maps and analyses which are included in this plan. During the development review process, all residential development must comply with the development densities outlined under the future land use section of this plan, as well as current zoning standards. If it is determined that a given lot is nonconforming based on the Town's currently adopted zoning code, then the property owners may secure a variance through the Board of Adjustment prior to securing a zoning compliance certificate approving the development of a given piece of property. **Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.**



SECTION 5. GOALS & IMPLEMENTING STRATEGIES

- I.7 The Town will permit residential development to occur in response to market needs provided that the following criteria are met:
- (1) Due respect is offered to all aspects of the environment, including the protection of all islands located throughout the Town's municipal limits. Development on these islands should not exceed a density of two units per acre.
 - (2) If deficient community facilities and services are identified, the Town should attempt to improve such to the point of adequately meeting demands. This policy does not include the development of water or sewer system infrastructure.
 - (3) Additional residential development should concurrently involve planning for improvements to community facilities and services if excess capacity does not exist within those facilities and services.
 - (4) Residential development is consistent with other Town policies and the land use map as contained in this plan update.

This implementing action will be enforced through the Town zoning and subdivision ordinances. ***Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.***

- I.8 The Town will review the zoning ordinance for non-residential sites to ensure adequate buffering and landscaping to separate residential and incompatible non-residential uses, and adequate regulation of off-site lighting, hours of operation, and vehicular access and parking locations. ***Schedule: FY2020-2021 to FY2021-2022; Funding Source: General Fund, Staff Time.***
- I.9 The Town will regulate through its zoning and subdivision ordinance the development of conflicting land uses in areas where non-residential development is permitted. ***Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.***
- I.10 The Town will consider requiring large scale multi-family developments and planned unit developments (PUDs) to conduct traffic impact and adequate parking studies to determine the potential problems that may result from a respective development. The results of these studies will be utilized to make decisions regarding allowable density for a development, as well as site layout and curb cut locations. ***Schedule: FY2020-2021 to FY2021-2022; Funding Source: General Fund, Staff Time.***
- I.11 The Town's planning and inspections department will work with local realtors and developers to inform homebuyers of the potential issues relating to homeownership within the CBRA and defined flood hazard areas, including ocean hazard and inlet hazard areas. This effort will be aimed at educating property owners about issues unique to North Topsail Beach such as redevelopment following a tropical storm event or the impacts of various flood zones. These efforts are carried out through the Town's Community Rating System program associated with the National Flood Insurance Program. ***Schedule: Continuing Activity; Funding Source: General Fund, Staff Time, NC Department of Public Safety.***

SECTION 5. GOALS & IMPLEMENTING STRATEGIES



- I.12 The Town will continue to work with legislators and lobbyists in efforts to eliminate CBRA zones from North Topsail Beach's planning jurisdiction. **Schedule: FY2020-2021; Funding Source: General Fund, Staff Time.**

Policies - Commercial:

- P.18 The Town supports commercial development that is specifically consistent with the Town's future land use map. This may require revisions to the Town's existing zoning ordinance.
- P.19 The Town opposes the establishment of any industrial operations within its planning jurisdiction.
- P.20 The Town opposes the establishment of private or public solid waste collection sites within the Town's planning jurisdiction.
- P.21 Commercial operations which are noxious by reason of the emission of smoke, dust, glare, noise, odor, and vibrations should not be located in the Town.
- P.22 The Town recognizes the need for commercial development that will support visitors during peak summer months; however, the Town only supports modest new commercial growth in the form of convenience retail facilities and restaurants. This development should only take place in portions of Town defined for commercial development on the future land use map.

Implementing Actions - Commercial:

- I.13 The Town will enforce its existing zoning regulations and rely on state permitting agencies to ensure that all commercial development within or adjacent to Areas of Environmental Concern is carried out properly. **Schedule: Continuing Activity; Funding Source: NC Department of Environmental Quality, NC Division of Coastal Management, General Fund, Staff Time.**
- I.14 The Town will review its zoning and subdivision ordinances to ensure compliance with policies P.18-P.22. **Schedule: Review Annually; Funding Source: General Fund, Staff Time.**

Policies - Conservation:

- P.23 Except as otherwise permitted in this plan, residential, commercial, and office/institutional development will not be supported in natural heritage areas, conservation areas, or coastal wetlands. Residential and commercial development which meets 15A NCAC 7H use standards will be allowed in estuarine shoreline, estuarine water, and public trust areas. In all other areas, development will be allowed that is consistent with applicable local, state, and federal regulations.
- P.24 The Town aims to maintain its character as an eco-friendly low to moderate density residential community. Commercial development should be permitted only in areas defined for commercial use on the future land use map established in this document.



SECTION 5. GOALS & IMPLEMENTING STRATEGIES

- P.25 The Town, in an effort to protect the eco-friendly environment that the Town has established over the years, may aim to secure lots through either acquisition, grant-funded purchase, or donation. These lots may be secured as open space easements in perpetuity. Special attention will be given to acquire properties that have been deemed unbuildable due to either state or local development regulations.
- P.26 It is the policy of the Town to require the construction of dune walkover platforms at all Town-maintained public beach access points. The Town will seek public access grant funding for the development of these access points. The Town will encourage the development of dune crossovers on private property in the future. NOTE: This policy exceeds the minimum use standards.
- P.27 The Town supports protection of all remaining maritime forest areas. The Town will not support the rezoning of any parcel currently designated as conservation on the future land use map established within this document. Additionally, it is the Town's intent, where feasible, to rezone maritime forest areas to the CON-D zoning district.
- P.28 The Town supports the establishment of passive recreational uses in areas designated as conservation on the Future Land Use Map and/or CON-D on the Town's officially adopted zoning map. All uses must comply with all federal, state, and local rules and regulations.

Implementing Actions - Conservation:

- I.15 In portions of Town where sand and erosion has resulted in the accretion of upland areas, the Town will account for this increased land area through regulations outlined within the Town's Zoning Ordinance. **Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.**
- I.16 Protect the Town's environmentally sensitive areas from inappropriate, unplanned, or poorly planned development through the following:
- (1) By implementing the Town Zoning Ordinance, limit land uses in the vicinity of historic sites, natural heritage areas, and designated conservation areas to compatible land uses. **Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.**
 - (2) The Town will continue to work with NCDEQ through the implementation and enforcement of coastal development regulations in an effort to protect environmentally sensitive areas throughout the Town's planning jurisdiction. **Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.**
- I.17 The Town will establish a land trust that will serve to secure undeveloped land through either acquisition or donation as open space easements in perpetuity. This effort will help realize the Town's vision to maintain an eco-friendly environment. The Town will work with the Conservation Trust of North Carolina throughout this effort to ensure that all land secured is properly protected. **Schedule: FY2020-2021; Funding Source: General Fund, Staff Time.**



Policies - Stormwater Control:

- P.29 The Town supports reducing soil erosion, runoff, and sedimentation to minimize the adverse effects on surface and subsurface water quality throughout the estuarine ecosystem.
- P.30 The Town supports the enforcement of all controls and regulations, specifically design standards, tie-down requirements, construction and installation standards, elevation requirements, flood-proofing, CAMA regulations, and FEMA regulations, deemed necessary by the Board of Aldermen to mitigate the risks of lives and property caused by severe storms and hurricanes.
- P.31 The Town supports and will continue to enforce the NCDEQ Coastal Stormwater Rules.
- P.32 The Town supports the enforcement of maximum lot coverage requirements, as well as the enforcement of on-site stormwater retention requirements.
- P.33 The Town supports the limiting of impervious surface associated with development, redevelopment, and renovation/expansion on private property.
- P.34 The Town recognizes the State's sovereign North Carolina gained ownership of its submerged lands by taking them from King George III. In 1965, the State enacted legislation (NCGS 113-205 and NCGS 113-206) requiring registration of private claims to lands beneath navigable waters in 25 coastal counties. There are 18 submerged land claims in Onslow County. Therefore, the Town prohibits any area below the normal high-water line to be included in the calculation for impervious percentage for development or required square footage for subdividing, to include exceptions.

Implementing Actions - Stormwater Control:

- I.18 The Town will continue to monitor revisions to the Coastal Stormwater Rule Policy, and may amend Town ordinances to either meet or exceed development requirements established through these state guidelines. ***Schedule: Review Annually; Funding Source: NC Department of Environmental Quality, NC Division of Coastal Management, General Fund.***
- I.19 The Town will review its stormwater control policies and include updates regarding regulations for water detention and/or retention facilities in new developments as new state and federal policy requires. This will include a consideration of reducing the Town's current maximum lot coverage requirements and policy relating to on-site stormwater retention/detention. ***Schedule: FY2020-2021; Funding Source: NC Department of Environmental Quality; General Fund; Staff Time.***
- I.20 The Town supports ongoing planning and capital improvement efforts to address the drainage problems associated with flooding. ***Schedule: FY2020-2021; Funding Source: General Fund, Staff Time.***



SECTION 5. GOALS & IMPLEMENTING STRATEGIES

- I.21 The Town will continue to seek grant funding from state and federal agencies when available for capital improvement projects that will aid the Town in alleviating flooding and storm drainage problems. **Schedule: Continuing Activity; Funding Source: NC Department of Environmental Quality, NC Department of Transportation; NC Division of Coastal Management, NC Department of Public Safety, General Fund, Staff Time.**
- I.22 The Town enforces and supports the “per-parcel” impervious surface caps for all forms of development discussed under P.34:
- (1) An overall impervious surface cap of 30%.
 - (2) An overall impervious surface cap of 25% for development falling within 575’ of a defined Outstanding Resource Water (ORW). **Schedule: FY2020-2021; Funding Source: General Fund, Staff Time.**
- I.23 All impervious surface calculations relating to development proposals shall be calculated above the mean high-water line (MHWL). Areas below MHWL shall not be included. **Schedule: FY2020-2021; Funding Source: General Fund, Staff Time.**

Infrastructure Carrying Capacity

Management Goal

Ensure that public infrastructure systems are sized, located, and managed so the quality and productivity of AECs and other fragile areas are protected or restored.

Planning Objective

Policies that establish service criteria and ensure improvements minimize impacts to AECs and other fragile areas.

Land Use Plan Requirements

The following are the Town’s policies for infrastructure carrying capacity.

Policies:

- P.35 The Town supports providing adequate community services and facilities which meet the needs of the Town’s citizens and businesses.
- P.36 The Town supports providing sufficient water and sewer service to promote continued growth and to alleviate public health problems created by the absence of public water and sewer services in the Town.
- P.37 The Town supports the extension of water services from existing systems and encourages the use of central systems for new developments whether residential, commercial, or office/institutional in nature.

SECTION 5. GOALS & IMPLEMENTING STRATEGIES



- P.38 The Town opposes the installation of on-site wastewater treatment systems throughout the Town's corporate limits. Additionally, the Town strongly encourages that existing homes utilizing septic systems and/or on-site package plants tie into Pluris central sewer service as additional capacity becomes available.
- P.39 The Town supports the provision of public recreational facilities and areas and will pursue grant funds and private donations for public open space and recreation facilities.
- P.40 The Town supports all efforts of ONWASA and Pluris under terms outlined within current service agreements established between the Town and each respective utility operator.
- P.41 The Town opposes any NCDOT or municipal street or road projects that will result in blocking both access points into Town at any given time.
- P.42 The Town supports limited access from development along the Town's major thoroughfares to provide safe ingress and egress from residential and non-residential development.
- P.43 The Town supports maintaining an effective signage and addressing system for all right-of-ways including private drives and access streets. All addressing shall be coordinated with the Onslow County Emergency Management Department.
- P.44 The Town supports state and federal funding for maintenance/dredging of the Intracoastal Waterway, as well as the New River Inlet. Town residents and visitors rely on these resources for recreational and navigational purposes. Furthermore, the Town supports efforts to realign the New River Inlet and construct some form of hardened stabilization in an effort to minimize impacts on development within northern portions of the Town's corporate limits.
- P.45 The Town supports the development of a Town-wide bicycle/pedestrian path. Additionally, the Town supports establishing a schedule aimed at ensuring that the Town's off-street multi-modal transportation system is properly maintained.
- P.46 The Town opposes access to oceanfront and estuarine public access areas by any privately-owned automobile or all-terrain vehicle.
- P.47 The Town supports increasing the speed limit signage located throughout its corporate limits.
- P.48 All bridges to access islands or cross wetlands within the municipal limits of North Topsail Beach shall adhere to NCDOT standards.

Implementing Actions:

- I.24 The Town will amend the future land use map, when needed, to reflect water and sewer upgrade and/or extension projects as they are planned. ***Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.***



SECTION 5. GOALS & IMPLEMENTING STRATEGIES

- I.25 The Town will consult the future land use map when considering new public facilities and private development. **Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.**
- I.26 The Town will rely on its existing land use and development ordinances to regulate development and may amend or modify regulations to encourage or require the provision of central water service to lots or parcels proposed in new developments. **Schedule: Continuing Activity.**
- I.27 The Town will rely on the NC Department of Environmental Quality and the Onslow County Department of Environmental Health to oversee the proper operation, management, and maintenance of all on-site wastewater treatment facilities within the Town. Although the Town opposes on-site wastewater treatment systems, the Town will continue to rely on the County Health Department to permit and monitor the operation of all existing systems. **Schedule: Continuing Activity; Funding Source: NC Department of Environmental Quality, General Fund, Staff Time.**
- I.28 The Town will continue to monitor the efforts of Pluris, LLC, with respect to increasing sewer capacity. If it is determined that proper steps are not being taken to address concerns relating to capacity, the Town will take all steps necessary to assure that Pluris, LLC, abides by the current service agreement that has been adopted by the Town. **Schedule: Annually; Funding Source: Pluris, LLC, General Fund, Staff Time.**
- I.29 The Town will continue to provide sufficient emergency management personnel and facilities to adequately serve the projected off season and peak seasonal population growth. **Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.**
- I.30 The Town will coordinate the development of recreational facilities with all applicable property owners' associations in order to maximize the potential quality, access, and use of these facilities. **Schedule: Continuing Activity; Funding Source: General Fund, Staff Time, Applicable POAs.**
- I.31 The Town will review and update its subdivision ordinance to ensure compliance with policies P.42 through P.43. **Schedule: FY2020-2010; Funding Source: General Fund, Staff Time.**
- I.32 The Town will continue to consider the dedication of all street right-of-ways for Town maintenance. Dedication of all existing and proposed streets will be determined on a case-by-case basis, and will be determined based on whether the respective street right-of-way meets the design specifications of the Town and NCDOT if applicable. **Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.**
- I.33 The Town will continue to seek grant funding through the NCDOT Enhancement program, as well as other grant programs that address the installation of pedestrian and bicycle trail systems. **Schedule: Review Annually; Funding Source: NC Department of Transportation, General Fund, Staff Time.**
- I.34 The Town's planning staff will work with the police department to identify where deficiencies exist with respect to speed limit signage. Subsequent to identifying these deficiencies, the



planning department will phase in all new signage as required. **Schedule: FY2020-2021; Funding Source: General Fund, Staff Time.**

Natural Hazard Areas

Management Goal

Conserve and maintain barrier dunes, beaches, floodplains, and other coastal features for their natural storm protection functions and their natural resources giving recognition to public health, safety, and welfare issues.

Planning Objective

Policies that establish mitigation and adaptation concepts and criteria for development and redevelopment, including public facilities, and that minimize threats to life, property, and natural resources resulting from erosion, high winds, storm surge, flooding, or other natural hazards.

Land Use Plan Requirements

The following are the Town's policies/implementing actions for natural hazard areas. All policies are continuing activities.

Policies:

- P.49 The Town supports the US Army Corps of Engineers policy on dredging the New River Inlet; however, the Town would like to work with the Corps to establish a dredging process that will provide sand to the Town. This will help the Town in their efforts to establish a long-term solution to beach nourishment.
- P.50 The Town supports the use and installation of legal alternative shoreline stabilization structures.
- P.51 The Town supports the US Army Corps of Engineers' regulations and the applicable guidelines of the Coastal Area Management Act and the use of local land use ordinances to regulate development within or immediately adjacent to freshwater swamps, marshes, coastal wetlands, and 404 wetlands.
- P.52 The Town supports relocation of structures endangered by erosion, if the relocated structure will be in compliance with all applicable local, state, and federal policies and regulations including the Town's zoning and subdivision ordinances. Relocation of structures should comply with density standards outlined within the future land use map section of this plan.
- P.53 The Town will continue to explore options regarding shoreline stabilization and maintenance in an effort to address the potential impacts of sea level rise. Additionally, the Town supports cooperation with local, state, and federal efforts to inform the public of the anticipated effects of sea level rise and adopt policies accordingly.



SECTION 5. GOALS & IMPLEMENTING STRATEGIES

- P.54 The Town supports hazard mitigation planning. Hazard mitigation policies have been included as Appendix E to this plan and are incorporated herein by reference.
- P.55 The Town supports the land use densities that are specified on page 4-13 of this plan. Through enforcement of the zoning ordinance, these densities will minimize damage from natural hazards and support the hazard mitigation plan.
- P.56 The Town recognizes the significance of protecting the primary dune line along oceanfront portions of the Town's planning jurisdiction. The Town supports continued efforts to protect these dunes through a proactive dune stabilization and protection program.
- P.57 The Town supports the implementation of the Onslow County Multi-Jurisdictional Hazard Mitigation Plan.

Implementing Actions:

- I.35 The Town will continue to enforce FEMA, NFIP, and local floodplain regulations within all special flood hazard areas within its jurisdiction. ***Schedule: Continuing Activity; Funding Source: NC Department of Public Safety, General Fund, Staff Time.***
- I.36 The Town will continue to support the US Army Corps of Engineers in their effort to protect land designated as "waters of the United States." Identification of these lands require a site-by-site determination and may include tributaries, lakes, rivers, streams, creeks, and other more minor water features. ***Schedule: Continuing Activity; Funding Source: US Army Corp of Engineers, General Fund, Staff Time.***
- I.37 In the event of a natural disaster, the Town permits reconstruction of previously developed parcels, provided all local, state, and federal policies, regulations, and ordinances are complied with. Reconstruction, including infrastructure, should be designed to withstand natural hazards. ***Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.***
- I.38 The Town will enforce the density controls in the zoning ordinance and subdivision ordinance in potential reconstruction areas to control growth intensity. Special attention will be given to portions of Town that fall within the CAMA defined inlet hazard areas. ***Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.***
- I.39 In response to possible sea level rise, the Town will review all local building and land use related ordinances and consider establishing setback standards, density controls, bulkhead restrictions, buffer vegetation protection requirements, and building designs which will facilitate the movement of structures. ***Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.***
- I.40 The Town will utilize the future land use maps to control development. These maps are coordinated with the land suitability map and existing infrastructure maps. ***Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.***



- I.41 The Town will continue to seek funding through the US Army Corps of Engineers Section 933 Beach Renourishment Program in an effort to establish a comprehensive solution to maintaining a stable shoreline that will help mitigate adverse impacts on the built environment. **Schedule: Review Annually; Funding Source: US Army Corp of Engineer, General Fund, Staff Time.**

Water Quality

Management Goal

Maintain, protect, and, where possible, enhance water quality in all coastal wetlands, rivers, streams, and estuaries.

Planning Objective

Policies that establish strategies and practices to prevent or control nonpoint source pollution and maintain or improve water quality.

Land Use Plan Requirements

The following provides the Town's policies/implementing actions on water quality.

Policies:

- P.58 The Town supports the guidelines of the Coastal Area Management Act and the efforts and programs 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 of the Town.
- P.59 The Town supports conserving subsurface groundwater resources throughout the Castle Hayne Aquifer, which serves as the source of drinking water for the citizens of North Topsail Beach.
- P.60 The Town supports commercial and recreational fishing in its waters and will cooperate with other local governments and state and federal agencies to control pollution of these waters to improve conditions so that commercial and recreational fisheries will not be depleted. It also supports the preservation of primary nursery and habitat areas.
- P.61 The Town opposes the disposal of any toxic wastes, as defined by the US Environmental Protection Agency's Listing of Hazardous Substances and Priority Pollutants (developed pursuant to the Clean Water Act of 1977), within its planning jurisdiction.
- P.62 The Town recognizes the value of water quality maintenance to the protection of fragile areas and to the provision of clean water for recreational purposes and supports the control of stormwater runoff to aid in the preservation of water quality. The Town will support existing state regulations relating to stormwater runoff resulting from development (Stormwater Disposal Policy 15 NCAC 2H.001-.1003). Additionally, the Town supports all efforts of the Onslow County NPDES Phase II stormwater management program.



SECTION 5. GOALS & IMPLEMENTING STRATEGIES

- P.63 The Town supports the policy that all State of North Carolina and Town of North Topsail Beach projects should be designed to limit to the maximum extent practicable stormwater runoff into coastal waters.
- P.64 The Town supports implementation of the Cape Fear and White Oak River Basin Water Quality Management Plans.
- P.65 The Town supports protection of those waters known to be of the highest quality or supporting biological communities of special importance, including the High Quality (HQW) and Outstanding Resource (ORW) Waters adjacent to the Town's corporate limits.
- P.66 The Town supports management of problem pollutants, particularly those that affect biologically-active oxygen demand and release of biologically active nutrients, in order to correct existing water quality problems and to ensure protection of those waters currently supporting their uses.
- P.67 The Town opposes the installation of package treatment plants as an alternative method for wastewater treatment throughout the Town's corporate limits. The Town will continue to work with Pluris to increase sewer capacity and ultimately expand central sewer service throughout the Town's planning jurisdiction.
- P.68 The Town opposes the installation of private on-site wastewater treatment systems. If a private property owner secures a septic permit from the Onslow County Health Department, the Town will issue a zoning compliance certificate until additional sewer capacity becomes available.
- P.69 The Town supports the following actions by the General Assembly and the Governor:
- Sufficient state funding should be appropriated to initiate a program of incentives grants to address pollution of our rivers from both point sources and nonpoint sources.
 - An ongoing source of state funding should be developed to provide continuous support for an incentive grant program.
 - The decision-making process for the award of incentives grants should involve river basin organizations representing local governments and other interest groups in the review of all applications for state funding.
 - The ongoing effort of the Department of Environmental Quality to develop administrative rules implementing the Cape Fear River Basin Management Strategy should continue to involve local government officials in the development, review, and refinement of the proposal.
- P.70 The Town opposes the long-term mooring of vessels and/or the mooring of derelict vessels within waters falling within the Town's corporate limits that are not associated with the Intracoastal Waterway.



- P.71 The Town supports the following goals of the NC Coastal Habitat Protection Program (CHPP):
- Document the ecological role and function of aquatic habitats for coastal fisheries.
 - Provide status and trends information on the quality and quantity of coastal fish habitat.
 - Describe and document threats to coastal fish habitat, including threats from both human activities and natural events.
 - Describe the current rules concerning each habitat.
 - Identify management needs.
 - Develop options for management action using the above information.

Implementing Actions:

- I.42 The Town will comply with CAMA and NC Department of Environmental Quality stormwater runoff regulations, and coordinate local development activities involving chemical storage or underground and above ground storage tank installation/abandonment with the Town Emergency Management personnel and the Groundwater Section of the North Carolina Department of Environmental Quality. The Town, in conjunction with ONWASA, will plan for an adequate long-range water supply. In the planning process, the Town will cooperate with all regional counties to protect water resources. ***Schedule: Continuing Activity; Funding Source: NC Department of Environmental Quality; NC Division of Coastal Management, General Fund, Staff Time.***
- I.43 The Town will enforce its zoning and subdivision regulations to aid in protecting sensitive shoreline areas. It will rely upon state and federal agencies to promote and protect the waters of the Cape Fear and White Oak River Basins, as well as other primary nursery areas and habitat areas adjacent to the Town. ***Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.***
- I.44 The Town will rely on the technical requirements and state program approval for underground storage tanks (40 CFR, Parts 280 and 281), and any subsequent state regulations concerning underground and above ground storage tanks adopted during the planning period (see policy P.66 for Town policy regarding USTs). ***Schedule: Continuing Activity; Funding Source: NC Department of Environmental Quality, General Fund, Staff Time.***
- I.45 The Town will continuously enforce, through the development and zoning permit process, all current regulations of the NC State Building Code and North Carolina Division of Health and Human Services relating to building construction and septic tank replacement in areas where central sewer service is not currently available. ***Schedule: Continuing Activity; Funding Source: NC Division of Health and Human Services, General Fund, Staff Time.***



SECTION 5. GOALS & IMPLEMENTING STRATEGIES

- I.46 The Town will implement the following actions through local ordinances to improve water quality (NOTE - these actions are especially significant in areas adjacent to estuarine waters):
- Minimize impervious cover in site.
 - Limit erosion during construction through establishment of an erosion and sedimentation control ordinance.
 - Maintain coastal growth measures.
 - Restoration of impaired waters (through cooperation with state programs).
 - Reduction of nutrients in the Town waters through stormwater management concepts. **Schedule: Review local ordinances annually; Funding Source: General Fund, Staff Time.**
- I.47 Preservation of wetlands is important to the protection/improvement of water quality in the Town. The following will be implemented:
- Coordinate all development review with the appropriate office of the US Army Corps of Engineers and the Soil Conservation Service (if applicable). **Schedule: Continuing Activity.**
 - Require that wetland areas be surveyed and delineated on all preliminary and final subdivision plats and development plans. **Schedule: Continuing Activity.**
 - Encourage cluster development in order to protect sensitive natural areas within high density housing developments. **Schedule: FY2020-2021**
 - Develop conservation practices that preserve coastal wetlands. **Schedule: FY2021-2022**
Funding Source: NC Department of Environmental Quality, US Army Corps of Engineers, General Fund, Staff Time.

Local Areas of Concern

Management Goal

Integrate local concerns with the overall goals of CAMA in the context of land use planning.

Planning Objective

Policies which identify and address local concerns and issues, such as cultural and historic areas, scenic areas, economic development, or general health and human services needs.

Land Use Plan Requirements

The following provides the Town's policies/implementing actions on local areas of concern. All policies are continuing activities.



Policies - Cultural, Historic, and Scenic Areas:

- P.72 The Town supports protection of the Town's remaining maritime forest areas.
- P.73 The Town supports the protection of the sea turtle habitats located throughout oceanfront portions of the Town's corporate limits.
- P.74 The Town supports the efforts of the citizens and property owners of the Ocean City area to seek state and/or national recognition of the district's historical significance.
- P.75 The Town supports efforts of the Local Advisory Committee for Permuda Island. The purpose of the Advisory Committee will be to work with The Nature Conservancy.

Implementing Actions - Cultural, Historic, and Scenic Areas:

- I.48 The Town will guide development to protect the maritime forest where feasible through enforcement of regulations associated with the Coastal Forest Overlay Zoning District (CFOD). **Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.**
- I.49 The Town will enforce local regulations and work with federal agencies to assist in protecting sea turtle nesting grounds between the months of May and October. This proposed ordinance will involve a series of fines for individuals found in violation of the ordinance. This program will require involvement and assistance from the Town's permanent and seasonal residents. **Schedule: Continuing Activity; Funding Source: NC Department of Environmental Quality, NC Division of Coastal Management, NC Department of Public Safety, General Fund, Staff Time.**
- I.50 The Town will provide support, when feasible and practical, to Ocean City residents and property owners involving their efforts to establish historical recognition of the district. **Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.**

Policies - Economic Development:

- P.76 Tourism is important to the Town and will be supported in an effort to promote North Topsail Beach as a family vacation destination.
- P.77 The Town will encourage both residential and commercial development, as outlined on the future land use map, while aiming to protect the Town's natural resources and preserve its environmentally friendly atmosphere.
- P.78 The Town will encourage moderate commercial development in areas with existing infrastructure that does not infringe on existing or planned residential areas.
- P.79 The Town supports the extension of sewer services from existing systems and encourages the use of central sewer systems for new developments whether residential or non-residential in nature.



SECTION 5. GOALS & IMPLEMENTING STRATEGIES

Implementing Actions - Economic Development:

- I.51 The Town will continue to support the activities of the North Carolina Division of Travel and Tourism, specifically, the monitoring of tourism-related industry, efforts to promote tourism-related commercial activity, and efforts to enhance and provide shoreline access resources. ***Schedule: Continuing Activity; Funding Source: NC Division of Travel and Tourism, Onslow County Economic Development, General Fund, Staff Time.***
- I.52 The Town will support projects that will increase public access to shoreline areas through continued monitoring of areas where new public access points may be available (refer to public access policies). ***Schedule: Continuing Activity; Funding Source: NC Division of Coastal Management, General Fund, Staff Time.***

Policies - General Health and Human Services Needs:

- P.80 The Town supports the continued public provision of solid waste disposal, law enforcement, and educational services to all citizens of the Town. Additionally, the Town supports the establishment of a curbside recycling service.
- P.81 The Town supports a coordinated intergovernmental approach to emergency notification relating to natural and manmade disaster events. These efforts shall also involve notification of events and issues important to the community at-large.
- P.82 In an effort to improve health conditions, the Town supports the following water and sewer policies:
- The Town supports the extension of central water service into all areas of the Town shown on the future land use map as suitable for development, including the construction of lines to and through conservation areas to serve development which meets all applicable state and federal regulations.
 - The Town is aware that inappropriate land uses near well fields increase the possibility of well contamination. Land uses near groundwater sources are regulated by the North Carolina Department of Environmental Quality through NCAC Subchapter 2L and Subchapter 2C. The Town recognizes the importance of protecting potable water supplies, and therefore supports the enforcement of these regulations.
 - The Town supports all efforts to secure available state and federal funding for the construction and/or expansion of public and private water/sewer systems.
 - The Town supports the construction of water systems with adequate line sizes to ensure adequate water pressure and fire protection.
 - The Town opposes the establishment of package treatment plants within the Town's corporate limits (see infrastructure carrying capacity policies).



- P.83 The Town supports the establishment of a tree planting program. This program shall be established as a volunteer program involving volunteer and financial contributions from Town citizens.
- P.84 The Town supports the continued development of a Town-wide multi-use path aimed at providing alternate modes of transportation.

Implementing Actions - General Health and Human Services Needs:

- I.53 Floodplain regulation is a concern in the Town. To accomplish protection of public health and service needs, the Town will:
- Continue to enforce the flood hazard reduction provisions of the Town Land Development Ordinances.
 - Prohibit the installation of underground and above ground storage tanks in the 100-year floodplain.
 - Zone for open space, recreational, low to moderate density residential, or other low intensity uses within the floodplain. **Schedule: Continuing Activities; Funding Source: NC Department of Public Safety, FEMA, General Fund, Staff Time.**
- I.54 To effectively manage the Town's investment in existing and proposed community facilities and services, the Town needs to develop a capital improvements plan with emphasis placed on services and facilities which affect growth and development. This effort should especially focus on dealing with the effects of seasonal population fluctuations. **Schedule: FY2020-2021; Funding Source: General Fund, Staff Time.**
- I.55 The Town will provide sufficient emergency services to all residents. The Town will implement the following:
- Require that all necessary infrastructure firefighting capability/capacity be provided in new subdivisions and developments.
 - Continue to maintain an effective signage and addressing system for all streets, roads, and highways.
 - Continue to support the use of the CodeRED system through Onslow County Emergency Management for community-wide communication. **Schedule: Continuing Activities; Funding Source: Onslow County Emergency Management, General Fund, Staff Time.**



SECTION 5. GOALS & IMPLEMENTING STRATEGIES

Implementing Actions - Funding Options:

- I.56 The Town will continue to support state and federal programs that are deemed necessary, cost-effective, and within the administrative and fiscal capabilities of the Town. ***Schedule: Continuing Activity; Funding Source: NC Department of Commerce, Onslow County Social Services, General Fund, Staff Time.*** These programs include:
- Community Development Block Grant Program
 - Area Agency on Aging
 - Emergency Medical Services
 - Coastal Area Management Act, including shoreline access funds
 - Small Business Association
 - Economic Development Administration Funds
 - Federal Emergency Management Program
 - MEDICAID
 - Crisis Intervention
 - US Army Corps of Engineers Section 933 Program
 - US Department of Defense, Community Development Program
- I.57 The Town will selectively support state and federal programs related to the Town. The Town, through its boards and committees, will monitor state and federal programs and regulations. It will use opportunities as they are presented to voice support for or to disagree with programs and regulations that are proposed by state and federal agencies. ***Schedule: Continuing Activity; Funding Source: General Fund, Staff Time.***
- I.58 The Town officials will continue to work with the Army Corps of Engineers, Onslow County, and any other state and federal agencies to ensure continued dredging and maintenance of channels and rivers as needed to keep these facilities open to navigation. These efforts shall comply with applicable state and federal regulations. Providing borrow or spoil areas and provision of easements for work will be determined on case-by-case basis. The Town encourages spoil material being placed on those areas where beach renourishment efforts are necessary. Channel maintenance has major economic significance and is worthy of state and federal funding. ***Schedule: Continuing Activity; Funding Source: US Army Corps of Engineers, NC Department of Environmental Quality, General Fund, Staff Time.***



SECTION 6. TOOLS FOR MANAGING DEVELOPMENT

INTRODUCTION

It is intended that this document be an integral part of the North Topsail Beach decision-making process concerning future land use. This document, including all guidance, policies/implementing actions, and the future land use map, should be consulted prior to any decision being made by the North Topsail Beach staff, Planning Board, and/or Board of Aldermen concerning land use and development.

EXISTING DEVELOPMENT PROGRAM

The existing management program includes the following plans/ordinances: Zoning Ordinance; Subdivision Regulations; Flood Damage Prevention Ordinance; Stormwater Management Ordinance; 2009 CAMA Core Land Use Plan; 2017 Hurricane, Storm, and Flood Preparedness Plan; and the Onslow County Multi-Jurisdictional Hazard Mitigation Plan.

These documents were consulted as resources in developing this plan. Moving forward, all amendments to these regulatory and policy documents outlined above will consider the recommendations outlined in this land use plan. All amendments will be prepared by staff and subject to review by the Town's Planning Board and Board of Aldermen.

CONTINUING PLANNING PROCESS

This plan provides the framework upon which zoning and subdivision regulations and the capital improvements plan should be based. In fact, the preparation of a land use plan and map is mandated by North Carolina legislation as a prerequisite for zoning for both cities and counties. Specifically, in implementing this plan, the following should serve as guiding land use/planning principles:

- Consider the future land use map as part of the policies included in this plan.
- Consult this plan, including the future land use map, during the deliberation of all rezoning requests and proposed text amendments.
- Consider the following in deliberation of all zoning petitions:
 - All deliberations should consider this plan's goals, implementing strategies, and future land use map.
 - All uses that are allowed in a zoning district must be considered. A decision to rezone or not to rezone a parcel or parcels of property cannot be based on consideration of only one use or a partial list of the uses allowed within a zoning district.
 - Requests for zoning changes should not be approved if the requested change will result in spot zoning.
 - Access management should be considered in all land use/zoning decisions.

SECTION 6. TOOLS FOR MANAGING DEVELOPMENT



- The concept of uniformity should be supported in all zoning deliberations. Uniformity is a basic premise of zoning which holds that all land in similar circumstances should be zoned alike; any different circumstances should be carefully balanced with a demonstrated need for such different treatment.

Specifically, the Planning Board and Board of Aldermen should ask the following questions:

- Is the request in accordance with this plan? Zoning regulations shall be made in accordance with the Town's Comprehensive Plan (NCGS 160A-383). When adopting or rejecting any zoning amendment, the Board of Aldermen shall also approve a statement describing whether its action is consistent with the Town's Comprehensive Plan and any other officially adopted plan that is applicable, and briefly explaining why the Board of Aldermen considers the action taken to be responsible and in the best public interest.
- Will the request have a serious adverse impact on traffic circulation and other infrastructure?
- Will the request have an adverse impact on other Town services, including police protection, fire protection, or public works?
- Will the request have an adverse impact on Onslow County Schools?
- Is there a good possibility that the request, as proposed, will result in lessening the enjoyment or use of adjacent properties?
- Will the request, as proposed, cause serious noise, odors, light, activity, or unusual disturbances?
- Does the request raise legal questions such as spot zoning, hardship, or violation of precedents?
- Does the request adversely impact water quality or other natural resources?
- Will the request adversely impact beach maintenance or access?

Following adoption of this plan, the Town may implement the following to ensure effective citizen participation:

- Encourage diverse public participation and citizen input in all land use decisions and procedure development processes.
- Publicize all meetings of the Planning Board and Board of Adjustment through newspaper advertisements, public service announcements, and the Town's website.
- Utilize broad-based advisory committees to assess and advise the Town on special planning issues/needs, including implementation of this plan.
- Make notices of all Planning Department activities available on the Town's website.
- At a minimum, update this plan every ten to fifteen years.



SECTION 6. TOOLS FOR MANAGING DEVELOPMENT

LAND USE PLAN AMENDMENTS

At which time the Town of North Topsail Beach Comprehensive Plan needs to be amended, the Town will apply the guidelines for Land Use Plan Amendments under Subchapter 7B, Section 0803 of the North Carolina Administrative Code. A brief summary of those guidelines is provided below.

- The Land Use Plan may be amended as a whole by a single resolution or in parts by successive resolutions. The successive resolutions may address geographical sections, county divisions, or functional units of subject matter.
- The Town must hold a public hearing of which the public has been properly notified.
- Copies of the proposed amendment(s) must be available for review at the Town Municipal Building during designated hours.
- The executive secretary or a designated agent of the Coastal Resources Commission shall be given notice of the public hearing, a copy of the proposed amendment(s), and a reason for the amendment(s).
- Amendments must be consistent with the Coastal Resources Commission's Land Use Planning Guidelines (15A NCAC 7B) and, if possible, with the Land Use Plans of adjacent jurisdictions.
- If possible, the Town shall adopt the plan amendments expeditiously following the close of the public hearing.
- The Town will provide the executive secretary of the Coastal Resources Commission with a copy of the amended text or maps, and certification of adoption within 7 days of adoption.

CITIZEN PARTICIPATION

For the preparation of this plan, the North Topsail Beach Board of Aldermen adopted a citizen participation plan. A copy of that plan is included as Appendix A. Following adoption of this plan, North Topsail Beach will implement the following to ensure adequate citizen participation:

- The Town will encourage public participation in all land use decisions and procedural development processes while encouraging citizen input via its boards and commissions.
- North Topsail Beach will advertise all meetings of the Town's Planning Board and Board of Adjustment through newspaper advertisements, public service announcements, and the Town's website.
- The Town will, at least annually, conduct a joint meeting of the Board of Aldermen and the Town's Planning Board to identify planning issues/needs.
- Ensure that the membership of all planning related and *ad hoc* advisory committees has a cross-section of North Topsail Beach's citizenry.

APPENDIX A. CITIZEN PARTICIPATION PLAN

TOWN OF NORTH TOPSAIL BEACH 2018/2019 CAMA LAND USE PLAN UPDATE CITIZEN PARTICIPATION PLAN

Introduction

The Town of North Topsail Beach has initiated the preparation of an updated CAMA Land Use Plan for the North Topsail Beach planning area. The final document will serve as comprehensive plan for future public investment to achieve the community's overall vision. The intent of this project is to draft a plan that will maintain the positive attributes of the existing Plan, while identifying new and strategic development goals and policies, and new and strategic public initiatives supported by the community.

Recognizing that a collaborative effort with the public is essential, the initial step in the planning process is the adoption of this Citizen Participation Plan (CPP) by the North Topsail Beach Board of Aldermen. Approval of the CPP was accomplished on August 2, 2018.

Responsibility

The Town of North Topsail Beach Planning Board will supervise the preparation of the CAMA Land Use Plan Update. The town's staff and consultant will serve in an advisory capacity to the Planning Board. The updated CAMA Land Use Plan will be drafted by Holland Consulting Planners, Inc., the town's consultant. Final approval will be by the Town of North Topsail Beach Board of Aldermen.

Meetings

All Planning Board meetings will be conducted in an open format which will encourage public involvement/engagement. The Planning Board will conduct up to five (5) work sessions to prepare the draft CAMA Land Use Plan Update. All meetings of the Planning Board will be advertised, posted on the project and Town websites, and open to the public. At a minimum, the following meetings will be conducted throughout the plan preparation process:

-) Up to five (5) work sessions with the Planning Board and one (1) work session with the Board of Aldermen will be conducted. At each meeting, the location, date, and time of the succeeding meeting will be determined.
-) A mid-project public review meeting to report overall project status and to obtain public input on progress to date. This meeting will be scheduled approximately six (6) months into the project, and will provide a summary of all data and issues identification obtained to date in the process.
-) Submit draft plan to the Planning Board. Conduct a meeting with the town Planning Board for presentation of the plan.

-) Submit the plan to the Board of Aldermen for work session and consideration prior to submittal to the Division of Coastal Management.
-) Following review and comments by the Division of Coastal Management, present the final plan at a public hearing.

Public Notification

To ensure that the public is informed of meeting times and has access to the draft CAMA Land Use Plan throughout this process, the following steps will be taken:

-) Notices of all public meetings will be advertised in a Public Notices section of the Topsail Advertiser and The Daily News, in addition to being placed in the Town Hall.
-) Notices of all public meetings will be, at a minimum, e-mailed to civic groups and other interested groups (to be determined in concert with the Town).
-) The project team will create and maintain an interactive project-dedicated website to both collect and disseminate information regarding the project. The website will be especially valuable in reaching out to absentee property owners. The draft plan (as well as all notices) will be posted on this CAMA Land Use Plan website so that citizens may review the document. Information regarding the project website will be posted in the local newspaper.
-) Notices will be advertised on social media.
-) Notices of all meetings will be posted on the project website, in the local newspaper, and the Town's official website at <https://www.ntbnc.org/>.
-) The Town will utilize both the local Sunshine List and CodeRed System to inform the public about the planning process.

Dissemination of Information

The following procedures will be utilized to ensure the availability of information:

-) Copies of the draft plan will be placed at the Town Hall for citizen review, as well as being available at all meetings to ensure that the citizens in attendance can review items being discussed.
-) The draft Plan will be posted on the Town of North Topsail Beach CAMA Land Use Plan website as it is developed for online review or printing. Information regarding the location of the document online will be included in all published notices of Planning Board meetings.
-) Sections of the proposed plan will be provided to the Planning Board prior to any meetings at which the draft plan section(s) will be discussed.

) Copies of the draft plan or sections of the draft plan may be obtained from the Town Hall.

Public Comment

Throughout the process, the public will have the following opportunities for input:

-) At each Planning Board meeting, time will be allocated for public comments and/or questions.
-) At any time during the preparation of the draft Plan, the public may obtain information and/or offer comments via e-mail.
-) The town-wide mid-project status meeting/public input session, Planning Board work sessions, open house, and public hearing will all provide additional opportunities for public input and questions.
-) Sign-up sheets will be placed in the North Topsail Beach Town Hall. Individuals who place their names on this list will be mailed or e-mailed notices announcing meeting times for review of the CAMA Land Use Plan Update.
-) Social media will also be utilized.

Schedule

The CAMA Land Use Plan planning process will utilize the following schedule:

Phase	Project Task	Timeframe
Phase I:	• Issue Notice to Proceed	July 2018
	• Project Initiation/Public Involvement Strategy	July-August 2018
Phase II:	• Research and Analysis	August-November 2018
Phase III:	• Plan Format/Development	November 2018-May 2020
Phase IV:	• Submit plan to the NC Division of Coastal Management for review and comment (75-day review period required)	June 2020-February 2021
	• Public Hearing	March 2021

Town of North Topsail Beach



Build-Out and Non-Conforming Lot Study

In Coordination with
The Eastern Carolina Council of Governments
February 2010

Introduction

The Town of North Topsail Beach has conducted a subdivision lot inventory and potential build-out scenario based on the existing zoning designations. The inventory identifies the number of platted lots within the municipal limits and identifies those that are vacant or built upon. The build-out scenario uses the existing zoning density regulations, calculates the potential growth of the Town if the maximum permitted density of residential and commercial uses were to be built. The purpose of the lot inventory and build-out scenario to assist in the continued planning of the town into the future.

The study consists of the following elements:

1. A determination of which existing lots are built, and of those that are built, determination of their existing density. This is to include both residential density (by dwelling unit) and commercial density (by floor area).
2. Potential residential density was calculated by using the maximum allowable density of the existing zoning district. For large parcels that may be further subdivided, estimation was made of the required infrastructure and open space and will not be included in the residential calculation. The calculation of potential residential density will exclude existing built single family residential lots and multifamily units. Lots that are non-conforming as to area and cannot be built upon will also be identified.
3. The potential additional commercial density is be based on the maximum square footage that is permitted within the zoning district. A portion of the parcel area is be allocated to parking, open space etc. and will not be included in the density calculation in order to obtain a more accurate estimate. Existing sites that are built-out at maximum density will not be included in the scenario.
4. An estimate of additional housing units and commercial square footage will be reported based on the GIS model as well as a population increase estimate and identification of areas which may have the potential to see a large increase in population density.

Methodology

The initial task of the study was to gather pertinent data for analysis. The following data was obtained from Onslow County: Parcel, zoning, and aerial photography in shapefile and raster format. The data was then converted into a single comprehensive geodatabase using ESRI ArcGIS software. Additionally, information regarding recent building permits issued and current zoning regulations were be obtained from the town.

Using the data obtained from Onslow County, each lot/parcel will be evaluated to determine the following:

- a. If there is a principal structure on the property.
- b. If a principal structure exists on the property, the density will be determined (i.e. a single family residence on a single lot, the number of multi-family units in a complex, estimated size of commercial structures), and recorded in the geodatabase.
- c. The basic land use category was determined and recorded in the geodatabase. The following categories were used (with the abbreviation in parentheses):

1. Single Family residential (SFR)
2. Multi-family residential (MFR)
3. Mobile Home (MH)
4. Agricultural (AG)
5. Commercial (COM)
6. Institutional (INS)
7. Industrial (IND)
8. Office (OFF)
9. Government (GOV)
10. Recreational (REC)
11. Utility (UTL)
12. Vacant (VAC, may be developed with accessory uses or as supplemental parcels for beach access etc.)
13. Undeveloped (UND, raw land)

The next stage of the project was to evaluate undeveloped parcels to estimate the potential maximum density allowable under current zoning regulations. Potential residential density was estimated by using the maximum allowable density of the existing zoning district, lot size, and other bulk restrictions. For large residentially zoned parcels that may be further subdivided, 20% was reserved for the required infrastructure and open space and was not be included in the residential calculation.

The potential additional commercial density will be based on the maximum square footage that is permitted within the zoning district. The maximum lot coverage (30 percent) of the parcel area will be calculated to estimate commercial square footage. Forty percent of the remaining parcel area will be allocated to parking, open space etc. and will not be included in the density calculation in order to obtain a more accurate estimate.

Lots that are non-conforming as to area are also identified and not included in the calculations. Non-conforming lots are lots where the calculated area (by geometry, not taxable value) is less than the minimum lot size for the zoning district. EXCEPTIONS: lots that are the result of a split for creating a condominium in multifamily units and attached townhomes where the lot is part of a larger development that was subdivided.

Areas that cannot be built-upon for environmental regulatory reasons were also be identified so that they may be excluded from the overall build-out calculation. This was accomplished in two ways: 1) creating an outline along the estimated dune line and the estimated coastal marsh areas and using the 'clip' feature in ArcGIS to remove all parcel area that was estimated to be environmentally sensitive and 2) analysis of the remaining data according to the following criteria- 1) parcels that are east of the dune line, 2) parcels that are coastal marsh or water, 3) parcels that are clearly for access purposes (beach access or right-of-way) 4) parcels that are owned by an HOA or similar entity and contain accessory uses or are undeveloped, 5) Town, County, or State owned undeveloped property.

Sites where analysis cannot be done by using the data sources alone, and sites where questionable data exist were verified by town staff to determine structures, land-use, and density.

Findings

Existing Land Use and Non-conforming lots

Using GIS with current parcel data and aerial photography, each tax parcel was examined to determine if a principal structure was present and subsequently the current land use. Table 1 illustrates the number and land use classification of developed parcels, while Table 2 lists the number of vacant and undeveloped parcels.

Table 1. Number and Description of existing structures by Zoning District

District	Land Use										
	SFR ¹	MFR ²	MH	AG	COM	INS	IND	OFF	GOV	REC	UTL
R-5	240	1018				1					1
R-8	12	76									
R-10	508	33				3			2		1
R-15	62										
R-20	70								5	1	
RA	5										
MHR	239		70								
B-1	1				3				1		1
B-2					2						
CON-D	27										
CUR-5	89				1				4		
CUR-8	20										
CUR-10	21										
CUR-15	20										

1. Includes individual units in duplexes.
2. Multi Family is reported in number of existing units, not individual structures.

Table 2. Number of Undeveloped and Vacant Lots by Zoning District

Zoning District	UND	VAC	Total Lots	Zoning District	UND	VAC	Total Lots
R-5	299	66	1625	CON-D	505	3	535
R-8	9	2	99	B-1	22	2	30
R-10	215	39	801	B-2	3	0	5
R-15	67	6	135	CUR-5	85	0	179
R-20	190	3	269	CUR-8	50	2	72
RA	32	0	37	CUR-10	28	0	49
MHR	162	6	477	CUR-15	6	2	28

In addition to land use, lots that are non-conforming as to area (e.g. a 8,000 square foot lot zoned R-10, minimum lot size of 10,000 square feet) were identified. The geometric area of each parcel was calculated and compared with the existing zoning district minimum lot size (i.e. R-8 has a minimum

lot size of 8,000 square feet) using a mathematical comparison to determine if the parcel area was less than the minimum lot size for each zoning district. Parcels that were created as the result of a condominium split (where a small parcel exists within a larger parcel and the larger parcel is considered to be common area) were not counted as non-conforming as to area. Table 3 indicates the number of non-conforming lots by zoning district.

Table 3. Number of Non-conforming lots by Zoning District

Zoning District	Non-Conforming Lots	Zoning District	Non-Conforming Lots
R-5	63	MHR	128
R-8	62	B-1	8
R-10	400	B-2	0
R-15	23	CUR-5	78
R-20	34	CUR-8	8
RA	0	CUR-10	3
		CUR-15	0

Buildable and Non-Buildable Lots

The second part of the analysis was to determine the number of buildable and non-buildable lots. This was accomplished by ‘clipping’ out the environmentally sensitive area of the tax parcels including areas in front of the dune line on the ocean side and the estimated extent of the coastal marsh on the sound side. This analysis included those lots that may already be built but have been significantly impacted by environmental reasons such as dune erosion or coastal march encroachment. The non-buildable lot calculation also includes any parcels that are common area for condominiums and multifamily developments because they are considered to be a part of the larger development even though the parcel itself may be vacant. Table 4 indicates the number of non-buildable lots by zoning district.

Table 4. Number of Non-Buildable Lots by Zoning District

Zoning District	Non-buildable	Zoning District	Non-buildable
R-5	165	MHR	22
R-8	2	B-1	2
R-10	126	B-2	1
R-15	8	CUR-5	39
R-20	16	CUR-8	4
RA	6	CUR-10	1
		CUR-15	2

The build-out analysis also identified the number of buildable, undeveloped lots in each zoning district. This number is critical because it will indicate the geographic location and potential density that be built on a parcel. Table 5 indicates the number of buildable, undeveloped lots in each zoning district.

Table 5. Number of Buildable, Undeveloped Lots by Zoning District

Zoning District	Buildable Undeveloped	Zoning District	Buildable Undeveloped
R-5	192	MHR	143
R-8	9	B-1	22
R-10	127	B-2	2
R-15	58	CUR-5	46
R-20	171	CUR-8	48
RA	24	CUR-10	27
		CUR-15	5

Estimated Growth Potential

The third part of the analysis was to estimate the potential growth, both commercial and residential, based on the remaining undeveloped, buildable lots and the permitted density of each zoning district. Using the number of buildable undeveloped lots, the permitted densities and uses in each zoning district, and the minimum lot sizes for each zoning district (Appendix A) the number of housing units and commercial square footage was estimated. Housing units include single family, duplexes, and multifamily structures depending on what ever the highest density use is permitted in the zoning district. Table 6 indicates the estimated number of additional housing units and commercial square footage that may be developed.

Table 6. Estimated Housing Units and Commercial space by Zoning District

Zoning District	Housing Units/GFA	Zoning District	Housing Units/GFA
R-5	552	MHR	195
R-8	80	B-1	280,648 sq. ft.
R-10	321	B-2	151,710 sq. ft.
R-15	118	CUR-5	46
R-20	333	CUR-8	48
RA	24	CUR-10	27
		CUR-15	5

Also as a part of the growth potential analysis is a population increase estimate based on the average household size and the number of potential dwelling units. According to the 2000 census, the average household size is 1.87 persons. Using this number multiplied by the number of potential housing units, Table 7 indicates an estimated population increase (rounded) by residential zoning district.

Table 7. Estimated Population Increase (in persons) by Zoning District

Zoning District	Population Increase	Zoning District	Population Increase
R-5	1,032	MHR	365
R-8	150	CUR-5	86
R-10	600	CUR-8	90
R-15	221	CUR-10	50
R-20	623	CUR-15	9
RA	45		

Appendix A

North Topsail Beach Zoning District Densities

	Com.	MH	SFR	Duplex	Three-Four	Multi
CON-D:						
B-1:	X					
B-2:	X					
MHR:		X	X	X		
R-5:			X	X	X	X
R-8:			X	X	X	X
R-10:			X	X	X	X
R-15:			X	X		
R-20:			X			
R-A:			X			
CUR-5:			X			
CUR-8:			X			
CUR-10:			X			
CUR-15:			X			

Minimum Lot sizes:

CON-D:	NA
B-1:	8,000 per building
B-2:	8,000 per building
MHR:	5,000 sf, plus 5,000 sf for each unit over 1
R-5:	5,000 sf, plus 5,000 sf for each unit over 2
R-8:	8,000 sf, plus 8,000 sf for each unit over 2
R-10:	10,000 sf, plus 10,000 sf for each unit over 2
R-15:	15,000 sf, 15,000 sf for a duplex
R-20:	20,000 sf
R-A:	3 acres (130,680 sf)
CUR-5:	5,000 sf
CUR-8:	8,000 sf
CUR-10:	10,000 sf
CUR-15:	15,000 sf

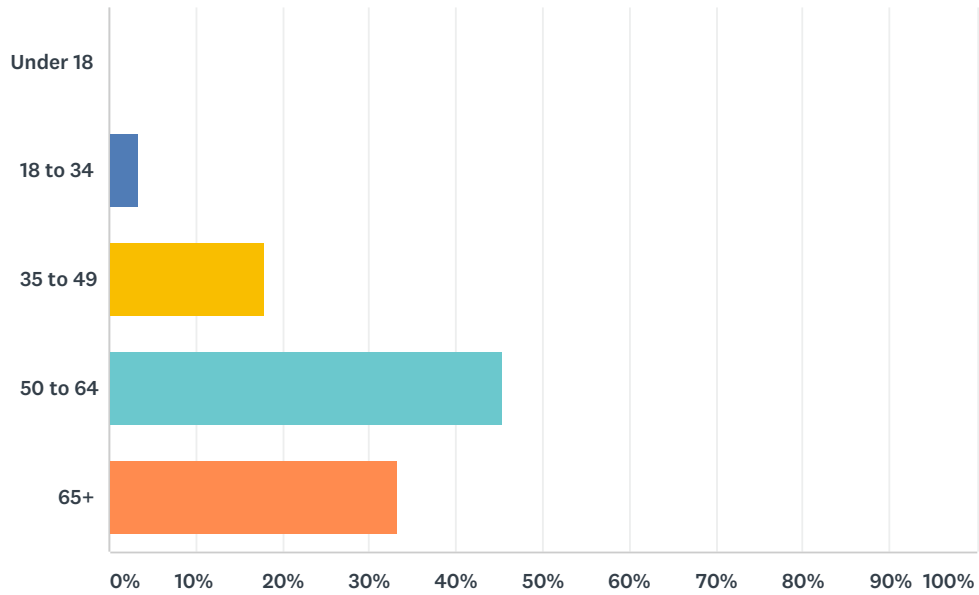
APPENDIX C. LAND USE PLAN SURVEY RESULTS

North Topsail Beach Land Use Plan Survey

SurveyMonkey

Q1 What is your age range (age of person completing this survey)?

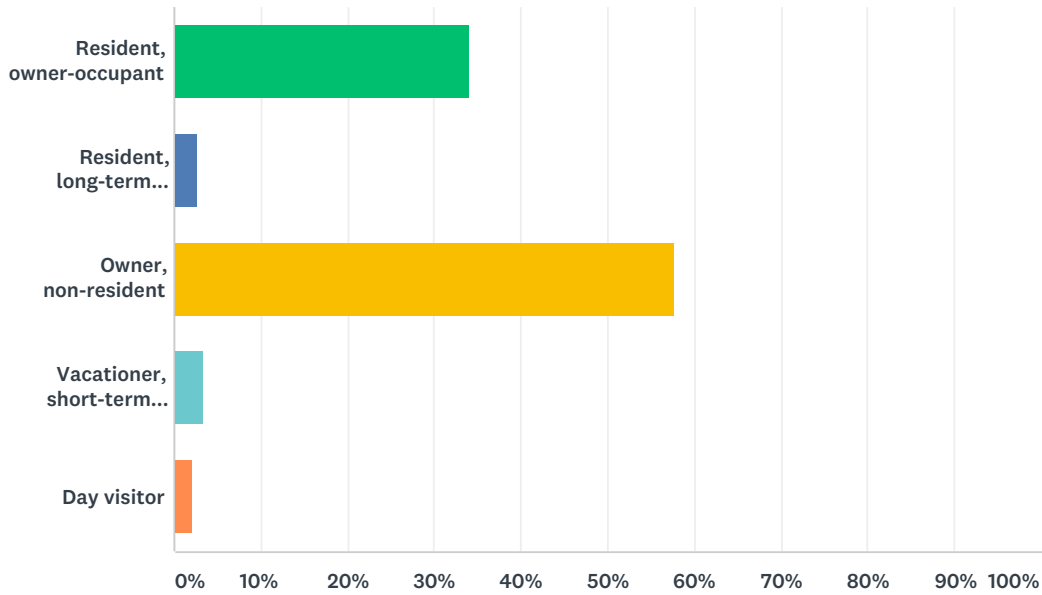
Answered: 825 Skipped: 0



ANSWER CHOICES	RESPONSES
Under 18	0.00% 0
18 to 34	3.39% 28
35 to 49	17.94% 148
50 to 64	45.45% 375
65+	33.21% 274
TOTAL	825

Q2 Are you a permanent resident, second homeowner, vacationer, or day visitor?

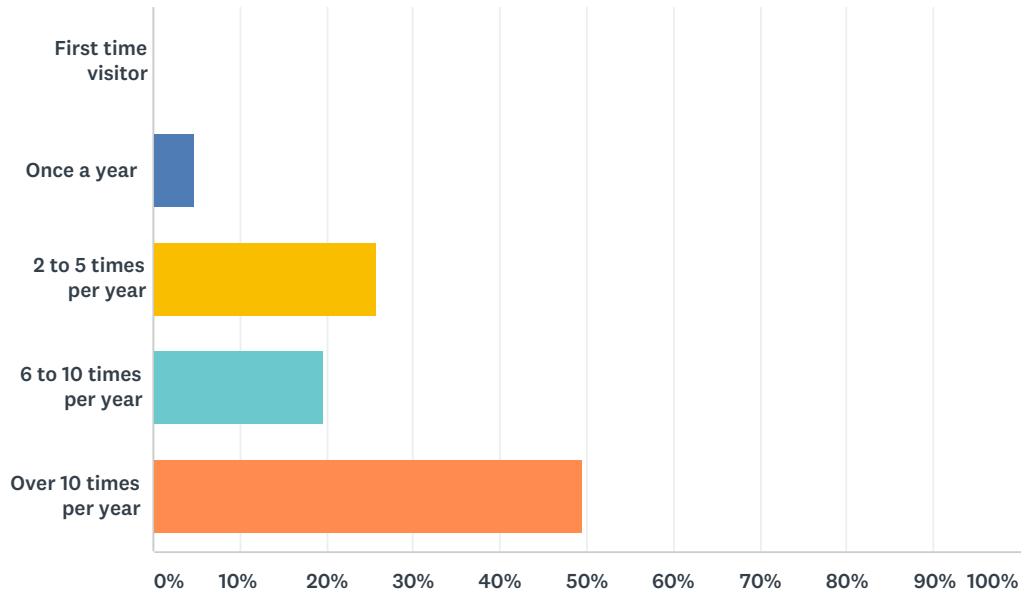
Answered: 825 Skipped: 0



ANSWER CHOICES	RESPONSES	
Resident, owner-occupant	34.06%	281
Resident, long-term renter	2.79%	23
Owner, non-resident	57.70%	476
Vacationer, short-term renter	3.39%	28
Day visitor	2.06%	17
TOTAL		825

Q3 If not a permanent resident, how often do you visit North Topsail Beach?

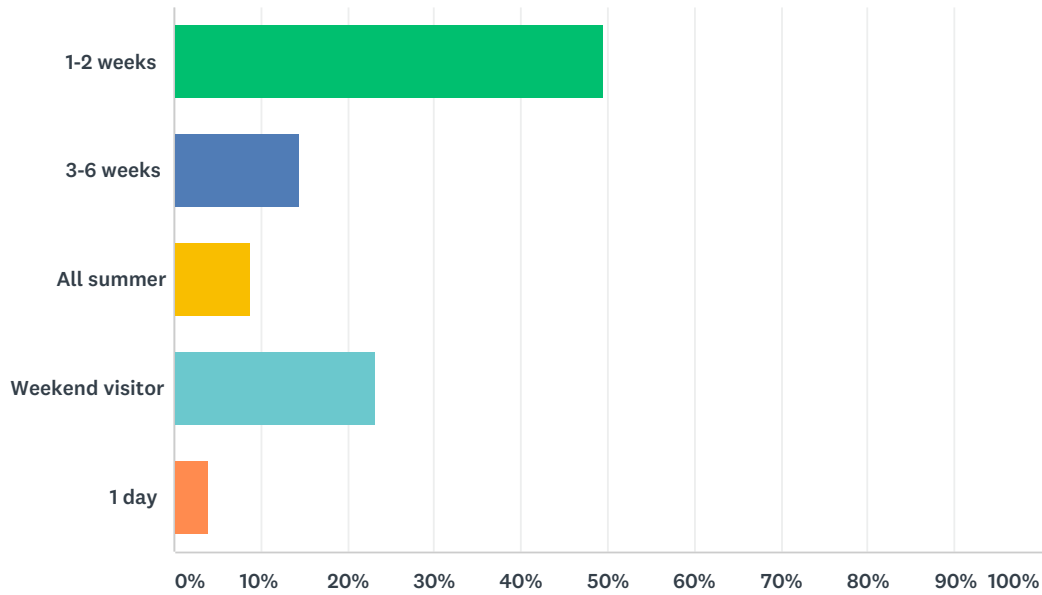
Answered: 511 Skipped: 314



ANSWER CHOICES	RESPONSES
First time visitor	0.20% 1
Once a year	4.89% 25
2 to 5 times per year	25.64% 131
6 to 10 times per year	19.77% 101
Over 10 times per year	49.51% 253
TOTAL	511

Q4 What is the average duration of your stay?

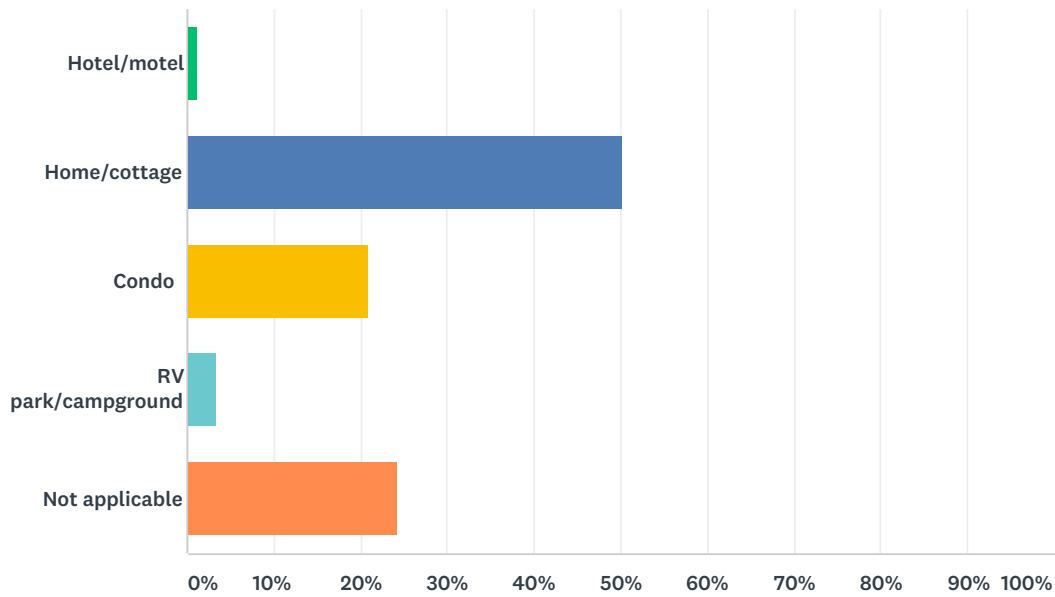
Answered: 511 Skipped: 314



ANSWER CHOICES	RESPONSES
1-2 weeks	49.51% 253
3-6 weeks	14.48% 74
All summer	8.81% 45
Weekend visitor	23.29% 119
1 day	3.91% 20
TOTAL	511

Q5 When you visit North Topsail Beach, what is your choice for accommodations?

Answered: 511 Skipped: 314



ANSWER CHOICES	RESPONSES
Hotel/motel	1.17% 6
Home/cottage	50.29% 257
Condo	20.94% 107
RV park/campground	3.33% 17
Not applicable	24.27% 124
TOTAL	511

Q6 What is the zip code for your primary residence?

Answered: 759 Skipped: 66

#	RESPONSES	DATE
1	45036	3/11/2019 2:05 PM
2	27282	3/6/2019 10:48 AM
3	97229	2/22/2019 5:19 PM
4	07823	2/19/2019 5:02 PM
5	27713	2/19/2019 3:17 PM
6	28301	2/18/2019 8:33 PM
7	28540	2/18/2019 4:01 PM
8	28460	2/18/2019 1:42 PM
9	28460	2/17/2019 2:22 PM
10	28460	2/17/2019 10:33 AM
11	28460	2/16/2019 10:22 PM
12	28460	2/16/2019 10:01 PM
13	28460	2/16/2019 10:00 PM
14	28460	2/16/2019 7:58 PM
15	28460	2/16/2019 7:38 PM
16	85266	2/16/2019 6:26 PM
17	28460	2/16/2019 2:29 PM
18	28625	2/16/2019 2:15 PM
19	17543	2/16/2019 1:00 PM
20	27613	2/16/2019 11:43 AM
21	27612	2/16/2019 10:40 AM
22	27617	2/16/2019 8:39 AM
23	28460	2/15/2019 9:26 PM
24	28460	2/15/2019 8:41 PM
25	28460	2/15/2019 7:53 PM
26	29460	2/15/2019 7:29 PM
27	28460	2/15/2019 7:22 PM
28	27101	2/15/2019 4:17 PM
29	28460	2/15/2019 2:19 PM
30	14150	2/15/2019 11:11 AM
31	08848	2/15/2019 10:16 AM
32	43209	2/15/2019 9:36 AM
33	13041	2/15/2019 4:04 AM
34	14150	2/14/2019 11:17 PM
35	21710	2/14/2019 11:01 PM

36	27516	2/14/2019 10:11 PM
37	28460	2/14/2019 8:43 PM
38	27587	2/14/2019 3:30 PM
39	28460	2/14/2019 1:51 PM
40	17331	2/14/2019 1:50 PM
41	28460	2/14/2019 1:13 PM
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46	17022	2/12/2019 6:42 PM
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48	10516	2/12/2019 10:38 AM
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51	28401	2/10/2019 11:23 AM
52	60611	2/10/2019 9:26 AM
53	27283	2/10/2019 9:04 AM
54	28460	2/9/2019 7:18 PM
55	28460	2/9/2019 2:47 PM
56	28540	2/9/2019 1:43 PM
57	28460	2/8/2019 10:46 PM
58	15238	2/8/2019 5:06 PM
59	27612	2/8/2019 4:09 PM
60	20119	2/8/2019 2:30 PM
61	80220	2/8/2019 1:48 PM
62	27604	2/8/2019 12:02 PM
63	28356	2/8/2019 10:34 AM
64	08248	2/8/2019 12:01 AM
65	08081	2/7/2019 7:48 PM
66	15618	2/7/2019 6:19 PM
67	80212	2/7/2019 4:21 PM
68	28376	2/7/2019 3:14 PM
69	27603	2/7/2019 2:07 PM
70	28460	2/7/2019 12:02 PM
71	44720	2/7/2019 11:39 AM
72	27539	2/7/2019 10:40 AM
73	28460	2/7/2019 8:28 AM
74	28460	2/7/2019 8:11 AM
75	28460	2/7/2019 7:38 AM
76	27518	2/7/2019 6:55 AM

77	28382	2/7/2019 2:17 AM
78	15071	2/7/2019 1:36 AM
79	27298	2/7/2019 12:32 AM
80	28460	2/6/2019 9:50 PM
81	44445	2/6/2019 9:46 PM
82	27713	2/6/2019 9:16 PM
83	28460	2/6/2019 8:49 PM
84	28540	2/6/2019 8:24 PM
85	27529	2/6/2019 8:00 PM
86	28460	2/6/2019 7:59 PM
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616	27302	10/22/2018 5:05 PM
617	28460	10/22/2018 5:03 PM
618	28460	10/22/2018 5:02 PM
619	28460	10/22/2018 5:02 PM
620	28460	10/22/2018 4:56 PM
621	27615	10/22/2018 4:48 PM
622	28460	10/22/2018 4:47 PM
623	24563	10/22/2018 4:44 PM
624	45424	10/22/2018 4:41 PM
625	28460	10/22/2018 4:41 PM
626	07712	10/22/2018 4:38 PM
627	27596	10/22/2018 4:31 PM
628	280640	10/22/2018 4:30 PM
629	27332	10/22/2018 4:22 PM
630	28460	10/22/2018 4:21 PM
631	28460	10/22/2018 4:20 PM
632	24153	10/22/2018 4:12 PM
633	28460	10/22/2018 4:12 PM
634	28460	10/22/2018 4:11 PM
635	28460	10/22/2018 4:07 PM
636	28056	10/22/2018 4:05 PM
637	27530	10/22/2018 4:03 PM
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639	27502	10/19/2018 11:17 AM
640	27517	10/17/2018 12:16 PM
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642	28460	10/16/2018 4:27 PM
643	28409	10/14/2018 9:23 AM
644	29501	10/11/2018 9:09 PM
645	15234	10/11/2018 6:12 AM
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647	28445	10/10/2018 6:40 PM
648	27502	10/9/2018 6:37 AM
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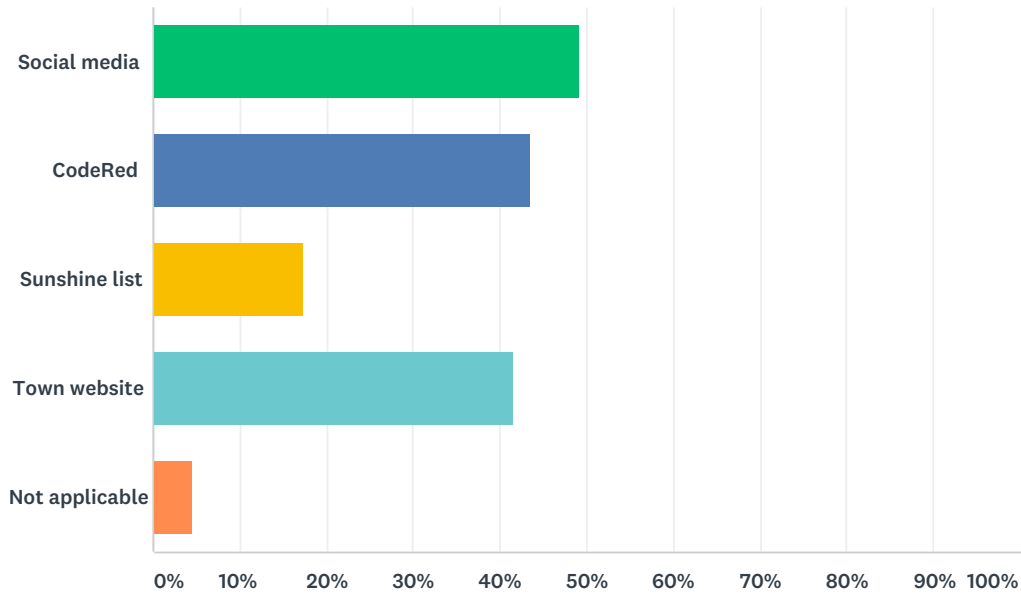
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659	28360	10/3/2018 8:40 PM
660	27545	10/3/2018 1:26 PM
661	20112	10/3/2018 12:49 PM
662	43054	10/3/2018 8:23 AM
663	18974	10/3/2018 5:30 AM
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668	08822	9/29/2018 9:12 AM
669	07866	9/29/2018 7:41 AM
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685	27518	9/16/2018 5:22 PM
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690	27539	9/15/2018 1:02 PM
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693	18092	9/15/2018 6:56 AM
694	27612	9/14/2018 6:32 AM
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705	28146	9/10/2018 9:18 AM
706	43212	9/10/2018 9:14 AM
707	27612	9/10/2018 7:28 AM
708	27006	9/10/2018 7:07 AM
709	28460-9558	9/9/2018 8:14 PM
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713	28460	9/9/2018 8:30 AM
714	28460	9/9/2018 12:11 AM
715	28226	9/8/2018 10:29 PM
716	44137	9/8/2018 3:59 PM
717	29460	9/8/2018 7:59 AM
718	28460	9/7/2018 9:35 PM
719	27517	9/7/2018 9:10 PM
720	28460	9/7/2018 6:04 PM
721	28460	9/7/2018 2:16 PM
722	27282	9/7/2018 1:01 PM
723	18458	9/7/2018 8:12 AM
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725	28460	9/6/2018 8:40 PM
726	28460	9/6/2018 8:02 PM
727	28460	9/6/2018 11:00 AM
728	28460	9/6/2018 8:57 AM
729	28460	9/6/2018 8:32 AM
730	28460	9/6/2018 8:23 AM
731	28460	9/5/2018 10:12 AM
732	27587	9/5/2018 6:21 AM

733	28560	9/4/2018 10:01 PM
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739	28374	9/4/2018 10:15 AM
740	27587	9/4/2018 9:09 AM
741	28460	9/4/2018 8:42 AM
742	28460	9/4/2018 8:19 AM
743	04863	9/4/2018 8:14 AM
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745	28460	9/4/2018 8:03 AM
746	27577	9/4/2018 8:02 AM
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751	28460	8/30/2018 4:40 PM
752	28460	8/30/2018 10:03 AM
753	28460	8/29/2018 8:37 PM
754	28460	8/29/2018 5:54 PM
755	28460	8/29/2018 4:59 PM
756	28460	8/29/2018 10:28 AM
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758	28460	8/29/2018 8:15 AM
759	28460	8/28/2018 9:46 PM

Q7 How do you receive Town emergency alerts?

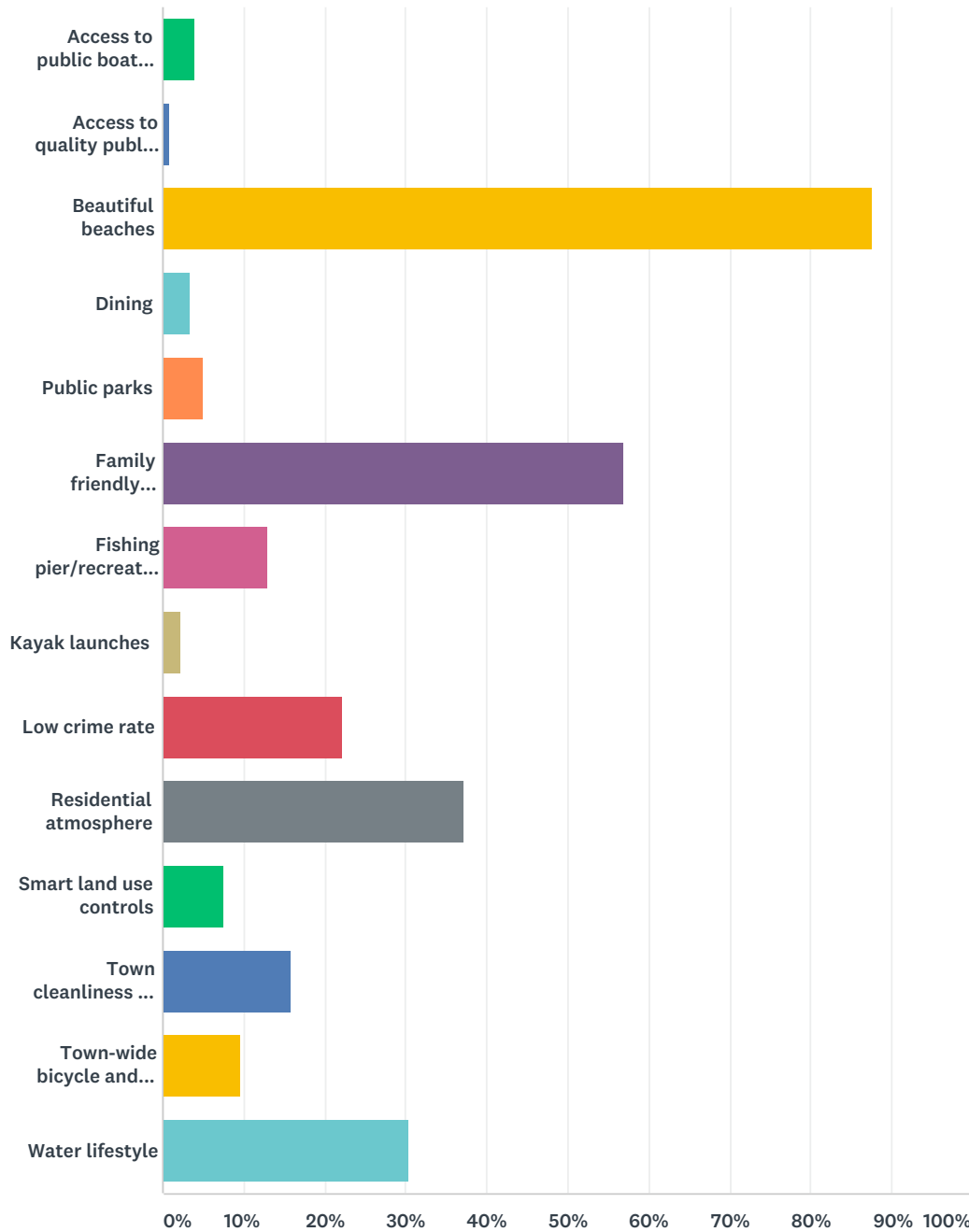
Answered: 759 Skipped: 66



ANSWER CHOICES	RESPONSES	
Social media	49.14%	373
CodeRed	43.61%	331
Sunshine list	17.39%	132
Town website	41.63%	316
Not applicable	4.61%	35
Total Respondents: 759		

Q8 What would you consider to be North Topsail Beach's top THREE (3) assets? Please select ONLY THREE. Choices are listed in alphabetical order.

Answered: 759 Skipped: 66

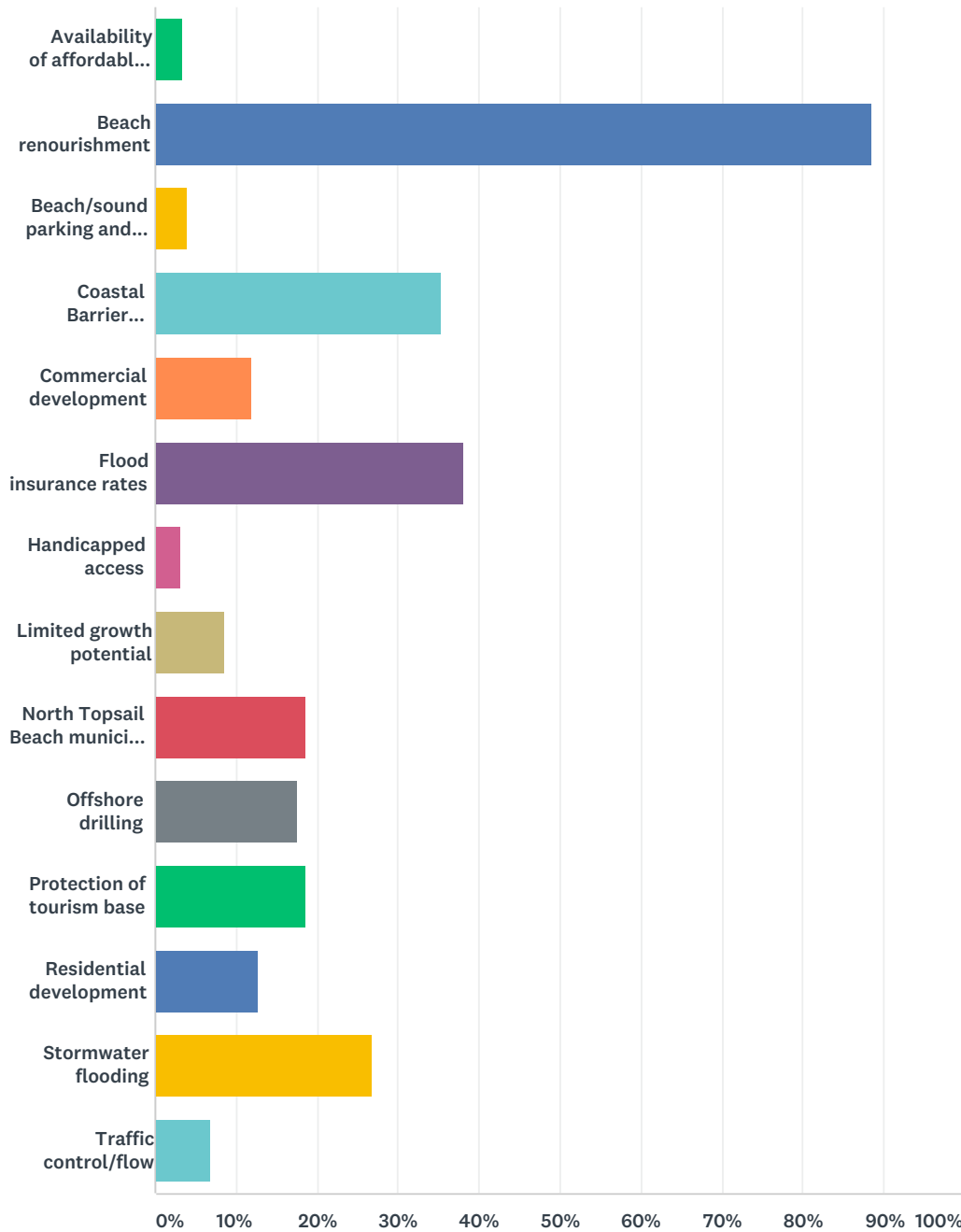


ANSWER CHOICES	RESPONSES	
Access to public boat ramp	3.95%	30
Access to quality public schools	0.79%	6
Beautiful beaches	87.75%	666

Dining	3.29%	25
Public parks	5.01%	38
Family friendly environment	56.92%	432
Fishing pier/recreational fishing opportunities	13.04%	99
Kayak launches	2.37%	18
Low crime rate	22.27%	169
Residential atmosphere	37.29%	283
Smart land use controls	7.51%	57
Town cleanliness and aesthetics	15.94%	121
Town-wide bicycle and pedestrian plan	9.62%	73
Water lifestyle	30.30%	230
Total Respondents: 759		

Q9 What would you consider the top THREE (3) most significant issues/concerns facing North Topsail Beach? Please select ONLY THREE. Choices are listed in alphabetical order.

Answered: 759 Skipped: 66

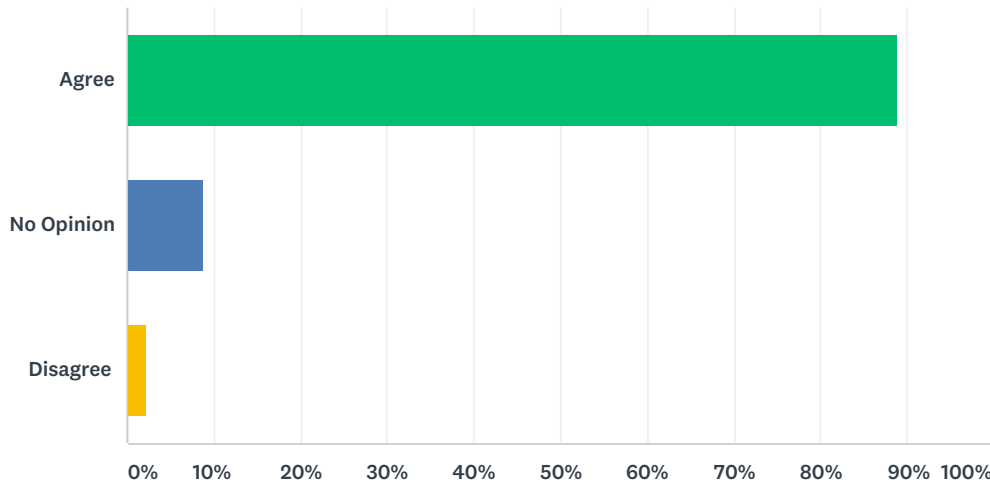


ANSWER CHOICES	RESPONSES	
Availability of affordable housing/accommodations	3.29%	25
Beach renourishment	88.54%	672
Beach/sound parking and access	3.95%	30

Coastal Barrier Resource System	35.31%	268
Commercial development	11.99%	91
Flood insurance rates	38.08%	289
Handicapped access	3.16%	24
Limited growth potential	8.56%	65
North Topsail Beach municipal tax rate	18.71%	142
Offshore drilling	17.65%	134
Protection of tourism base	18.58%	141
Residential development	12.78%	97
Stormwater flooding	26.75%	203
Traffic control/flow	6.85%	52
Total Respondents: 759		

Q10 NTB should encourage conservation of the maritime forests. Maritime forests are shoreline estuaries that grow along coastal barrier islands that support a great diversity of plants and animals.

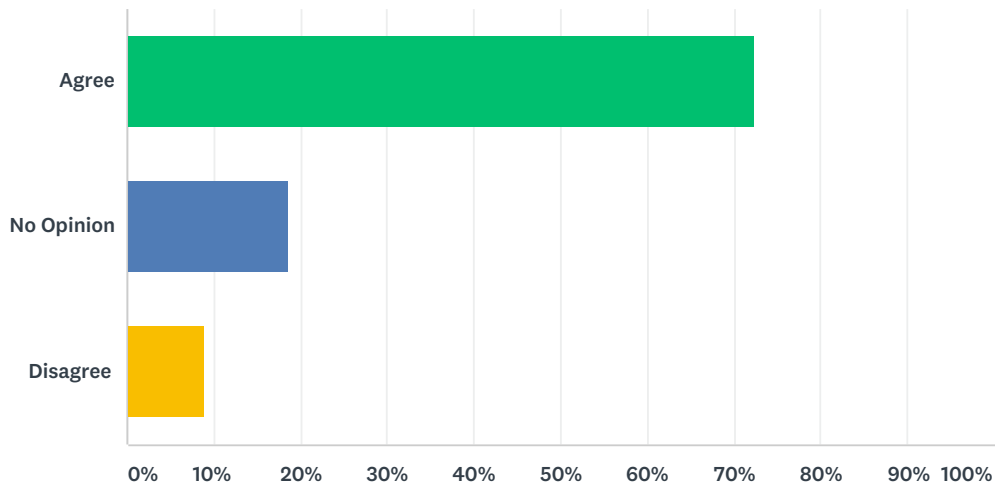
Answered: 723 Skipped: 102



ANSWER CHOICES	RESPONSES	
Agree	88.93%	643
No Opinion	8.71%	63
Disagree	2.35%	17
TOTAL		723

Q11 NTB should establish a land trust to promote green space (large tracts/one acre or larger).

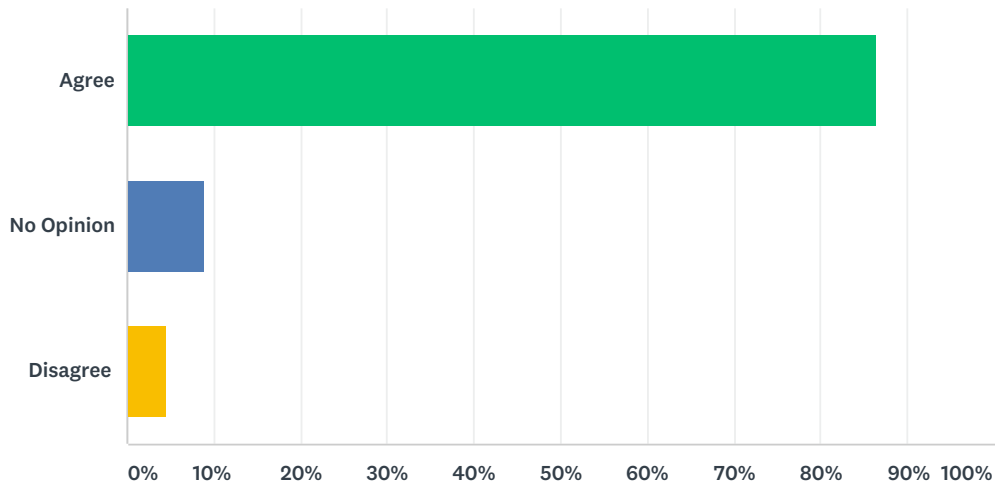
Answered: 723 Skipped: 102



ANSWER CHOICES	RESPONSES	
Agree	72.34%	523
No Opinion	18.67%	135
Disagree	8.99%	65
TOTAL		723

Q12 NTB should maintain the viability of shellfishing waters, marshes/wetlands, fish spawning, and nursery areas through more strict land use controls (i.e., preserve green/landscape areas and control stormwater runoff).

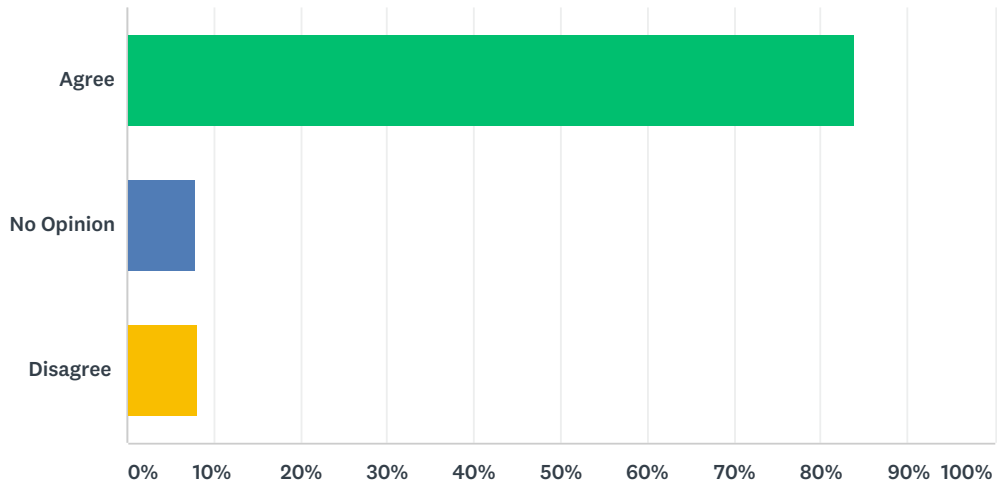
Answered: 723 Skipped: 102



ANSWER CHOICES	RESPONSES	
Agree	86.31%	624
No Opinion	8.99%	65
Disagree	4.70%	34
TOTAL		723

Q13 Sea turtle habitats should be protected through local ordinances.

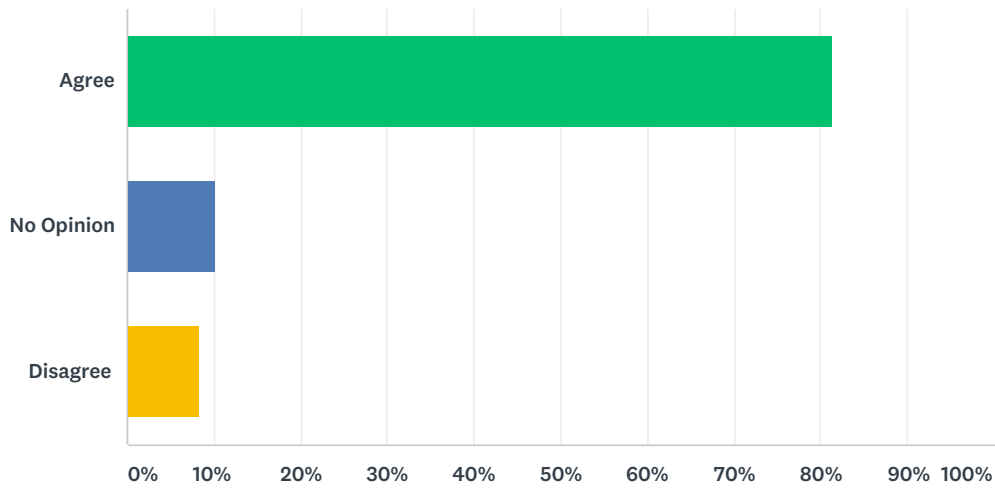
Answered: 723 Skipped: 102



ANSWER CHOICES	RESPONSES	
Agree	83.96%	607
No Opinion	7.88%	57
Disagree	8.16%	59
TOTAL		723

Q14 NTB should encourage low density residential development (average four dwelling units per acre or fewer).

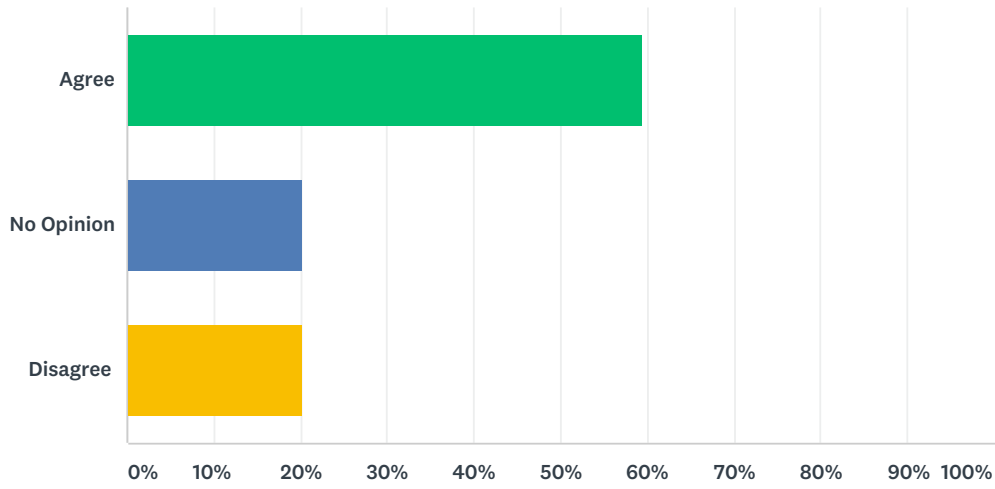
Answered: 723 Skipped: 102



ANSWER CHOICES	RESPONSES	
Agree	81.33%	588
No Opinion	10.24%	74
Disagree	8.44%	61
TOTAL		723

Q15 NTB should establish more strict oceanfront setback requirements.

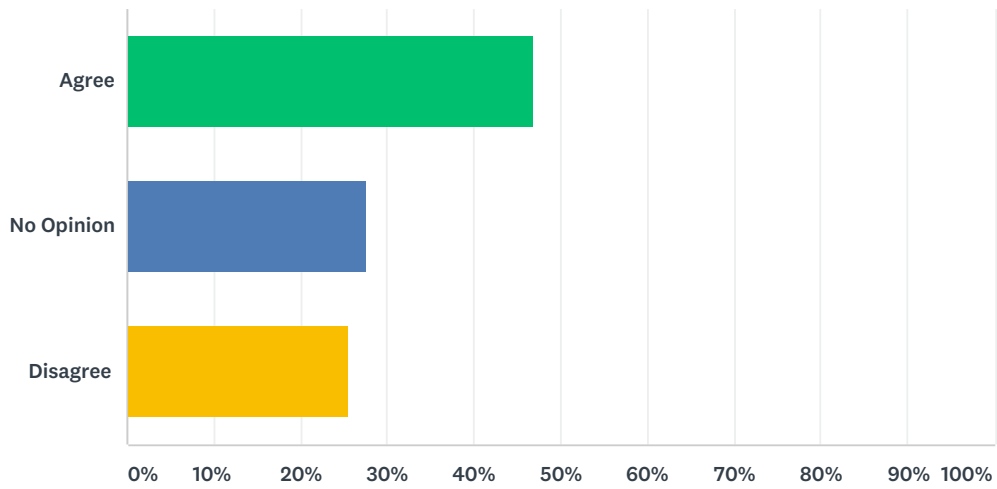
Answered: 723 Skipped: 102



ANSWER CHOICES	RESPONSES	
Agree	59.47%	430
No Opinion	20.33%	147
Disagree	20.19%	146
TOTAL		723

Q16 NTB should consider increasing the limits on paved surfaces for residential/non-residential development.

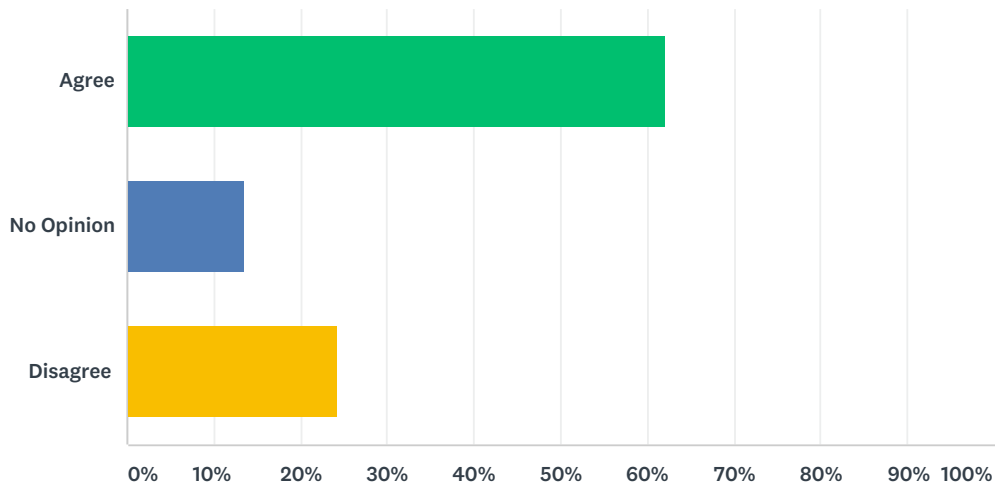
Answered: 723 Skipped: 102



ANSWER CHOICES	RESPONSES
Agree	46.89% 339
No Opinion	27.52% 199
Disagree	25.59% 185
TOTAL	723

Q17 NTB should limit or reduce the amount of commercial development/property zoned commercial

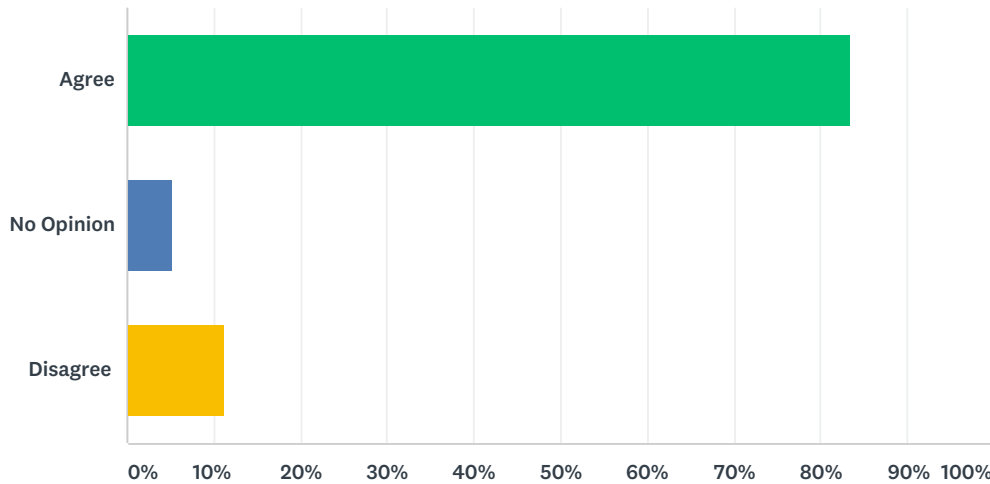
Answered: 723 Skipped: 102



ANSWER CHOICES	RESPONSES	
Agree	62.10%	449
No Opinion	13.55%	98
Disagree	24.34%	176
TOTAL		723

Q18 NTB should continue to ban the driving of automobiles and/or recreational vehicles on the beach and from all estuarine and oceanfront public trust areas.

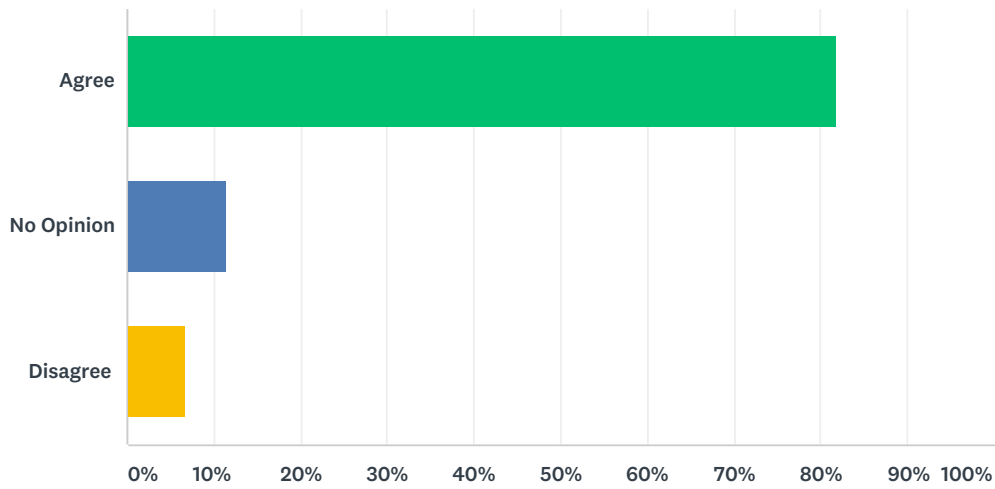
Answered: 723 Skipped: 102



ANSWER CHOICES	RESPONSES	
Agree	83.54%	604
No Opinion	5.26%	38
Disagree	11.20%	81
TOTAL		723

Q19 NTB should encourage the retention of all lands designated Conservation District, and prohibit these lands from rezoning.

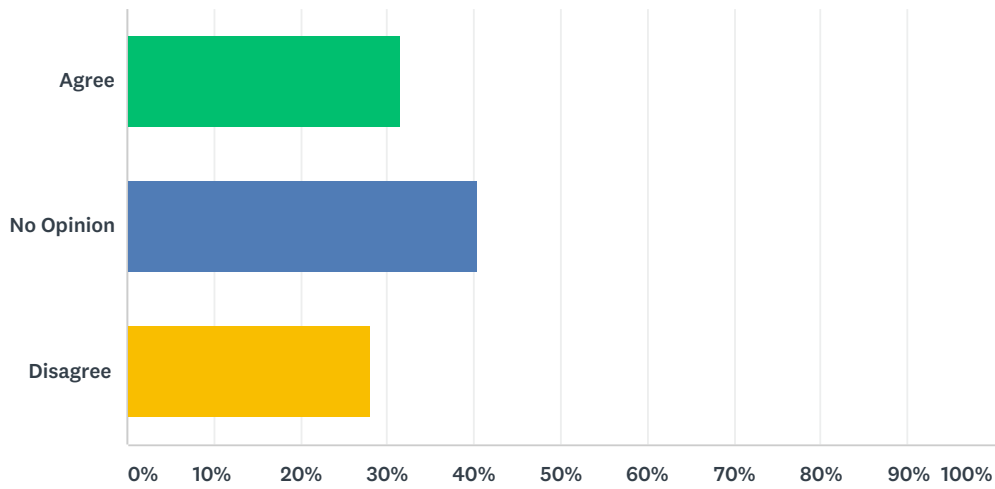
Answered: 723 Skipped: 102



ANSWER CHOICES	RESPONSES	
Agree	81.74%	591
No Opinion	11.48%	83
Disagree	6.78%	49
TOTAL		723

Q20 NTB should increase the number of required parking spaces for new construction.

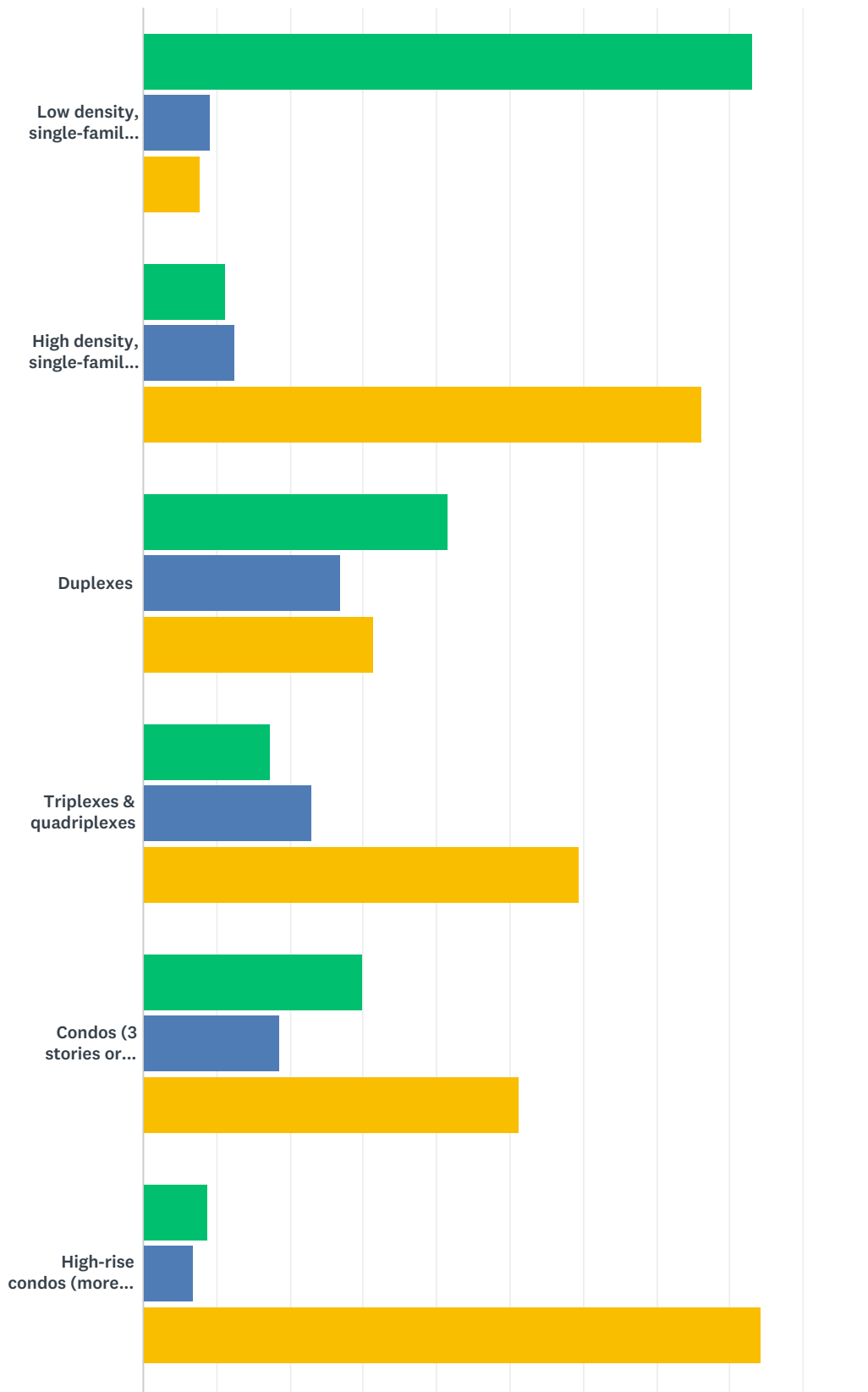
Answered: 723 Skipped: 102

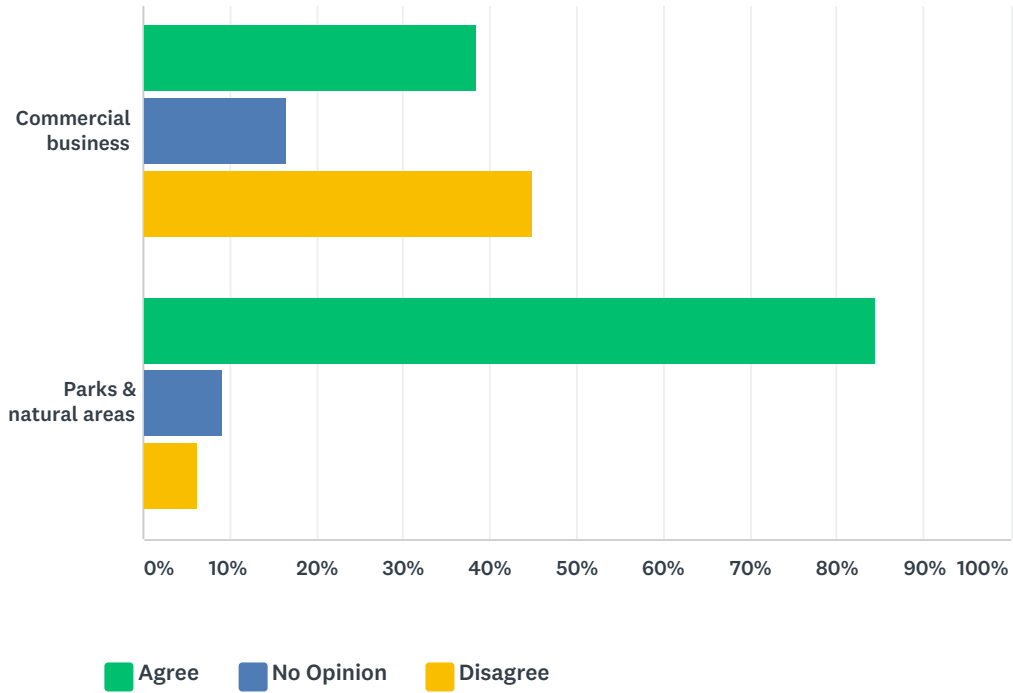


ANSWER CHOICES	RESPONSES	
Agree	31.54%	228
No Opinion	40.39%	292
Disagree	28.08%	203
TOTAL		723

Q21 The following types of development should be encouraged in North Topsail Beach.

Answered: 723 Skipped: 102

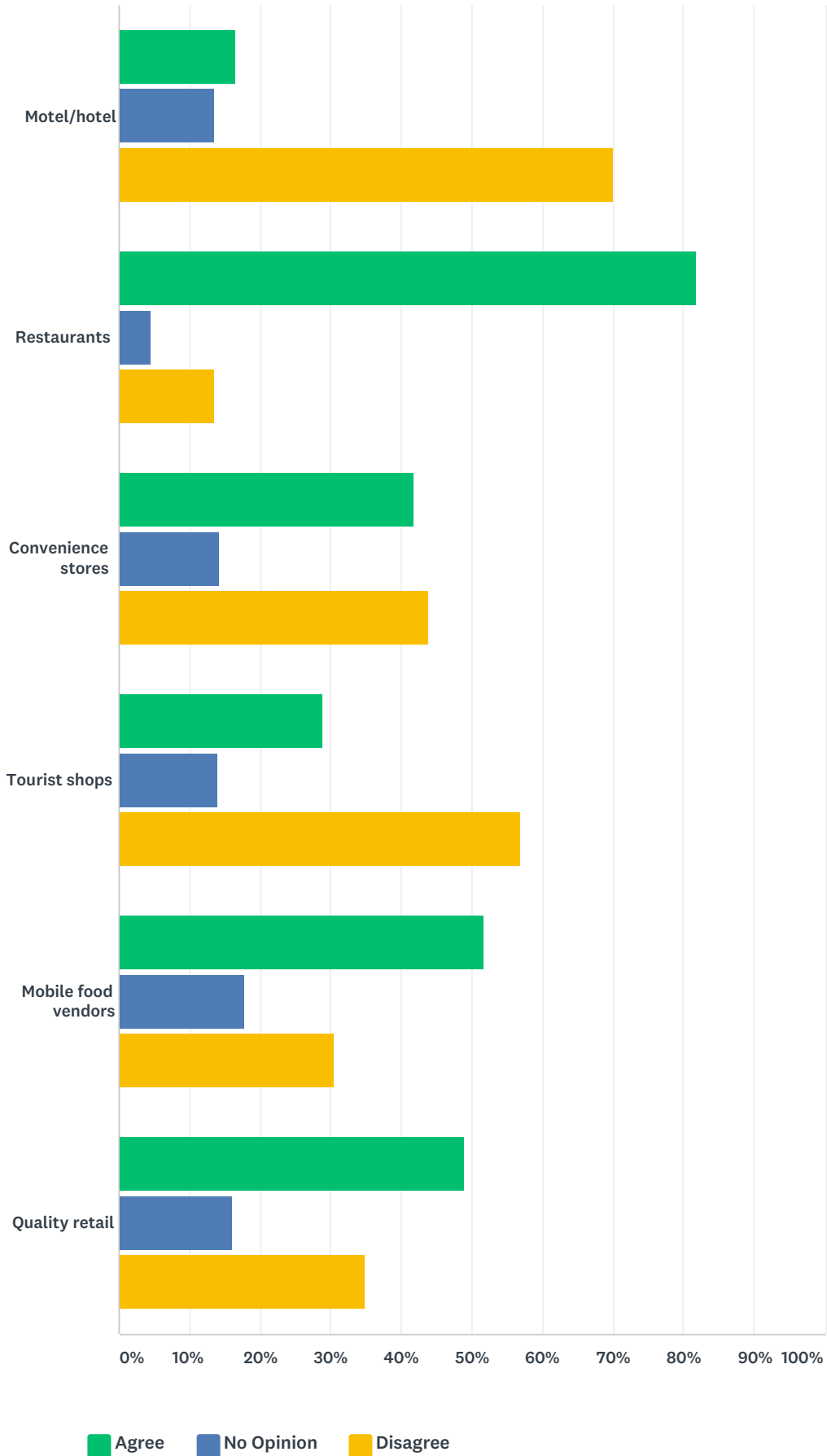




	AGREE	NO OPINION	DISAGREE	TOTAL
Low density, single-family homes (<4 per acre)	83.13% 601	9.13% 66	7.75% 56	723
High density, single-family homes (5 or more per acre)	11.34% 82	12.59% 91	76.07% 550	723
Duplexes	41.63% 301	26.97% 195	31.40% 227	723
Triplexes & quadriplexes	17.43% 126	23.10% 167	59.47% 430	723
Condos (3 stories or less)	30.01% 217	18.67% 135	51.31% 371	723
High-rise condos (more than 3 stories)	8.71% 63	6.92% 50	84.37% 610	723
Commercial business	38.59% 279	16.46% 119	44.95% 325	723
Parks & natural areas	84.51% 611	9.27% 67	6.22% 45	723

Q22 The following types of business should be encouraged in North Topsail Beach.

Answered: 723 Skipped: 102



■ Agree
 ■ No Opinion
 ■ Disagree

	AGREE	NO OPINION	DISAGREE	TOTAL
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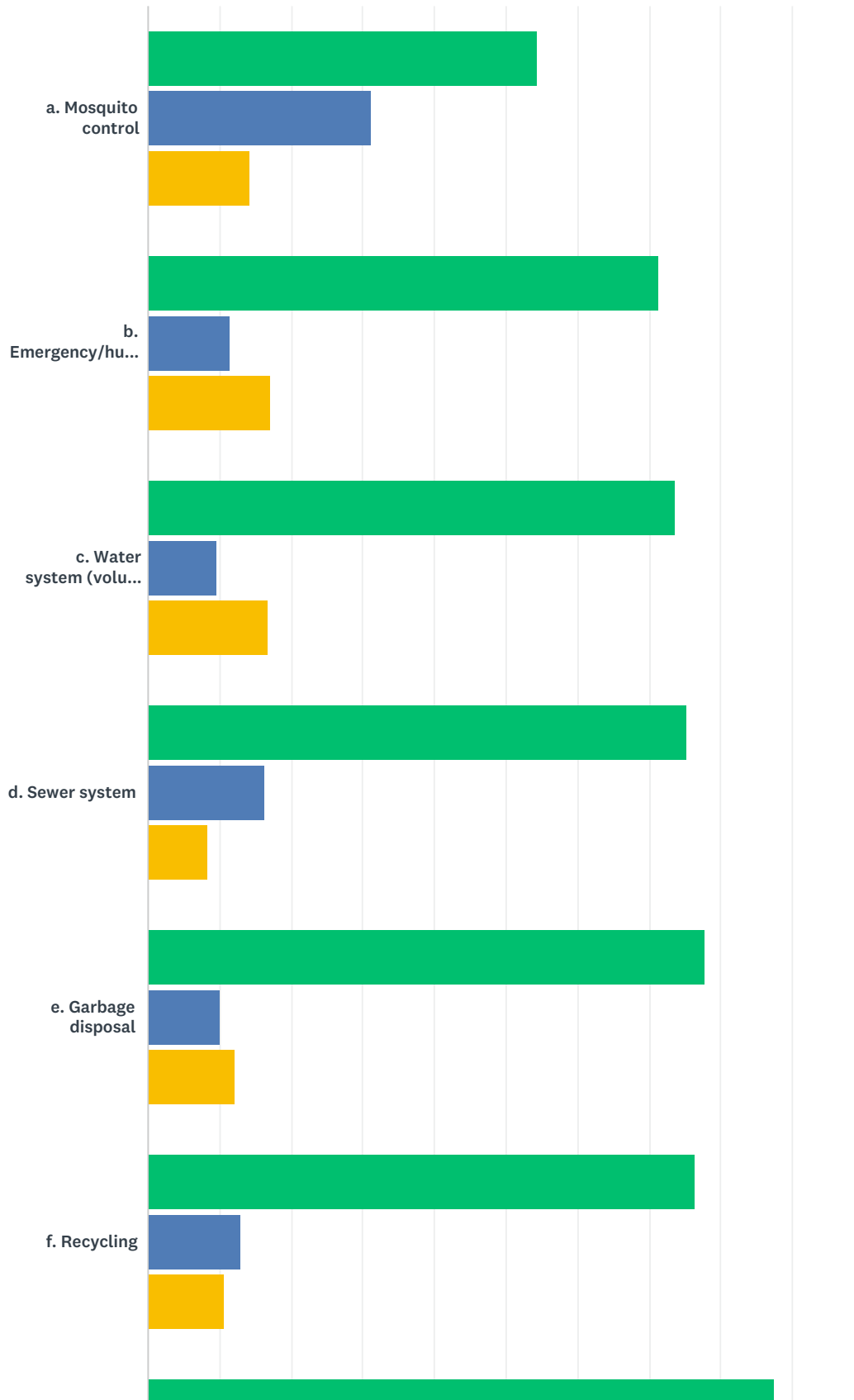
North Topsail Beach Land Use Plan Survey

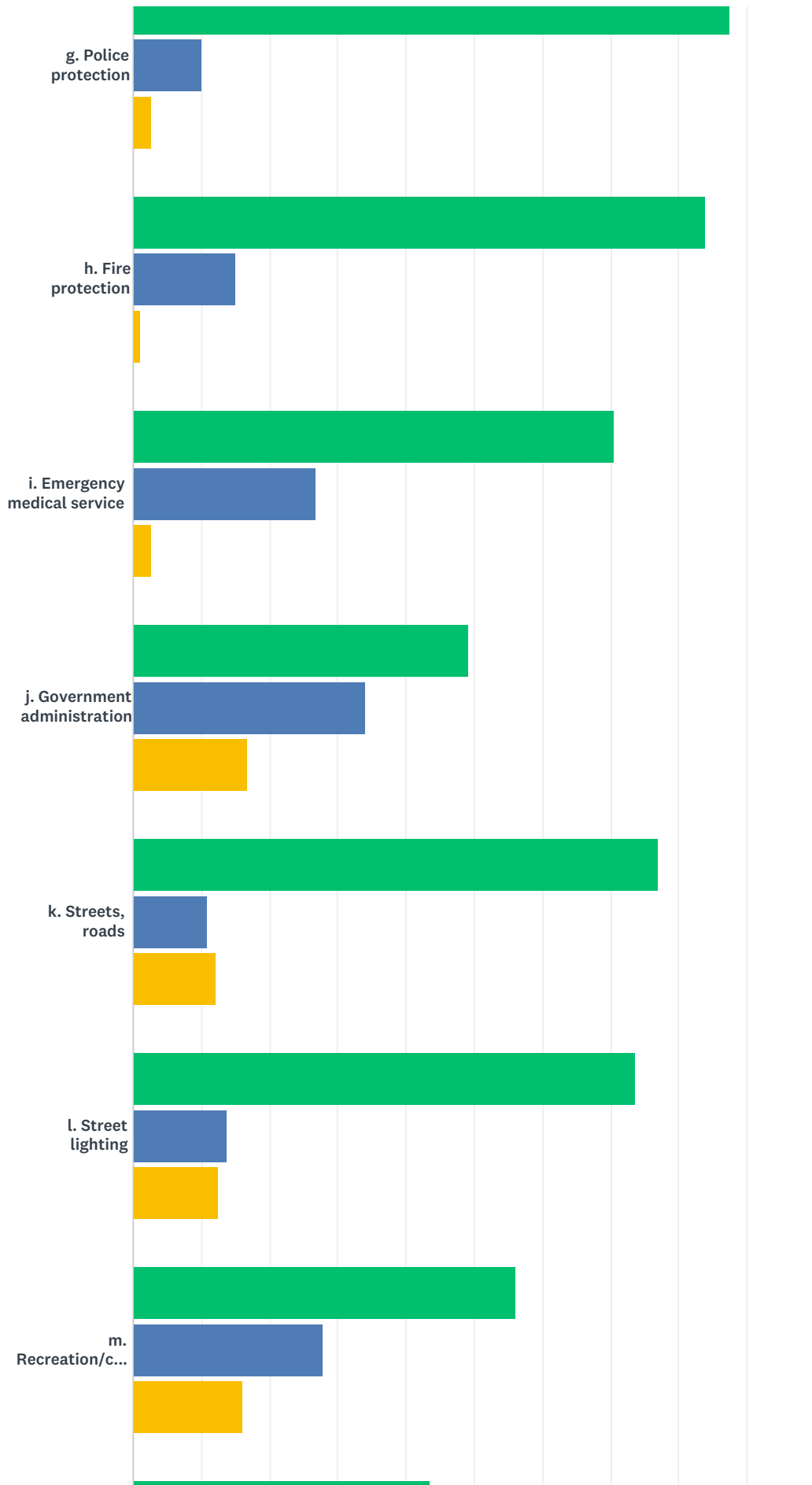
SurveyMonkey

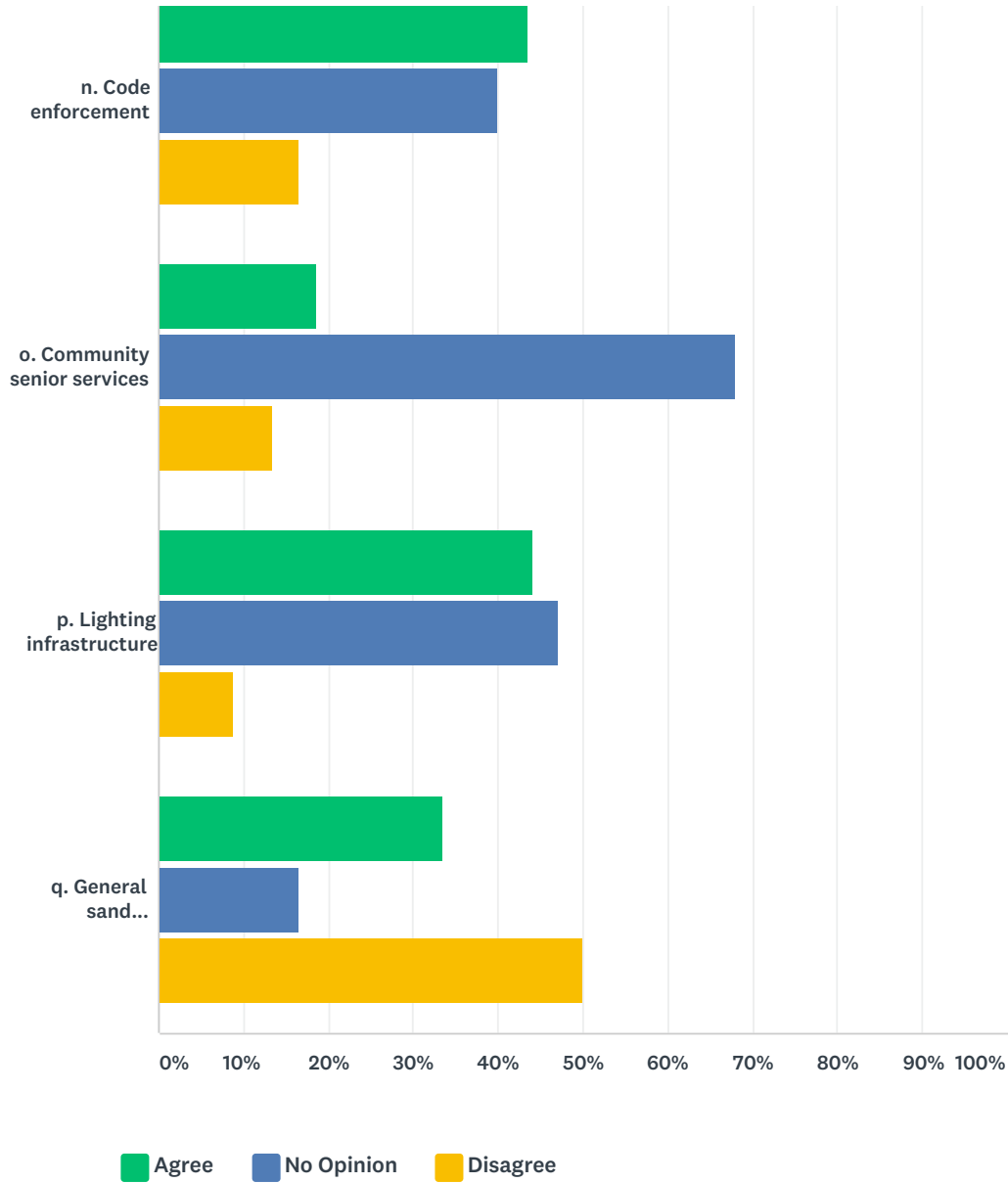
Motel/hotel	16.46% 119	13.55% 98	69.99% 506	723
Restaurants	81.74% 591	4.70% 34	13.55% 98	723
Convenience stores	41.77% 302	14.25% 103	43.98% 318	723
Tourist shops	28.91% 209	14.11% 102	56.98% 412	723
Mobile food vendors	51.73% 374	17.70% 128	30.57% 221	723
Quality retail	48.96% 354	16.18% 117	34.85% 252	723

Q23 I am satisfied with the following public services:

Answered: 723 Skipped: 102





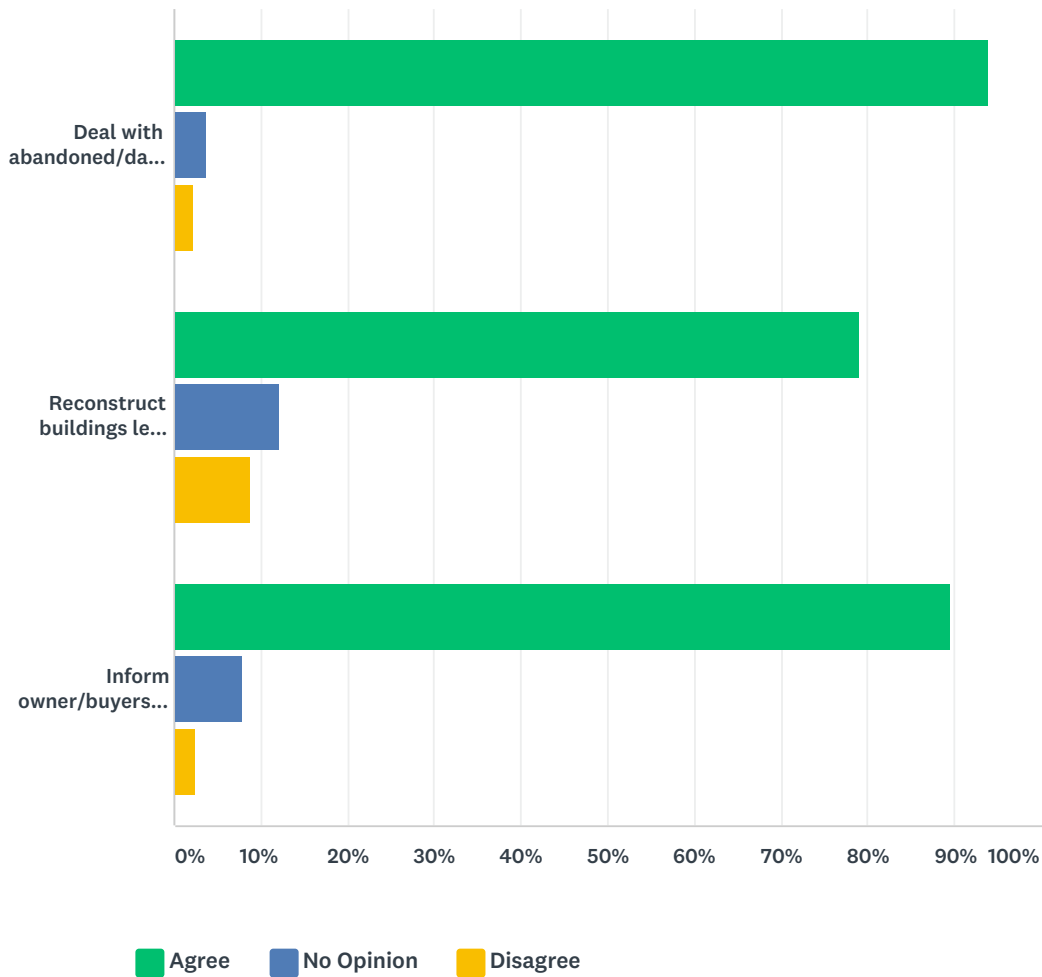


	AGREE	NO OPINION	DISAGREE	TOTAL
a. Mosquito control	54.50% 394	31.26% 226	14.25% 103	723
b. Emergency/hurricane preparedness	71.37% 516	11.48% 83	17.15% 124	723
c. Water system (volume & pressure)	73.72% 533	9.54% 69	16.74% 121	723
d. Sewer system	75.38% 545	16.32% 118	8.30% 60	723
e. Garbage disposal	77.73% 562	10.10% 73	12.17% 88	723
f. Recycling	76.35% 552	13.00% 94	10.65% 77	723
g. Police protection	87.41% 632	9.96% 72	2.63% 19	723
h. Fire protection	83.82% 606	15.08% 109	1.11% 8	723

i. Emergency medical service	70.54% 510	26.83% 194	2.63% 19	723
j. Government administration	49.10% 355	34.16% 247	16.74% 121	723
k. Streets, roads	76.90% 556	10.93% 79	12.17% 88	723
l. Street lighting	73.58% 532	13.83% 100	12.59% 91	723
m. Recreation/cultural facilities	56.15% 406	27.80% 201	16.04% 116	723
n. Code enforcement	43.57% 315	39.97% 289	16.46% 119	723
o. Community senior services	18.67% 135	67.91% 491	13.42% 97	723
p. Lighting infrastructure	44.12% 319	47.16% 341	8.71% 63	723
q. General sand renourishment	33.47% 242	16.60% 120	49.93% 361	723

Q24 In light of erosion and coastal storm damage, NTB should develop policies to:

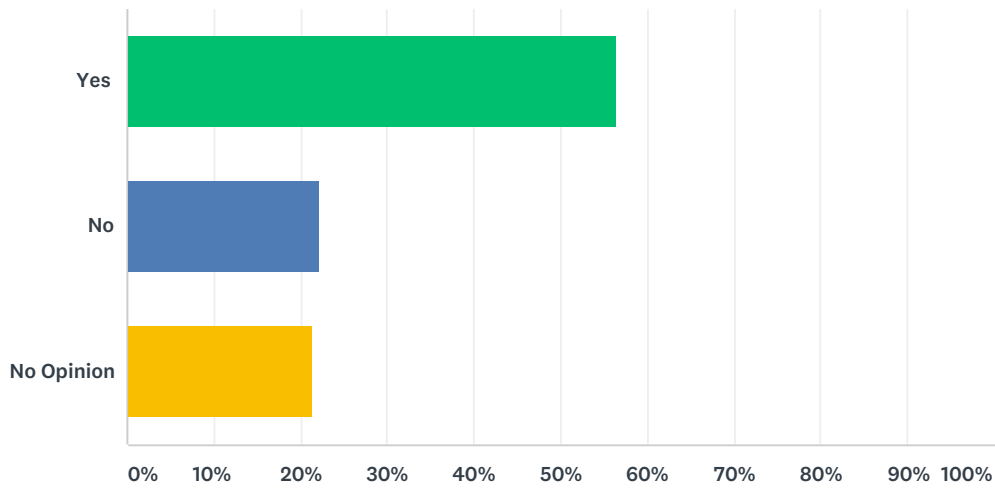
Answered: 723 Skipped: 102



	AGREE	NO OPINION	DISAGREE	TOTAL
Deal with abandoned/damaged buildings.	93.91% 679	3.73% 27	2.35% 17	723
Reconstruct buildings less likely to be damaged in the future.	79.11% 572	12.03% 87	8.85% 64	723
Inform owner/buyers about availability of flood insurance and regulations concerning flood damage/clean-up.	89.63% 648	7.88% 57	2.49% 18	723

Q25 Should NTB encourage planting more trees outside of the maritime forest areas?

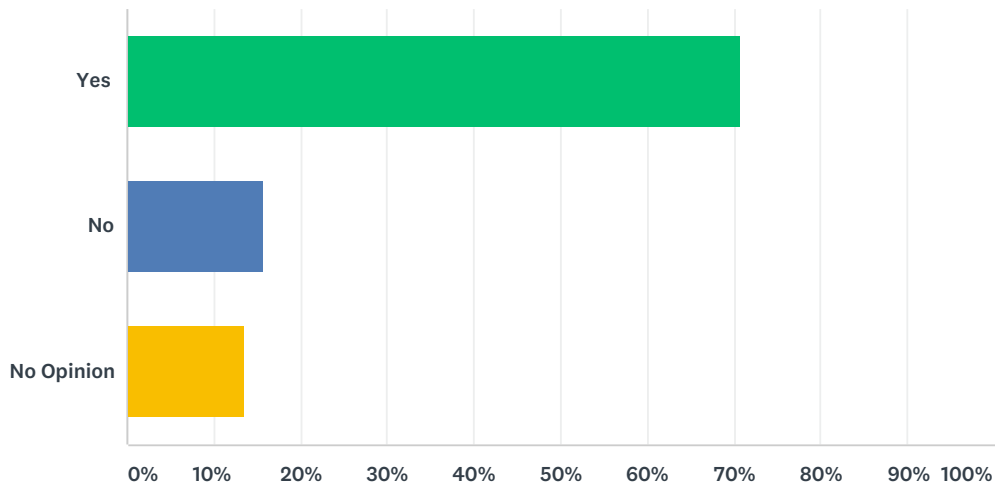
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES
Yes	56.47% 397
No	22.19% 156
No Opinion	21.34% 150
TOTAL	703

Q26 Should NTB address channel maintenance and sand management regarding the New River Inlet?

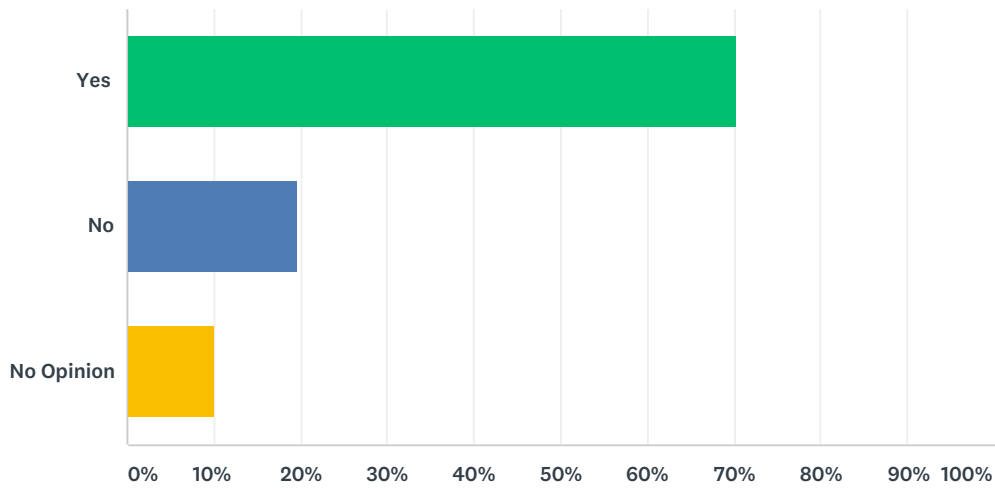
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES	
Yes	70.70%	497
No	15.79%	111
No Opinion	13.51%	95
TOTAL		703

Q27 Should NTB continue implementation of bicycle path construction from one end of town to the other?

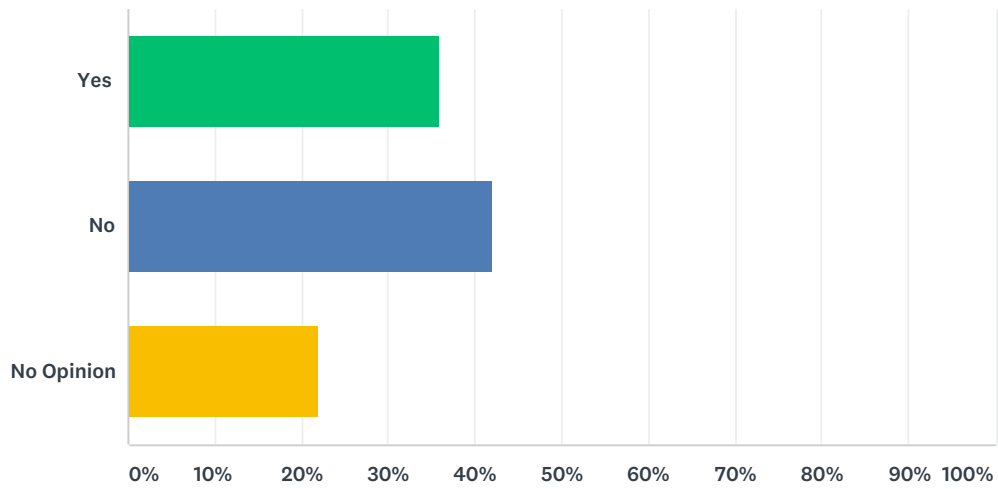
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES	
Yes	70.27%	494
No	19.63%	138
No Opinion	10.10%	71
TOTAL		703

Q28 Should NTB establish an outdoor public amphitheater and community center?

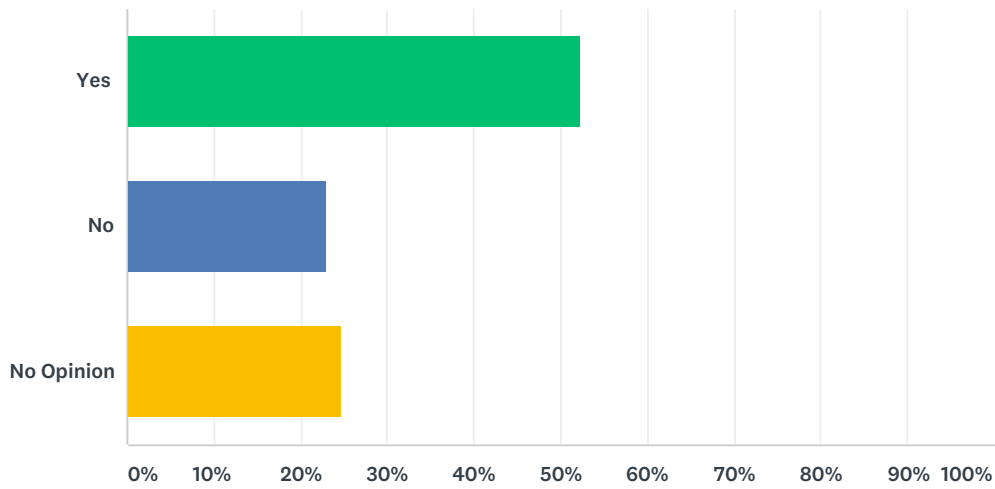
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES	
Yes	35.99%	253
No	41.96%	295
No Opinion	22.05%	155
TOTAL		703

Q29 Should NTB increase awareness and number of public canoe/kayak access facility(ies)?

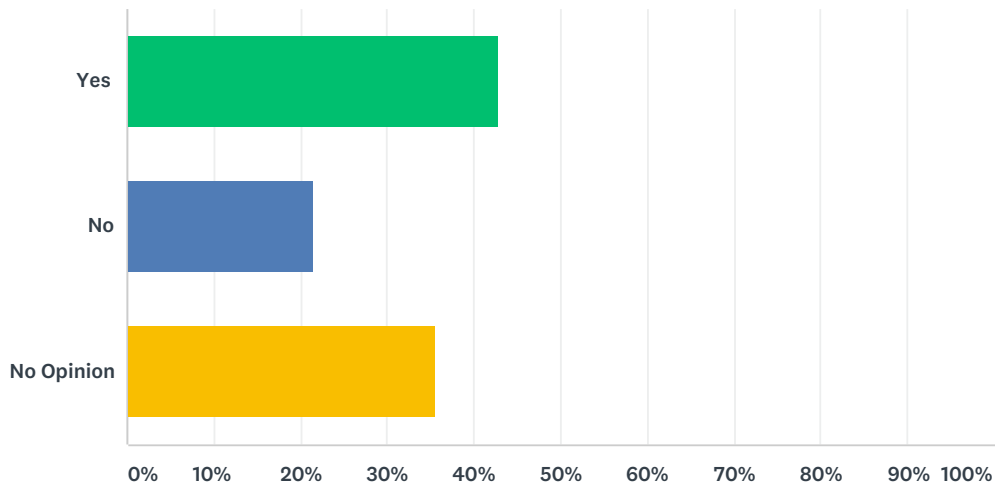
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES
Yes	52.20% 367
No	23.04% 162
No Opinion	24.75% 174
TOTAL	703

Q30 Should NTB better address handicapped public access, including shoreline access.

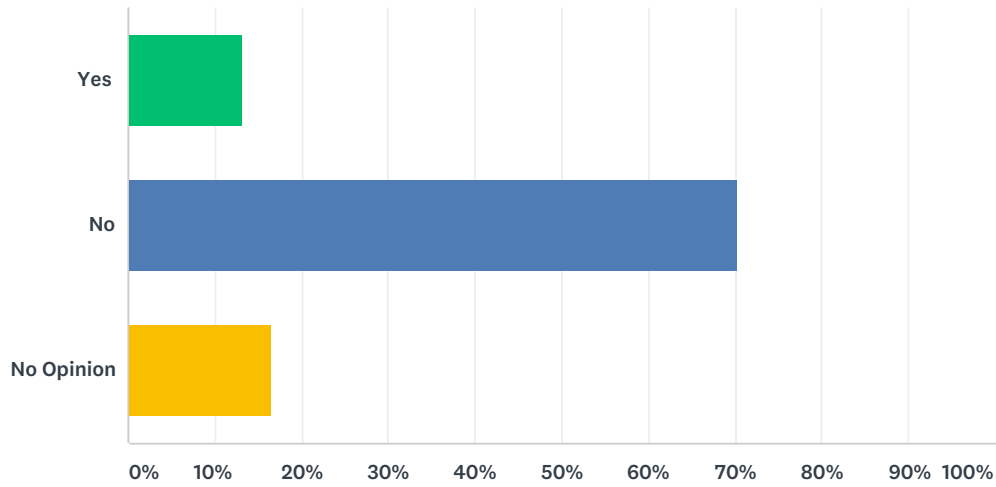
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES
Yes	42.96% 302
No	21.48% 151
No Opinion	35.56% 250
TOTAL	703

Q31 Should NTB increase public parking?

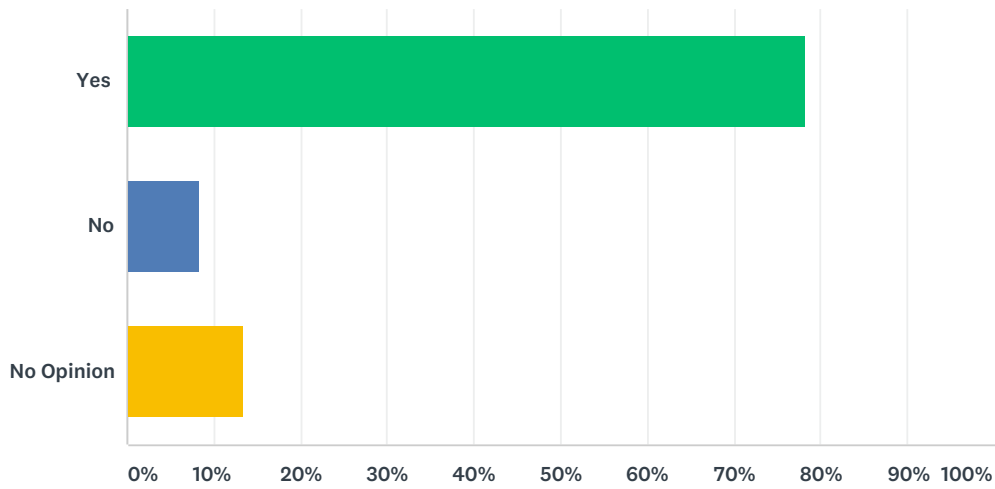
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES	
Yes	13.23%	93
No	70.27%	494
No Opinion	16.50%	116
TOTAL		703

Q32 Are there sufficient public access points (both estuarine and ocean) in NTB?

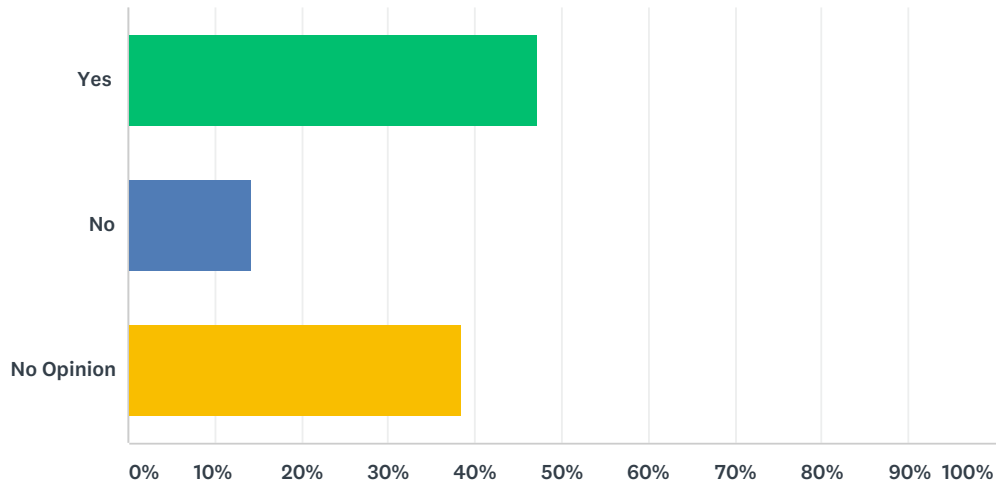
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES
Yes	78.24% 550
No	8.39% 59
No Opinion	13.37% 94
TOTAL	703

Q33 Are there sufficient boat ramp facilities in NTB?

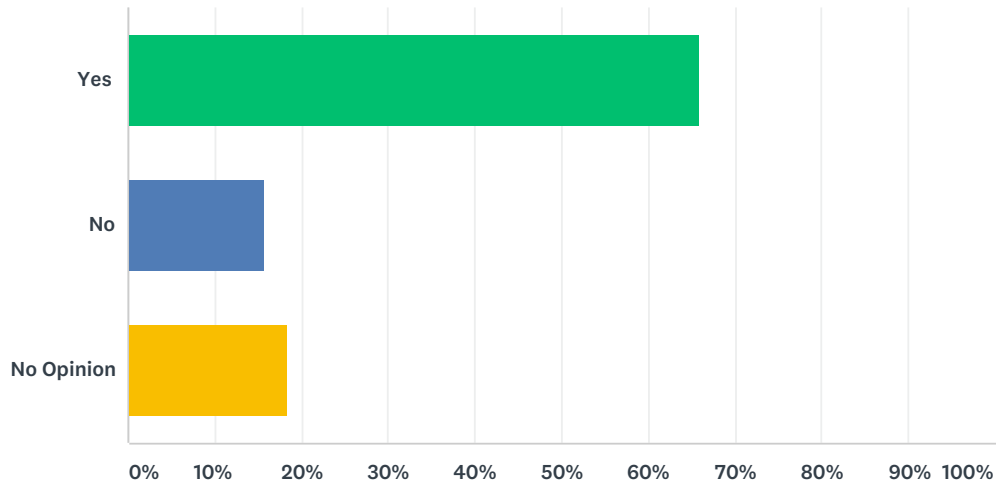
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES	
Yes	47.37%	333
No	14.22%	100
No Opinion	38.41%	270
TOTAL		703

Q34 Are there sufficient public parks in NTB?

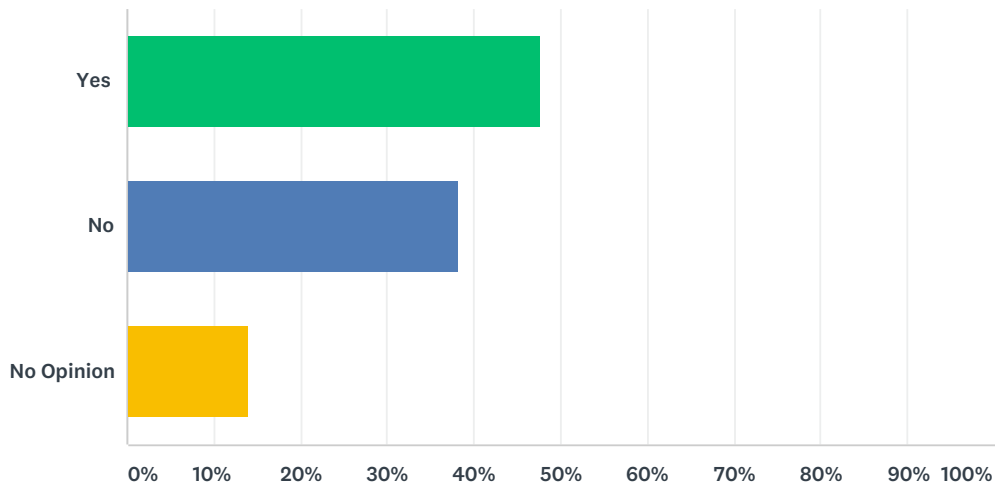
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES	
Yes	66.00%	464
No	15.65%	110
No Opinion	18.35%	129
TOTAL		703

Q35 Are there sufficient pedestrian walkways, sidewalks, crosswalks, and greenways in NTB?

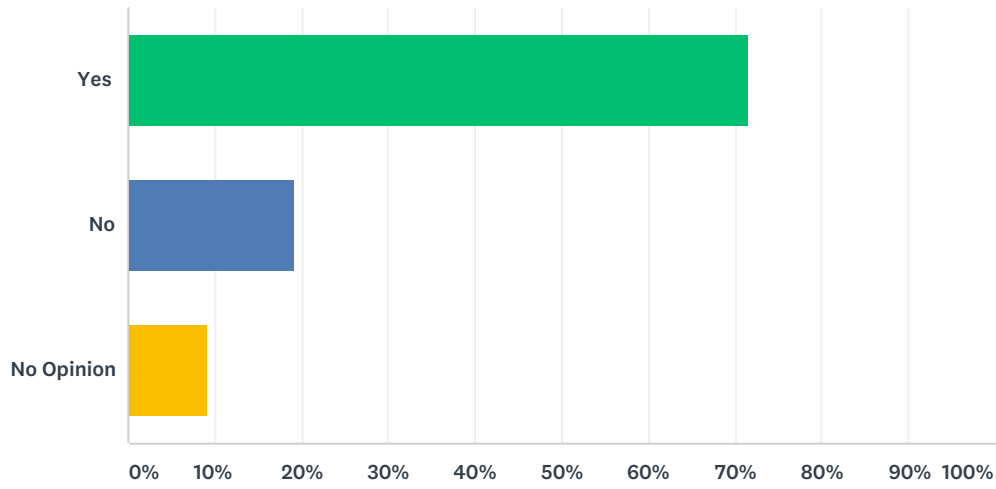
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES
Yes	47.80% 336
No	38.26% 269
No Opinion	13.94% 98
TOTAL	703

Q36 Is the water capacity (water pressure) sufficient in NTB?

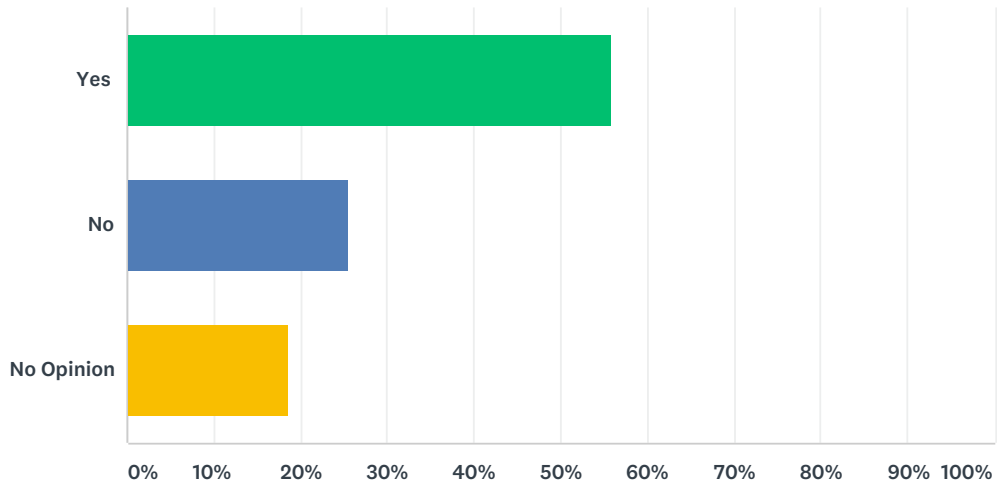
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES	
Yes	71.55%	503
No	19.35%	136
No Opinion	9.10%	64
TOTAL		703

Q37 Are there sufficient beach patrol efforts in NTB?

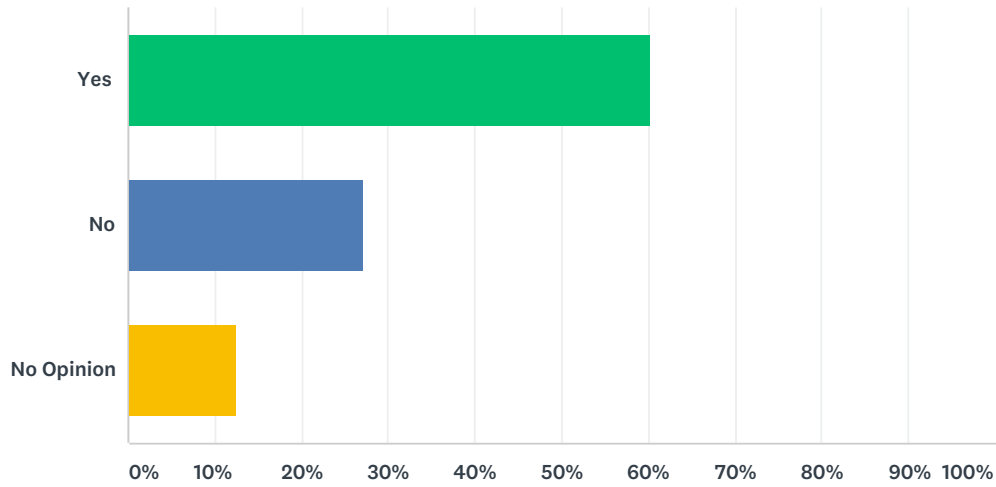
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES	
Yes	55.90%	393
No	25.46%	179
No Opinion	18.63%	131
TOTAL		703

Q38 Should NTB seek monetary recompense for parking (day visitors)?

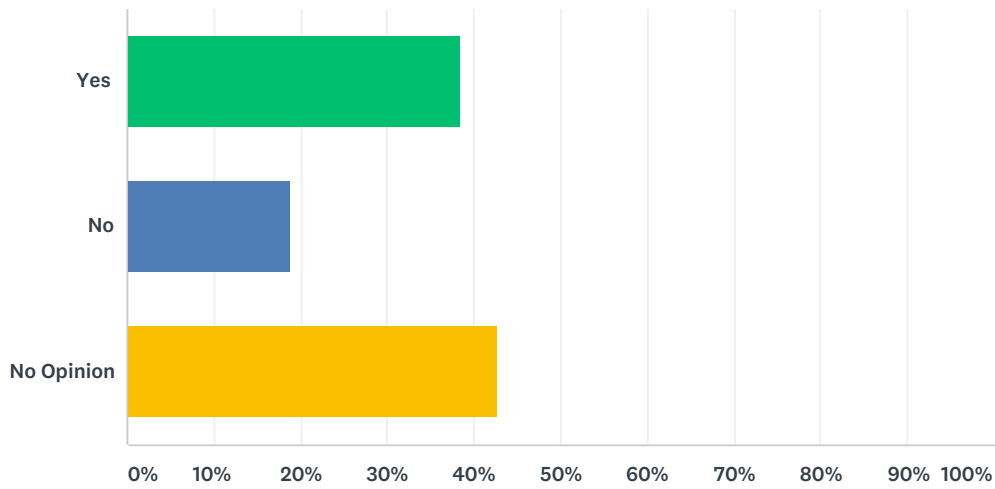
Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES	
Yes	60.31%	424
No	27.17%	191
No Opinion	12.52%	88
TOTAL		703

Q39 Should NTB work with Congress to remove the Coastal Barrier Resources System (CBRS)?

Answered: 703 Skipped: 122



ANSWER CHOICES	RESPONSES
Yes	38.41% 270
No	18.92% 133
No Opinion	42.67% 300
TOTAL	703

Q40 Please utilize the space below to add any further comments or concerns regarding the Land Use Planning efforts currently underway in the Town. Any comments concerning community facilities and infrastructure, resource protection, water quality, land use regulation, and transportation will be appreciated. (Comments submitted in this section will be reviewed by the NTB Board of Aldermen, and use of these comments will be optional.)

Answered: 270 Skipped: 555

#	RESPONSES	DATE
1	I feel the NTB/CAMA Static line should less restrictive and based on individual land plats as opposed to a pre-determined drawn line that allows no deviation. Just as CBRA is restrictive in areas that make no sense, the static line should be less restrictive in allowing easier appeals based on individual properties.	3/6/2019 10:59 AM
2	I believe the CAMA requirement limiting deck area is too strict and very impractical. A beach house has to be functional to attract renters. You need to have enough space to place lounge chairs and other furniture to enable people to enjoy the beautiful scenery at the beach.	2/22/2019 5:42 PM
3	There was a lack of information from the town on what to do after the hurricane. And please issue citations for parking infractions and unleashed dogs on beach.	2/19/2019 3:34 PM
4	Please address better drainage system. After heavy rains ,water floods area streets and yards.	2/18/2019 8:43 PM
5	Water pressure is a real problem in middle of summer	2/18/2019 4:10 PM
6	Continue with the dune and CAMA repairs. Work on long term dune repair. More parking access near beach access points. Great job with post hurricane clean up.	2/18/2019 1:50 PM
7	The community would benefit from sidewalks and complementary lighting. Please seriously consider this addition for safety purposes.	2/17/2019 2:43 PM
8	It is dangerous to walk along the main road, especially at night. Like Surf City and Topsail we should invest in sidewalks.	2/17/2019 10:40 AM
9	There is literally nothing to do for fun in NTB. Except drink , shop or play minuatue golf. A pickle ball court or bowling alley or movie or even a family community center would be nice.	2/16/2019 2:41 PM
10	Please provide information about beach nourishment	2/16/2019 11:49 AM
11	Need for additional beach renourishment projects as well as rebuilding the dunes. All tax paying residential property owners should have a say and voting rights on town elections and voting.	2/15/2019 6:20 PM
12	Town definitely needs to be more bicycle friendly. Also, please allow some food trucks, and encourage development of more restaurants.	2/15/2019 2:37 PM
13	Re CBRS, NTB needs to have the town removed from same immediately to facilitate availability of insurance and mortgage financing options.	2/15/2019 9:49 AM
14	More retail would be fantastic.	2/15/2019 4:15 AM
15	beach restoration in past good. Hope it continues.	2/14/2019 10:20 PM

16	No where near enough commercial to accommodate the growing population. As a full time resident, there isn't even a place to go and eat in NTB. It is because of NTB's archaic and poorly instituted city wide requirement that the entire town be in the VE zone. As if NTB is smarter than the ENTIRE FEMA map makers all together and understand "wave action" better. Commercial properties become extremely limited by the VE zones. Most of the AE zones in NTB could house a commercial establishment but once the building is FORCED to meet the Town's ordinance of VE zone compliance throughout the town, it is no longer viable. Roads are in decent shape. Bike lane looks under-utilized for the cost, but is a much safer alternative than the previous set up. Paid parking seems a logical step that most other beaches around us have already gone too... should help with beach patrol, cleanliness and renourishment efforts.	2/13/2019 9:46 AM
17	The sand replenishment to beach front properties should include much more sand for the dunes, sea oats planting and a stone wall.	2/12/2019 10:44 AM
18	NTB should promote laws, leaders and regulations that limit global warming.	2/11/2019 9:04 PM
19	Not a fan of trash/recycling pick up in the middle of the week. It doesn't help those of us who visit mainly on the weekends since the cans cannot be left at the road.	2/11/2019 3:55 PM
20	renourish the beach!	2/9/2019 7:21 PM
21	I pay a ridiculous amount of taxes being oceanfront on the mainland, yet I heard the NTB ran out of money for a dune push? I have absolutely NO dune. This is unacceptable,	2/8/2019 4:15 PM
22	I am concerned about how close the helicopters often fly over our rooftops. Besides the deafening sound and at times our homes shaking, each year they seem to get closer and closer. They used to travel along the coast, why have they changed that course?	2/8/2019 2:47 PM
23	I visit NTB often from Colorado and my primary concern are your beaches. It seems like a major beach renourishment is necessary, along with much larger dunes like in Topsail Beach. I am afraid I may have to choose Surf City or TB in the future if the beaches keep disappearing every high tide in NTB. I like spending my money in this town though and would prefer to keep going back to the rentals that I use in NTB.	2/8/2019 1:53 PM
24	Work to lower municipal taxes and sewage cost. No construction near wetlands or maritime forests.	2/8/2019 10:45 AM
25	I had a vacation house at NTB which I sold last year due to a couple of reasons. Reason one is DOGS running loose on the beach, mainly from 7am to 9am. I have called the police Dept. about this numerous times. The lease law is NOT ENFORCED. The beach needs to be patrolled with a 4 wheeler every morning to stop these dogs running loose. The 2nd problem at NTB is the noise from tourist and some yearly renters in the late evenings from 9pm to midnight. I have called the police on this. I got tired of these two problems and sold the house. Its no fun when you are chased off the beach and have noisy drunks making loud noise at night. This is NOT what a beach town should be. Ken Hummel 412-897-6770	2/7/2019 6:31 PM
26	My primary concern is rebuilding the beach abd the dunes.	2/7/2019 4:56 PM
27	More palm trees and street lights at north end . Jetty please	2/7/2019 2:17 PM
28	Houses built in the dunes are an issue, we saw it last September where those dune houses were where the water breaches were on Topsail Road. Code enforcement of derelict trailers and homes needs to be stricter. These are not only eye sores but they are also dangerous and attract animals to the area. Public parking should be paid. As a taxpayer, I am paying for 100 % upkeep of these areas, including the significant litter that is left and the people using these areas contribute zero. If we want to improve the town, it is not sidewalks and trees first, it is removing the unkept homes/lots and only having visitors that are willing to contribute to the well being of the town. Other improvements are needed, but these should be a priority.	2/7/2019 7:09 AM
29	Beach nourishment and maintenance of healthy dunes should be a major priority for NTB to preserve its tourist attractiveness.	2/7/2019 1:43 AM
30	The inlet needs a groin.	2/6/2019 10:04 PM
31	Concentrate on the beach and access so that we have a great summer!!! Thanks	2/6/2019 8:31 PM
32	Please protect our delicate ocean life, our tourism, and beautiful beaches by fighting against Offshore Exploration and Drilling.	2/6/2019 8:14 PM

33	We purchased our property because of the quaint nature and lack of commercialism in NTB. We value and support the small local businesses, but not the big box businesses. Would like to see things grow, but not at the cost of turning into an overly congested, tourist destination.	2/6/2019 8:13 PM
34	Speeding is still a problem north of the 35 mph sign on the inlet rd. Lowd truck muffler pipes are a big problem.	2/6/2019 7:01 PM
35	We had a walkover that was destroyed by Flo.. there should not be a permit required to rebuild what we once had. Rebuilding is hard enough without all the restrictions you are placing on homeowners. At the very least pls expedite permits. Thank you for letting me voice my frustration.	2/6/2019 7:00 PM
36	Need to address the CBRA problem as flood insurance is crazy. if solved it will lead to higher home values and tax basis. Police team is excellent	2/6/2019 6:56 PM
37	I would like rezoning for my home	2/6/2019 6:51 PM
38	Keep up the great work. This is a beautifully wild town.	2/6/2019 6:47 PM
39	Community leaders need to prohibit development along the fragile shoreline or in the marshes. Healthy marshes, dune systems and coastlines are key to protecting existing homes and infrastructure. We've had a place on N.T.B. since 1988, and during that time watched the houses on the north end - which should have never been built - fall into the ocean. NTB is special because of its natural beauty, and we should do everything possible to maintain it. Furthermore, if people insist on building big, expensive houses, then they should also bear the full cost of insuring and repairing those homes - not rely on other taxpayers to do it.	2/6/2019 6:43 PM
40	We need to quit trying to save areas that are a continuous issue and let nature take care of it .	2/6/2019 6:41 PM
41	Reduce speed limit from 35mph to 25mph along NRIR starting from the Tiki Bar to the Beach Club. This stretch of road from Topsail Reef to the Beach Club needs repaved. Add speed bumps to River Drive and River Road to slow down traffic since it cannot be constantly enforced. These two roads are dangerous for homeowners and renters especially in peak months.	2/6/2019 6:14 PM
42	The Town needs to decrease its impervious areas... paving should be via pervious concrete, open space pavers, and/or other permeable surfaces. Asphalt pavement should be limited to roadways and bicycle pathways. The water has adequate pressure; however, it has too high chlorine content. This breaks down toilet gaskets and seals, resulting in wasted water flow. It needs to be addressed. Any improvements to New River Inlet needs to be coordinated with/shared cost with Camp LeJeune/USMC, and reviewed/approved by the US Army Corps of Engineers Beach access off-season (Oct - Mar) with 4WD/AWD vehicles should be allowed for local residents (similar to what Topsail Beach allows). Vehicles need to obtain a special permit; fees will go to enforcement and renourishment of beaches. NTB should establish a CERT program, in conjunction with the National Emergency Management program for same. There are many very talented, well-versed individuals in the town, whose expertise could be of use during adverse weather and/or other emergencies.	1/30/2019 8:10 PM
43	please bring in sand from out in the ocean to restore the sand that keeps washing away north of the high rise bridge	1/28/2019 10:42 PM
44	4 big things: 1) stop the madness with beach renourishment - you can't defeat Mother Nature (and NTB is not responsible for the loss of houses or property - that's why owners carry flood & wind insurance), 2) many residents are 2nd homeowners and come for long weekends; the current trash/recycling pickup does not adequately support us, 3) please please return to the Dog-friendly policies that led many of us to become NTB residents ("under owner's control", no leash, during off-season; leash-only between Memorial and Labor Days; must pick up poop at all times), and 4) to support the turtle's nesting and birthing habits, no street lights at night on the beach side of the road. Many thanks!	1/20/2019 6:42 PM
45	Please work with Congress and the Governor to get an 85 million dollar beach replenishment	1/14/2019 5:28 PM
46	NTB should consider providing public paid overnight parking in a designated secure lot, excluding campers or motorhomes.	1/13/2019 11:40 PM
47	Better coastal/sand/dune replenishment/ replacement ASAP after the storm.	1/8/2019 3:39 PM
48	More bike lanes and sidewalks.	1/7/2019 4:54 PM
49	CREATE A LIST OF HONEST LOCAL CONTRACTORS WHO WON'T GOUGE PEOPLE AFTER A DISASTER.	1/4/2019 2:22 PM

50	When I mark NO OPINION, I mean I do not think I have enough information about the issue to make an informed opinion, and I DO THINK YOU SHOULD PROCEED before providing more information.	1/3/2019 3:59 PM
51	NTB cannot properly take care of or communicate well with it's citizens right now. I do not recommend taking on more projects or policies when we can't enforce the ones we already have. Let's work on keeping dogs on leashes and glass containers off of the beach. Let's repair what beach access/parking areas we have already before we open more of them or start anything else that we cannot maintain. Let's focus on what we have and making it better and the growth will follow. We just have a big mess right now. Praying for the best for our town.	1/2/2019 11:35 AM
52	Next time we need good quality sand . Last time , we got rocks and mud . The beach has not looked the same since. I realize the last beach renourishment helped protect us during the hurricane .I am thankful for that . The quality of the sand is very important , for the beauty of beach . Thank you ! .	12/29/2018 3:52 PM
53	Limit the same house plan being used over and over in a single neighborhood (need diversity): e.g. Wellman Construction. add sidewalks, clean up rocks on beach from last renourishment, hopefully, a better source of sand can be found.	12/29/2018 3:43 PM
54	Explain question 36, CBRS.	12/27/2018 1:04 PM
55	Continue efforts for beach renourishment...	12/24/2018 8:28 AM
56	Some questions were difficult to answer, especially #21. Possibly a 5 point Likert scale would have been easier to use. For clarification, lighting and mosquito control. I think no lighting is best or at least less street lighting, low to ground, and down light is better for environment, night skies, and turtle nesting. There is a light pole next to my oceanfront house that shines light on my backyard and to the beach. Mosquitos, we should not spray any pesticides on or near the beach. Thank you for accepting my input. NTB is a special place and I worry that development will ruin the magic and pleasure of the area and its environmental importance. Will we receive results on how many responses were received and data on responses? Thank you.	12/22/2018 12:17 PM
57	I am very concerned about the rising sea levels and the negative impact on the long-standing residential communities, for instance, along Topsail Road. The seas are rising faster here (Topsail Island and nearby regions) than anywhere else. With the newly built sand dunes, the beach is inaccessible at high tide. What happens when high tide begins break down the sand dunes on such a regular basis, that tides are washing over roads like Topsail Road? Is there a plan to address access to homes before it's too late? Thank you for your time.	12/21/2018 5:45 PM
58	We have owned a condo at NTB for 30 years. It is impossible for us to carry a tent (needed to protect from sun) down and up 3 flights of stairs daily. We are 70 and are facing selling due to your policy of not allowing tents overnight on the beach, Totally agree chairs etc shouldn't be allowed. Can't believe a turtle would be deterred by a 1" pole. You are making it hard on seniors. We worked our whole life toward the time we can spend these years there	12/21/2018 10:27 AM
59	We need representation on the South end of N. Topsail. One Aldermen should be from this area.	12/21/2018 9:40 AM
60	Beach nourishment and NRI maintenance are the two most important issues at NTB. People will not purchase property or visit if the beaches and dunes are not kept up. Same with boat traffic in the NRI. Head-boats have re-located to other inlets due to poor inlet conditions.	12/20/2018 4:25 PM
61	NTB is in desperate need of more eateries. I spend most of my time when there driving to Surf City to dine.	12/20/2018 9:28 AM
62	This town needs to do more to help a person with disabilities To be able to enjoy the beach here on North Topsail Beach	12/20/2018 9:20 AM
63	Glad you are taking opinions. Thanks.	12/18/2018 5:44 PM
64	I made sworn and notarized statements about length of time I have owned my property across the street from the St Regis. Neighbors did the same. The city has refused to address the public access or to maintain it because of dispute with the buyer of the property next to the St Regis. This is a disservice to owners of homes in that area who have no way to access the beach in our neighborhood directly. Very disappointing.	12/18/2018 5:00 PM

65	(a) Extremely tall and narrow homes on tiny lots are an eye sore and pose possible safety risks to adjoining property owners during high wind events. The local building code should be revised to prevent the construction of these eye sores. Possible wording for the code revision would be: "On small residential lots (100' by 100' and smaller) new buildings shall be restricted to no more than two floors of living space." (b) Developers/Builders/Owners have not provided adequate on-lot parking for some large cottages. Renters have begun parking on the sides of the roads and on adjoining properties without permission. The local code needs to be revised to prevent the situation from getting worse. Possible wording for the code would be: "Developers/Builders/Owners shall provided adequate permanent parking spaces on the property in a ratio equal to or greater than one parking space for each pair of bedrooms."	12/17/2018 10:24 PM
66	Slow down growth, people like small town environments, or, control growth focusing on preservation of what you have.	12/17/2018 6:36 PM
67	Please make sure the dunes are rebuilt and please plant dune grass against erosion	12/17/2018 1:28 PM
68	Not sure what the CBRS is, but NTB needs to work with the state to fix the erosion issue at the north end of the island- and keep residents and owners up to date with efforts.	12/17/2018 11:43 AM
69	Beach renourishment is a must with systematic (yearly?) dredging operations. Jetties (groins) need to be seriously considered even though they are frowned upon on NTB and surrounding communities. Bottom line: No beach, no NTB.	12/16/2018 10:43 PM
70	Need to distribute funds and beach re-nourishment across the entire NTB footprint not just on the north end of the island.	12/16/2018 8:19 PM
71	banning all fireworks on NTB beaches esp. during sea turtle nesting/hatching season. Fireworks have no place on the beaches. thank you for listening. please act on this.	12/16/2018 8:05 PM
72	I feel the renourishment the town did three or four years ago was only temporarily beneficial. I would like to see other venues explored which will NOT damage the sea life--can't tell you the number of broken starfish seen, the dolphins disappeared from the waters here, as did the many sea birds we have. And it is not a permanent solution. At ANY time another hurricane or just a severe north wind comes and chips away at the dunes. Supposedly many coastal areas have had good luck using jersey barriers to help keep and divert sands toward the coast and seem to do a better job than the months of renewal that was done four years ago. That was sad, expensive, and certainly not a forever fix. I do think we need more bicycle paths on the major roadways. I would love to see a couple of restaurants and better stores here. There is NO need to have any further keechy beach trinket stores. How ridiculous to have 3 on the same corner. But there are about 6 or 7 of them between NTB and Surf City, Hwy 50. It was assumed when Walmart was being built that would be a full-fledged Walmart--clothing and other items that might be needed. However this island has chosen to have shoppers go and spend money in Jacksonville or Wilmington--whether shopping, going to movies on a rainy day....they take their money away from here. There are some lovely gift shops on this island, but that is about the only quality shopping; and there is little entertainment--movies, ball parks, even aquariums or some nature park are in different cities that take a minimum of 90 minutes to reach.	12/16/2018 7:33 PM
73	Activate plan to keep New River Inlet navigable.	12/16/2018 3:21 PM
74	The need for a bicycle path from the north end of NTB to Rt 210. Also, a "smart" traffic light at the intersection of New River Inlet Road & Rt 210. I have had very long waits making left hand turns during the Tourist Season.	12/16/2018 12:53 PM
75	Need to reduce speed limit to 35 on New River Inlet rd. Where are they rushing to?	12/16/2018 10:36 AM
76	I feel most strongly that Conservation areas should be maintained, and be made more accessible to foot and water traffic. This is to prevent further overdevelopment of NTB, elimination of protective vegetation, and to preserve water quality. I also think that development on currently undeveloped lots should require greater preservation of existing vegetation.	12/16/2018 4:00 AM
77	1) Ensuring a safe bicycle path/lane from from end-to-end of the town would set NTB apart...and add to the quality of life in the community. 2) We don't want to lose the "feel" of NTB...hi-rise construciton and too many multi-unit (three and four) unit buildings would do that. 3) Why are seo oats and sand fences not mandated, or managed by the town through the town budget (even if there is a small tax increase? It appears to me this is a must to grow and protect the dunes, but it's currently optional and uneven at best. 4) We've got to figure out a way to be smarter about building, especially on the north end. Nature will win in the end and we need to understand that.	12/15/2018 11:02 PM

78	Our home 118 Topsail Rd. has inadequate water pressure to the point of no water during certain months and certain days and generally is low spring, summer and fall. We would greatly appreciate attention to this issue.	12/15/2018 3:06 PM
79	Need to address lack of replacement of Dunes for protection for all home owners.!	12/15/2018 2:24 PM
80	Review posted speed limits and addition of speed bumps. Roads more dangerous than ever.	12/15/2018 1:16 PM
81	Not everyone has facebook and I would like to see more information when available on something more than your facebook page. Surf City seemed to be very active on Twitter during the hurricane and I received most of my information from them. The last information that was posted on twitter from ntb is about the 4x4 beach access from July 2017.	12/15/2018 12:06 PM
82	1. NTB needs to notify both the NC and US Congress to remove the Coastal Barrier Resources System (CBRS).....Or, NTB will severely limit and restrict "non-residents" access...CLOSE PUBLIC PARKING AREAS, USED BY DAY-VISITORS, OR CREATE A CBRS-FUND AND CHARGE DAY-VISITORS \$25/DAY TO PARK... UNTIL CBRS DESIGNATION IS CHANGED... DISTRIBUTE THOSE FUNDS TO ALL HOMEOWNERS TOWARDS THEIR FLOOD INSURANCE COST... 2. Do NOT construct a traffic-circle at NRI road and Island Drive...HORRIBLE IDEA.... 3. Ensure that anyone who is registered and identified as a permanent resident or long-term renter has access to their home on NTB regardless of evacuation orders by NTB-officials... Thanks for the opportunity.....Frank #15	12/15/2018 11:16 AM
83	Need to focus more on handicap ramps and access for the handicap and seniors to enjoy the beach.	12/14/2018 3:27 PM
84	Please, please initiate parking fees. The income would help the town so much. A lower rate for NTB residents and higher for no residents. This would decrease crowding too. The income would be so advantageous.	12/14/2018 11:23 AM
85	I'm very very concerned about the front row houses on Topsail road. I think their should be some type of barrier in front and side of the house that are front row. This way we will not loose our dumes again At the beginning of Topsail Rd from 3rd ave down and the 2 street before 3rd ave we lost all dumes I believe we have to secure the beaches that are the front row with barriers in front of the house and on the side of the house . The people should keep their house but must secure the dumes on the front and side of their house. I hope you will please look at this issue. Thank you	12/14/2018 11:14 AM
86	NTB should make an effort to protect the natural resources and fisheries that make the surrounding areas unique. Towns further south are overdeveloped and NTB should recognize that they have an opportunity to be different and conserve their natural areas. This will draw more tourism and recreation as people become tired of poor water quality, crowded beaches, and waterways. NTB has an opportunity to be forward-thinking and focus on a greener land use plan moving forward. Otherwise, NTB will become just like the beaches to the south, which are overdeveloped, suffer from degraded water quality, and are crowded. While this may sound like what needs to be done to bring in more tourism dollars, I challenge NTB to be different and draw people by protecting what people come to our area for in the first place, the natural resources.	12/14/2018 10:45 AM
87	We live on Topsail Road and a new dune was built after Florence. While we appreciate that being done, it's already being eroded because of houses on the dune that should have been condemned after Florence. We would like to see options to sandbag these houses or build the dune behind the houses so that our 2nd row properties aren't continually being subject to sunny day flooding.	12/14/2018 9:07 AM
88	In the summer, renters sometimes do not return trash bins to the house in a timely manner. The Trash Officer issues too many tickets to the homeowners for the trash bin tardiness. It seems to be unfair to tax the homeowners for this bad behaviour. (You cannot make a renter do something they don't want to do unless they get in trouble for it.) Why don't they send the bill to the renter instead? Because it is an easy income generator for the town and only upsets the homeowner not the renters. This harrassment should stop because it is leaving the homeowners a bad taste about the Town government! So when are we getting a beach sand push back to repair the dunes???????????? I pay huge amounts in taxes and am not getting my sand's worth!	12/13/2018 10:35 PM
89	Parking should be metered (paid). Town Tax payers are paying for this and it should be the day trippers. We do not have enough commercial business to make up what it cost the town to maintain these areas. The parking lot on the north end should not be repaired or replaced.	12/13/2018 10:10 PM
90	Increase summer beach patrols to control destructive tourist. Raise fines and enforce them for litter and polluters. Start enforcing garbage pail policy. Charge a daily use fee or pay for parking. Raise rental tax so tourist pay their fair share. Things are getting out of control especially on summer holidays.	12/13/2018 10:02 PM

91	The sound side must be protected from development If NTB is truly serious about beach re nourishment they need to put a moratorium on building along the coastline.Lastly,all NTB employees/ officials in decisions making be required to live in NTB.	12/13/2018 10:01 PM
92	I've read through the documentation on CBRS but I still don't understand how it affects NTB and me personally as a home owner. Would really like NTB to send out a simple tutorial/information to haelp educate home owners. Thanks for the survey!	12/13/2018 5:23 PM
93	Please restrict rebuilding in flood areas.	12/13/2018 12:01 PM
94	1. NTB needs a continuous beach re-nourishment program which is funded from commercial taxes as well as county, state and federal grants 2. Expand the tax base with selected commercial development. 3. Publish Town meeting minutes within 10 business days after the meeting 4. Flood zone re-designation is long overdue	12/13/2018 11:34 AM
95	I once owned a condo in Playa del Carmen, MX and they buried all the telephone/ electric lines rather than continue to experience unsightly poles with transformer boxes & wires . Can we consider this, especially with new construction?	12/13/2018 10:06 AM
96	light, water, air pollution griwth must be stopped, along with trash - non biodegradable waste from hurricane damage. limit greed & development now. examples of better barrier island mgmt are Jekyll island in Georgia or Harker Island off of Swansboro North Carolina.	12/13/2018 9:22 AM
97	We spend 3 months (January February & March) at NTB this is our 5 year and hopefully someday day make it our permanent home. Absolutely love it there. Thanks for all of your hard efforts in keeping it a beautiful place on earth. See U soon. Don & Kathy from Altoona Pa.	12/13/2018 8:35 AM
98	I do not believe we need anymore tourist shops. There are too many here right now in Sneads Ferry. Enough is enough.	12/13/2018 8:16 AM
99	Charge visitors to come across the bridge but allow residents to come across free. Charge visitors to park.	12/13/2018 12:51 AM
100	Do away with the restrictions about beach equipment used by owners and residents	12/12/2018 11:50 PM
101	Do away with restriction for beach equipment for full time resident property iwners	12/12/2018 11:49 PM
102	A nominal daily charge could be charged to day visitors who park in public access lots but no meters! And no more taxpayer \$\$ needs to be spent on moving the Inlet or trying to salvage the homes on the far north end... it was a total waste in previous years!!	12/12/2018 11:15 PM
103	We live at the st Moritz, just moved in aug 14 of this year and the pool is gone now. We are concerned for property value. We moved to ntb because it was amazing and still is. A bike path and sidewalk would be nice and it would be convenient if we didn't have to go to surf city for social events and even Saturday night dinners. Thank you for all of your efforts!	12/12/2018 10:55 PM
104	BUILD THE GROIN/JETTY AT NEW RIVER INLET	12/12/2018 10:33 PM
105	Bike paths sidewalks needed	12/12/2018 10:03 PM
106	NTB should stop building in areas prone to flooding, deal with homeowners who have trash in their yard, add more Christmas lights and continue to keep NTB a family friendly beach town,	12/12/2018 9:51 PM
107	We need the help of the town, state and federal government to help repair the dunes, plan for better sand management and beach protection from storms and rezone to cover everyone with FEMA insurance.	12/12/2018 9:47 PM
108	We like the small town, laid back, local business atmosphere.	12/12/2018 8:53 PM
109	My name is Lee Gordon my address is 4324 Island Dr. I have owned this house for almost 20 years. I do not rent my house and I would encourage NTB to enforce the parking polices that the ORV board that has issued.	12/12/2018 8:46 PM
110	Keep NTB more residential not "touristy" .	12/12/2018 8:31 PM
111	what is the plan for beach restoration following hurricane florence	12/12/2018 8:16 PM
112	I really think beach renorishment needs to be done regularly and if that means taxes go up then that is necessary.	12/12/2018 8:04 PM
113	Clean debris from beach , we can't wait until refurbished dunes are done	12/12/2018 8:02 PM
114	Water pressure is literally nonexistent during peak times. It's really awful. This needs to be corrected. As a full time resident we find this extremely deficient	12/12/2018 7:42 PM

115	Areas that invested in wide, flat beaches and natural dunes fared far better than narrow beaches and high, constructed berms during Hurricane Florence. Dune reconstruction should avoid burying vegetation on the seaward slope.	12/12/2018 7:04 PM
116	Beach renourishment needs to be done several times per year and allow residents to do it when they see fit.	12/12/2018 6:16 PM
117	I think there should be more handicapped access to the beach. I also think the that these need to be taken care of. Most are useless! I think the town planners should all get in a wheelchair and try to use them! There is so much sand on the ramp that it's impossible to use!	12/12/2018 6:13 PM
118	Oceanfront building should be severely restricted by the town and the town should enforce CAMA setbacks.	12/12/2018 6:10 PM
119	personally, I'm most interested in pursuing the bike path, particularly from town hall to the north end. That part should be completed first, before heading south	12/12/2018 6:03 PM
120	It would be nice to have a crossing painted on the street at Utopia st.	12/12/2018 5:52 PM
121	the city has shown it is incompetent to deal with natural or man made disasters. Time and money needs to be used for planning, response and recovery. Water capacity is totally inadequate when a large number of people visit. Development of any kind should not be allowed until adequate water can be delivered during peak times	12/12/2018 5:26 PM
122	It is important to rebuild the dunes and work to sustain them	12/12/2018 5:25 PM
123	NTB needs to add pickle ball courts, as this game is one of the fastest growing activities in the US. NTB needs to develop one or two small commercial areas for restaurants, shopping, and bars. On a side note, the response time and web update time during Hurricane Florence was horrific. You need to hire someone, even part time, who is internet savvy and capable of updating conditions hourly. I realize that communications were down, but that is not an excuse considering the accessibility of the web from virtually anywhere.	12/12/2018 4:55 PM
124	I feel that NTB is best served protecting our resources and limiting future growth. Our efforts should be towards protecting the quality of our beaches and waters. Let other towns shoulder the commercial burden and leave NTB the residential paradise we bought into 12 years ago. I think natural spaces should be protected at all costs. I am grateful for the opportunity to share my opinions ... thank you	12/12/2018 4:44 PM
125	We should eliminate the numerous trailer parks. They are an eye soar and devalue the land that could be used for better homes, parks or commercial space.	12/12/2018 4:33 PM
126	We bought our house in NTB because of the level of development (sparse) and the types of development (mostly single-family) in the town. Therefore, we don't support anything that risks a development free-for-all. While I am not sure exactly what needs to be done, but the trash collection is not optimal.	12/12/2018 4:29 PM
127	ABSOLUTELY the first thing that needs to be addressed is beach refurbishment. Many owners are in limbo to repair their homes waiting on the beach to be stabilized. In my case, the house has shifted in the 3 MONTHS since the storm, and now requires 30,000 - 50,000 additional structural repair. Needless to say this is a HUGE issue for us and it is only exacerbated by the fact that NTB & CAMA won't allow homeowners to do their best to save their own homes. Meanwhile NTB continues to meet, discuss, block, control, plan, but isn't actually DOING anything about this problem. All the restrictions begin to sound like excuses. I'm all for saving the turtles, fostering vegetation and wildlife, etc, but If my house falls in the ocean, it will hardly matter to me anymore.	12/12/2018 4:14 PM
128	water pressure is a huge issue. this needs to be addressed ASAP	12/12/2018 4:02 PM
129	hurricane debris removal was and still is unacceptable. I have to pay to remove my debris because you wouldn't pick it up even though it was placed by the road in a timely manner.	12/12/2018 3:35 PM
130	Beach renourishment should be our number one concern	12/12/2018 3:28 PM
131	The town should have two priorities, restore and maintain its beaches and protect its environmentally sensitive areas by not rezoning or developing its present conservation district.	12/12/2018 3:26 PM
132	Keep aggressive that tents and umbrellas are removed overnight. Thank you.	12/12/2018 3:24 PM
133	Efforts should be made to establish a system of charging for day use of the beach(s) to assist in costs to maintain and preserve the beach(s)	12/12/2018 3:22 PM

134	Should have some type of periodic large piece trash pick-up. Should continue scheduled regular beach renourishment.	12/12/2018 3:20 PM
135	Please stop ARmy Corp Engineers from dredging New River. For years it has been obvious to ocean front home owners that erosion increases dramatically when this takes place! Can we build a jetty or cement fishing pier at New River Inlet? Charge to use it and for parking to help subsidize it!	12/12/2018 3:07 PM
136	I would love to see rock jetties built out into the ocean, which could fight erosion. Also, it would be nice to have more "placemaking"...like beachy lanterns/streetlamps lining parts of the street, palm trees, and banners...kind of like Folly Beach, SC.	12/12/2018 3:05 PM
137	You have covered everything I can think of.	12/12/2018 2:51 PM
138	NTB needs to have code enforcement patrol on the beach every morning from 7 am to 9 am for the people who let their dogs run without a leash. Almost every day when I go down to the beach dogs are running around as the owners walk ahead no noticing their dogs going to the bathroom and not cleaning up after them. We sold our house in September. This was one of the main reasons we sold. We did call the cops several times about this. but the town never was out on the beach enforcing this issue.	12/12/2018 2:49 PM
139	NC's Mountains-to-Sea Trail has a substantial section through NTB. It is the official state trail of North Carolina. It needs to be well supported with signage and off road paths such as the existing one, which it uses. In addition, future consideration of adding a pedestrian walkway outside the guardrail across the high bridge.	12/12/2018 2:43 PM
140	Thanks for making North Topsail Beach such a great place.	12/12/2018 2:18 PM
141	Town should better enforce the beach equipment overnight rules- one day start from the south end- next day start at the north end After hurricane do more beach replenishment even if it would raise taxes . Make and enforce more distance from ocean dunes and any building lot	12/12/2018 2:09 PM
142	All visitors should have to use the public parking and not be able to use sidewalks and residential side streets. NTB should be a non smoking beach.	12/12/2018 2:08 PM
143	Lifeguards!	12/12/2018 2:06 PM
144	put the dunes back in when the properties are. The properties are more important than the public access. Charge money to access the beach. No to raising the taxes	12/12/2018 1:56 PM
145	NTB should consider changing its Land Use Plan to allow for Con-D property that meets upland & setback requirements by CAMA & The Corps as buildable property to be re-zoned. Otherwise, with the continued loss of oceanfront properties from erosion and storms, NTB will need to continue to raise taxes to make up for the loss. The taxes are already too high.	12/12/2018 1:49 PM
146	A bike path at the north end would be most helpful	12/12/2018 1:48 PM
147	We have go see to rezone the areas designated as CBRA zones. It makes no sense that my home is in a CBRA zone and homes just down the road are not. Also, we absolutely need to replenish the beaches with sand. The beach is a good foot or more lower than it used to be before Florence, so there is now essentially no soft sand on the beach in front of my home. It is very sad to see.	12/12/2018 1:47 PM
148	Leave the inlet alone. No groin. Tear down junk houses that cannot be salvaged.	12/12/2018 1:46 PM
149	They should Not Allow the sale of properties that are Non Buildable !!!!!	12/12/2018 1:45 PM
150	I was unable to answer some of the questions because I didn't know where we initially stood. For example number 15- I don't know what the established setback standard is so how can I say if it needs to be changed? More background on some of these questions would have been helpful. I'd like to see NTB moving down an environmentally friendly path since we will be directly impacted by climate change.	12/12/2018 1:42 PM
151	Land is limited on the North end as well as tremendous sand/beach erosion. The integrity of the beach is most important and development should end. There is a tremendous amount of greed to build there, yet lots of the homes already built are still empty. Please preserve what is left of the north end.	12/12/2018 1:35 PM
152	I've only been a homeowner in NTB for a few months. My main complaint is the trash and recycling schedule. I am usually only able to visit on the weekend 2 or 3 times each month, and trash/recycling pickup is in the middle of the week. I end up having to take my trash and recycling back with me to my primary home because I have yet to be here on a Wednesday. It is extremely frustrating to pay for a service that I absolutely cannot use because of the service schedule.	12/12/2018 1:24 PM

153	Need sand not just on public beaches, but in front of oceanfront homes. Especially since we live here and pay taxes. Should consider a tax on vacationers coming to NTB. Could use this money to keep the 11 miles of our shoreline with sand and the homes on the inter coastal waterway assistance with any erosion issues they may have	12/12/2018 1:23 PM
154	I'm nervous about answering some of these questions because I think the answer could be viewed as in favor of or against, when then opposite is the intention. One thing is the housing density. If you built high density/ that is more green, but only if the high density is offset with preserve areas that keeps the natural plantings, geography, etc... if the entire available land was low density, then it's too much. For example, a 100 unit condo Facility would develop less land than a 20 house low density plan- but would allow more units to be available and the resources used wisely to preserve more of the island. For renourishment/ I believe it is necessary and critical for the region. However. I don't agree with the groin or the massive preservation of aging inlet housing that the sea is overtaking. I agree with charging visitor parking, but maybe a small diameter around the beach would be except so those without ocean front access would be able to access . Or reduced resident permits on a yearly basis. I like the idea of A convenience store or a coffee shop/cafe- but not whole shopping centers and large commercial development. The bike paths and rentals could be good/ and what about electric car recharge stations?	12/12/2018 1:20 PM
155	The special status of the history of Ocean City Beach should be thoughtfully reviewed and considered for a special section relevant to the Land Use Plan.	12/12/2018 1:12 PM
156	Bike-walking trail to N end of island	12/12/2018 1:11 PM
157	Have lived here since 1989. Want NTB to remain residential and not commercial. Too many tourists in the summer. Need to increase the number of trash bins in houses that are rental during the summer. Tired of seeing trash overflowing in rental units that only have one trash bin. Drop speed limit to 35. Cant get to beach in summer from the sound side due to fast traffic.	12/12/2018 1:11 PM
158	The houses "on the beach" were the main source of extensive erosion. Where they weren't present, for the most part the engineered dunes held. There are no dunes or protection in front of these houses and they are costing tens of thousand in clean up effort. A plan should be put in place to buy out these properties and tear them down	12/12/2018 1:10 PM
159	Please do not raise taxes on locals or residents. If funds are needed, we should try to acrue these from visitors whether it be parking passes, season passes, boat ramp access passes, etc.	12/12/2018 1:04 PM
160	Better communication on the plan to restore our dunes and beaches.	12/12/2018 1:00 PM
161	The beach and water is NTB value. We must protect and rebuild these wonderful natural resources with no exceptions.	12/12/2018 12:58 PM
162	I would like to see the public walkways to the beaches maintained. I would like more restaurants that are family friendly and have reasonable prices.	12/12/2018 12:57 PM
163	I am in full support of beach/sand renourishment and hardened structures at the New River Inlet. I believe this will allow better protection for homes at the inlet as well as reduce the amount of dredging required.	12/12/2018 12:51 PM
164	NTB should BAN smoking on public beaches. My family spends countless hours picking up garbage and cig. butts left behind by careless people. Also, the question regarding time spent at NTB does not cover 2nd home owners, we listed "summer" because it was the only option that fit, but we spend all summer PLUS several more weeks per year and almost every weekend.	12/12/2018 12:49 PM
165	Need to be more proactive and aggressive with beach renurishment.	12/12/2018 12:48 PM
166	We will need more signs posted for the upcoming tourist season on all the berms to keep off the big piles of sand, (now that our dunes are destroyed) or there will be a fine.	12/12/2018 12:48 PM
167	We plan on moving there permanently October 2019.	12/12/2018 12:47 PM
168	Stop wasting our money trying to save the far end of the island. Let nature take its course	12/12/2018 12:43 PM
169	If not already a policy, first and second row houses should be required to maintain and take part in dune management and plantings in front of their houses and around their houses. Either through additional taxes or assessments. A tree planting plan should be implemented throughout NTB to start to create a more lush environment. Minimum architectural standards should be required on all new houses and rebuilds (if not already in place). Trailer parks should ultimately be phased out by encouraging higher end development opportunities in those areas.	12/12/2018 12:43 PM

170	I personally think that TOPSAIL Island has more than enough accommodations for people. I sincerely believe the island has been over developed. But too late now. Topsail is all about fun. So the most important thing is access to the sand and surf. As an owner I am looking forward to our beautiful beach returning. We don't rent and enjoy our beach house at least more than 50-60% of the time. It's just so beautiful and serene. I think the beach needs nourishment ASAP. We also help with fences and the planting of sea oats. Thanks for asking. Mary	12/12/2018 12:42 PM
171	I would like the Town to contract for trash pickup/recycling on Saturday throughout the year. Wednesday is a bad day for long weekend owners of property and renters during off season.	12/12/2018 12:41 PM
172	PLEASE truck in sand to replace/rebuild our dunes and beaches	12/12/2018 12:38 PM
173	NTB really needs to address the beach erosion as a top priority. Replenishing the dunes is not sufficient.	12/12/2018 12:35 PM
174	Beach restoration efforts following Hurricane Florence should take top priority and be done as soon as possible. Public input on change to Cobra mapping in Congress should be promoted on website.	12/12/2018 12:33 PM
175	I have owned here for 16 years. I am appalled by the removal of maritime forest for development. We see the implication with the flooding and destruction of Hurricane Florence. There needs to be a halt on development in areas on the ocean and the sound. We want to remain classy and not become a tourist trap. Year-long residents have chosen this more isolated and family friendly life style.	12/12/2018 12:32 PM
176	At this point, the biggest issue is restoring the beach and dunes from the hurricane. I get it, but my flood insurance rates are outrageous and the my policy is written in such a way that claims are highly unlikely. Florence was close to a worse case scenario for flooding with the location in relation to NTB and the stall that pummeled us for days. Even with that my oceanfront property did not have a compensable claim yet we pay an incredibly high annual premium.	12/12/2018 12:32 PM
177	I believe the town of North Topsail Beach should actively seek to protect the New River Inlet and make a groin area in there to protect the Northern end of the island from beach erosion. The town also needs to improve their communication during emergencies with particular reference to this hurricane Florence and the lack of communication from the town about the situation on the island and other Communications that would be pertinent for people who own property here. It appeared to me that the town of Surf City was better able to communicate to their people then the town of North Topsail Beach was able to communicate with their people. Press conferences were held by the town of Surf City and state officials it was very disheartening not to see or hear from someone from the town of North Topsail Beach. I understand Communications will be blacked out for a while but somehow the town of Surf City was able to communicate. Perhaps someone from North Topsail Beach should have asked for permission to get our message out on situation here on the island from Surf City. Once Communications were reestablished it was spotty at best and definitely needed to have more content and more frequent communication	12/12/2018 12:23 PM
178	Dunes need to be replaced immediately. Seems like Surf City has accomplished so much more since Florence than NTB.	12/12/2018 12:21 PM
179	Frustrating that there are so few restaurants in NTB. Town should do what they can to encourage opening of new restaurants.	12/12/2018 12:20 PM
180	It would be nice to have a few good restaurants in NTB.	12/12/2018 12:20 PM
181	The town failed to act sufficiently to protect homes properly in advance of Florence. The gap in the dunes at the beach access at MM19 was not sealed as it has been done prior to other storms. As a result, there was significant flooding which damaged my home. In addition, I believe the gap in the dunes enabled much more significant erosion and damage to the adjacent dunes by allowing an immediate breach point for flood waters.	12/12/2018 12:20 PM
182	The value of NTB is its distinctive difference from other beach communities with commercial tourist shops. The island is an escape from every other community on the mainland. Policies should protect the environment. Sea walls and barriers increase erosion and should not be allowed for grandfathered structures. The slow destruction of structures by the ocean endangers adjacent property and people and a policy should be developed to state when action will be taken. All these may be already an active policy. The protection of the environment should not come at the expense of current policy that allows piers and beach access for homeowners.	12/12/2018 12:20 PM
183	develop clear, capable plan for north end or abandon it and aid owners to get out	12/12/2018 12:16 PM

184	please continue your efforts to keep anything left on the beach overnight to be removed and work with condos and homeowners to keep low or no lighting on the beach at night.	12/12/2018 12:16 PM
185	Not in favor of pushing dunes from seaward side as it destroys the vegetation struggling to come back. Our dune held during Florence because of vegetation. Continue supporting planting of sea oats.	12/12/2018 12:15 PM
186	Bike paths are too close to the road. Would be nice to have a section of grass between bike/walkway paths and roadway.	12/12/2018 12:11 PM
187	The Primary Focus should be Beach Re-nourishment; other improvements should be SECONDARY!	12/12/2018 12:11 PM
188	Low water pressure is a problem every day in the afternoon during the summer. The system clearly needs more capacity to handle the increased demand.	12/12/2018 12:09 PM
189	Most people move to or visit North Topsail Beach for the BEACH. We must insure that beach erosion is addressed. North Topsail beaches are diminishing while sand is moving to the south part of the island. We need to work with the Federal Government to construct a barrier that reduces erosion, or there will be no north end of the island!	12/12/2018 12:09 PM
190	No offshore drilling, support dredging water channels, main concerns	12/12/2018 12:07 PM
191	Number one issue to focus on is removal of the CBRS	12/12/2018 12:01 PM
192	The flood insurance issue badly needs to be resolved	12/12/2018 12:01 PM
193	Thank you for allowing me to take the survey. I am an owner/non full time resident today. However, full time residency is in my near future.	12/12/2018 11:36 AM
194	1) Most important. Protect the Conservation Districts. 2) No more free public parking for day trippers! Why does the town spend money on free parking when day trippers are a drain to our finances, requiring added police, fire, emergency, and trash services? 3) make sure the voters get to approve and further expenditures on beach nourishment. The voters have voted against it, but our government keeps wasting money on it.	11/25/2018 8:35 AM
195	There should be a fee for public parking at the beach. This would more than cover future dune replacement and replenishment. I live in NJ and there is only paid parking by the beach areas.	11/21/2018 5:37 AM
196	CBBS repeal and shoreline protection are the most important items to the future of the town. This is especially true post Hurricane Florence. We have enough parking for day trippers. Would love to see pay parking for day trippers but understand that it is not politically possible. I see the NRIR bike path is an extremely low priority. It should only be considered if it can be built in a manner similar to the path on NC 210. If the design requires multiple crossings of NRIR or substantial intrusion/encroachment into the right of way, the idea should be abandoned. Bikers currently don't use the existing portion of the path on NRIR. It is used by walkers and joggers only. This makes continuation of the current NRIR path a waste of money.	11/18/2018 10:48 AM
197	would like to see more efforts in beach nourishment including more vegetation, higher fines for walking on the dunes/illegal parking and sea barriers to increase the amount of sand at the most northern part of the beach. Otherwise NTB is a pretty special place.	11/18/2018 10:30 AM
198	Shipwatch Condo needs to be removed from Cama. Our infrastructure was in place before designated cama area was implemented.	11/17/2018 1:29 PM
199	We need to charge people (non residents) for parking at ALL PUBLIC BEACH ACCESS. No free parking!!	11/17/2018 9:09 AM
200	No input for question #39 as I don't know the impact of CBRS. I DO, strongly believe we need to do what it takes for NTB to become a FEMA zone!	11/16/2018 6:17 PM
201	We have been owners of a condo at Shipwatch Villas in NTB for 26 years, and now spend 6 months of the year there. We have seen the NTB change physically, but like the fact that it is still family oriented, non-commercial, and friendly, and will do everything required to keep it that way.	11/16/2018 3:11 PM
202	Future rebuild of dunes	11/16/2018 3:02 PM
203	I feel one of the main priorities is to finish the Multi Use Path Project.	11/12/2018 4:43 PM
204	Please tax the owners, work with the county and state, and lobby congress to replenish sand, build sand fences, and plant dune grass so all lots will be build able. If necessary, sue to get compensation to do this work as a result of the new river outlet Army Corps dredging and engineering.	11/12/2018 3:01 PM

205	I've noticed that NTB utilizes social media as an official way of communicating with property owners but limits access to comments made by property owners on the same social media sites. I believe that this is a violation of state sunshine laws.	11/9/2018 5:39 PM
206	Dune replacement and removal from CBRA are my household highest priorities even if taxes go higher. I'm paying \$9,000 per year for flood insurance I will never need! That's a lot of money that could be spent for N T B projects!	11/6/2018 5:15 PM
207	The roads are very dangerous to walk, jog or bike on. Many people enjoy these activities as well as walking and walking dogs when on vacation. I believe this is one of the few negatives about vacationing on north topsail. A good convenient store and small shopping complex would also be nice midway up the island from the high bridge.	11/3/2018 6:06 PM
208	Militant monitoring of trash cans being pulled back from roadway for vacationer-taxed rental properties is inappropriate.	10/23/2018 10:18 PM
209	1. dune openings were not sealed prior to Florence, adding to overwash problems realized. 2. Setback changes in the past 5 years adversely affected the dune system and facilitated cramped and risky building on some previously un-buildable lots.	10/23/2018 4:14 PM
210	The Town invariably gets into the blame game when it comes to protection of the beach...blame the people who bought into a fragile area..but the reality is..this is within the town's purview to manage..the town sets the building codes, allowed building in fragile areas..and yet the public and town officials blame people who bought these structures. Over the years, I have watched the town turn a blind eye toward development within the town's boundaries in areas that are susceptible to flooding. We all know where those areas are and yet..somehow, someone got a building permit to build a house in an area where the hurricane has cut a new channel. Land use also includes monitoring for common sense land use and denying developers and builders permits for areas that will inevitably have destruction due to storm damage. Does the land use plan include such the town's plan for protecting these vulnerable areas and areas like the north end. If you lose the north end, it is not just the beach club that goes..River road properties, Topsail Dunes, and all those adjacent streets will be inaccessible if the road is washed away up there. The land use plan needs to include all areas of the town including the challenged areas	10/23/2018 3:37 PM
211	Provide funding to OUTS for transit services especially for seniors.	10/23/2018 9:02 AM
212	Handicap entrance to beach is non existent in residential areas.	10/22/2018 8:50 PM
213	Need year-round garbage collection on Saturdays.	10/22/2018 6:26 PM
214	CBRA is a big issue. Continue to develop NTB as a alternative to the commercial beaches that dot most of the bigger beach towns. Limit retail brand outlets and encourage small local shops. Would be nice if the three towns could get together and develop a small bus line that runs the length of the island.	10/22/2018 5:20 PM
215	I think the encouragement of business to entertain our tourists is a good thing as long as they don't build somewhere they shouldn't. Nobody should allowed to sue the town if they buy a property or build one that gets washed away in a storm, that's the craziest thing...ever. So whatever it take to prevent that from happening again. I genuinely feel for those who have lost their homes to the storms, especially those that were originally second and third row homes. But I believe we still need to maintain the berm infrastructure to the best of our ability. But new constructions definitely do not need to be allowed to get to close to them and if they do I certainly don't want to pay for it when it washes away. One thing I would love to see is a bird watching tower added. Anything that we can add to the community to give our tourists something to do is a good thing. We really don't have that much at this time for them to come here for except the beach. And if I'm dreaming, can I dream in some softer water(it's better on appliances) with more water pressure? But the fact that it doesn't smell like sulfur the way beach water did back is the day is a good thing!	10/22/2018 5:10 PM
216	*37 better signage at beach crossovers to keep people off the dunes; then enforce it. Charge them enough to replant the dunes with protective covering! Or charge them enough to provide the sand fencing to protect they area they climbed all over! Then use payment for day parking or whatever time ... to continue to keep public areas in shape! We pick up and clean the beach and parking lot after those who use it and don't care! It's time we had some help in this.	10/22/2018 4:56 PM
217	We chose NTopsail because of the lack of commercial, hotel and high rises. We would hate to see that change.	10/22/2018 4:49 PM
218	One of the best things about NTB is that it is a quiet little, family friendly beach town. Let's keep it that way.	10/22/2018 4:30 PM

219	Reduce and enforce speed limit on NRIR to 35 mph. Keep paradise safe for all.	10/22/2018 4:24 PM
220	We need to enforce the laws of our beaches and roads. We need a bike and pedestrian walkway, but enforce it when not used. And a big yes to charging visitors to use our parking spaces seeing that they walk in the sand dunes, leave trash, and dig holes on our beaches and walk away from them, so we should make a profit for their no care thinking!!!!!! Our police should be allow to enforces our laws by applying fines	10/22/2018 4:23 PM
221	People should pay to use our beach (day trippers)!!! I pay property taxes stop letting them use it for free!!	10/22/2018 4:08 PM
222	The Planning Dept. Is not progressive at all. There needs to be adequate parking for all the approved homes. They advertise sleeping 12-15-20-28 people and they have parking for 2-3-4-5 cars max. The short termers park all over the place in the right of way or anywhere they please with no repercussions from the Police Dept. There is a huge safety issue not having paved aprons at ALL driveway entrances. It does not count against the impervious on the lot as it is in the public right of way. The planning director is doing the bare minimum to keep her job in my opinion. You should ban all smoking and vaping from town owned facilities..	10/17/2018 8:41 AM
223	as weekend visitor (homeowner) it is difficult to comply with rule to leave recycle day before (Tues) and bring in next day after pickup (Wed/Thurs). Perhaps rather than issuing fines homeowners could sign up for containers to be brought back to house (\$10 each time? monthly fee?)	10/16/2018 4:34 PM
224	The town should stop wasting money in phase 1 and provide the rest of its citizens with beach nourishment instead of spending all its money on only a few at the North end	10/14/2018 9:29 AM
225	The north end keeps consuming most of the money . The neighborhood south of town hall needs renourishment as well . I feel no efforts are ever focused on us .	10/11/2018 9:19 PM
226	The residents of NTB should come before visitors. Also fines for walking on sand dunes should be enforced. Residents know why its imperative not to walk on the dunes but visitors dont seem to care. The sand bags are an eyesore and didn't even work. I hope when u decide on a new plan it will be more thoughtful.	10/10/2018 7:14 PM
227	1. Water pressure; 2; Lighting; 3. Bike Paths; 4. Community Center	10/10/2018 6:47 PM
228	Deb Hill is an incompetent, power mad waste of space	10/7/2018 12:34 PM
229	Beach re-nourishment in light of Hurricane Florence is one of the most pressing issues from my perspective. My home is far from ocean-front but there is currently little to no beach at high tide which will impact all home owners and visitors. This is in addition to having no dune protection from future storms that will impact the town.	10/5/2018 12:05 PM
230	We need to establish a policy for pushing sand after a storm, finish the beach nourishment project and establish & enforce laws for keeping people of the sand dunes.	9/29/2018 7:50 AM
231	Make sure town infrastructure can support the number of homes built.	9/22/2018 6:19 PM
232	Code enforcement: Dogs run at large on the beaches. Sound-side homeowners bring them to the beach and let them run wild while homeowners are jogging or whatever. I have seen several dogfights and dogs running up to children. They also run underneath the decks of oceanfront homes to use the bathroom while owners are not in sight. We really need to enforce the fines for unleashed dogs. They let them run and play in the ocean unleashed, as well. It seems to get worse every year. The word is out that they can run at large at NTB. Thanks for the survey.	9/21/2018 12:10 PM
233	The town allowed those who had homes on the ocean side of the dunes to have no barriers either under or behind those houses. As predicted the tidal surge washed through these natural channels covering the roads and destroying dunes from behind. Are you people out of your mind!?!?!	9/19/2018 8:59 AM
234	There is little credibility for the bureaucracy & honesty within the city structure. They have focused on expanding their public empire and spending has been irresponsible, lack of responsible fleet management, to many department assistants, fostering an entitlement culture among employee's, way to large of public staff, to many chiefs who think day trippers shouldn't have to contribute to the cost of supporting their activities, such as trucks, employees & 5 gallon cans to pick up the trash daily produce. Put the employee's to work. Their TOTAL COMPENSATION supports much higher productivity.	9/18/2018 10:48 PM
235	Need more sccess to beach for residences particularly around St Regis	9/17/2018 6:36 PM
236	NTB should more vigorously seek Federal Flood Insurance.	9/15/2018 4:20 PM

237	I believe that the CBRS should be modified to represent high quality continuous coastal barriers and that our community is not represented by such barrier as it is not continuous. I still believe that the CBRS has its place, just not in our particular community.	9/15/2018 1:22 PM
238	Recompense for day visitor parking isn't ideal as that will detract visitors but the current lack of funding from Onslow County and added taxation on home owners to fund operations and improvements for NTB places the funding obligation on home owners. There needs to be a vehicle to obtain funding from day use visitors to compensate for the services provided them.	9/15/2018 9:55 AM
239	Flood insurance is not regulated fairly. Properties beside each other are rated differently even though one may be built sooner with the strict building codes the older one has a better flood insurance rate.	9/15/2018 8:28 AM
240	First the NTB Police department do an outstanding job of patrolling the town. I live on Osprey Dr. and they are up and down that road at all hours. NTB Police are top shelf. Definitely parking and seasonal pass charges will accomplish two important things: a revenue stream and keep those people who don't respect the beach off the beach. Some of the revenue raised can be used to increase and better outfit beach patrols. NTB has some of the most beautiful beaches and are even visited by sea turtles. NTB is a magical place and every effort should be made to keep it that way and improve on it! thank you.	9/13/2018 1:58 PM
241	The beauty of Topsail Island is that it is a throwback to past times. It's not overdeveloped, it's family friendly, and it's safe. Please do not let the island turn into an over-developed atrocity like Myrtle Beach. Keep Topsail simple and family friendly.	9/13/2018 1:44 PM
242	On island boat ramp near surf city / NTB with a maintained channel to ICW Access to permuda island via a dock with tie up capabilities for primitive camping and day trips	9/12/2018 12:09 PM
243	I have spoke to Mr. Barry Birk and Ms. Oxley in regards to having no signs/fines for destroying the beach. I counted zero and have pictures to prove it. Here is a copy of my email. I am a teacher and trying to improve or community. Good Day Ms. Oxley, Thank you for adding me to the Sunshine List. I love North Topsail Beach and have lived and surfed here for the past two years. It has been a wonderful period of my life. I have the honor and privilege of teaching and learning from the Middle School students at North Shore Academy. We would like to humbly ask for the assistance of you and the staff at Town Hall. Government is our curriculum for the upcoming month of September. Our objective is show them that change can start on a local level with even a group of 12 5th-8th graders. I have passion for making things better and the belief that these children can do anything they can visualize and conceive with hard work. Belief in themselves and a purpose. Our other passion is the Ocean and all things associated with it. People litter the beach with many things. We as a group would like to petition the Town to add signage(at the very least) and possibly a new law/code. We found that NTB protects the dunes but neglects the Beach. Simply put people dig holes both big and small. I have actually ran into one and fractured my leg in the past. I am sure I am not the only one. They dig rivers on the inlet and elsewhere that directly effect the natural formation of sandbars that marine life rely upon.Sand Castles, holes and rivers/motes are a danger to citizens, visitors and wild life. THEY DO NOT FILL THEM IN or LEAVE THE BEACH THE WAY THEY FOUND IT. Sometimes I go for a walk and I feel like I am walking on the moon dodging craters and the like. I have left a message with Code Enforcement today. Where do we start? Who can we talk to? What would we need to do to petition the town for some signs at the very least informing beach goers to leave the beach how they found it, fill in your holes and respect what is the beauty of NTB? If you would please forward this email with my information to whom this may concern or may be of service. It is a win win situation. One NTB gets a safer cleaner environment. Two these amazing students can make a small difference and see the result for years to come. This will give them a priceless experience of good citizenship, social/environmental activism and understanding that our Government cares if they get involved. Finally I would like to thank you for your time and the effort of you and Town Hall in advance. I anticipate this to be an amazing experience regardless of the outcome. I hope this message has found you well. Kind Regards, Elliot S. Stevens North Topsail Beach Resident and Teacher (917)224-0324	9/11/2018 4:53 PM
244	I think a bike/walk path spanning the entire island would be a huge tourist draw along with making the island safer for pedestrians and cyclists. I also think the unused land between Marine Drive and Sea Gull Lane, would be a great site for a second public park and small retail center.	9/10/2018 10:52 AM
245	Please focus on removal of the CBRS	9/10/2018 10:36 AM

246	My biggest concern is that NTB has not completed all phases of beach renourishment. I purchased my property in 2004 & the town has been "talking" about it since then. Yes phase 1 & 5 were done which qualifies us for federal \$, however we must complete all phases to ensure Federal backup \$ when the next storm hits & the island is demolished again.	9/10/2018 9:52 AM
247	I believe working with the appropriate congressman to remove CBRA is the single most impactful change that could come to NTB. Introducing a bill is not enough. Someone needs to be working the committee that is responsible for reviewing the bill. Committees receive thousands of proposed bills. Many they do not even look at. That is why lobbyists or sponsors are needed to meet with committee members etc.	9/10/2018 7:35 AM
248	Property owners should be allowed to re-zone Con-D property that has been flagged as upland by CAMA & The Corps of Engineers.	9/10/2018 7:31 AM
249	I believe this questionnaire will be of little use to the BOA and I'm disappointed in the town using it to try to resolve the problems we face.	9/9/2018 8:29 PM
250	My main concerns are (1) that lands designated for Conservation should remain so (and potentially expanded), for possible future use as public parks, and also to protect water quality; (2) density be kept reasonable so our beaches in the summer don't end up looking as crowded as New Jersey - and no hotels, motels, or condotels); and (3) the beach, our greatest resource, be kept CLEAN.	9/9/2018 9:19 AM
251	More financial support from Onslow County	9/9/2018 8:35 AM
252	Flood insurance is a big issue for homeowners & any relief would be much appreciated. Need more of a draw for tourists to deliver revenue for N Topsail. Don't really see much going on or planning to make N Topsail a destination of choice.	9/8/2018 10:36 PM
253	Extending the biking and walking trails should be a top priority.	9/7/2018 9:16 PM
254	I don't think in-ground pools should be allowed anywhere near dunes. For Item 20 I felt there is not enough effort to keep sand on the beaches. The tax set-aside for this needs to increase.	9/7/2018 6:07 PM
255	Parking lots just bring day trippers to the island and leave trash for the residents to pick up.No benefit for island and only an expense.Inlet area parking lot is big mistake as this promotes use of the inlet for swimming which is against the town policy and should be removed to prevent future drownings from occurring..	9/7/2018 8:21 AM
256	We need a hardened structure on the north end.	9/6/2018 8:46 PM
257	NTB seems to be growing and selling land at a rapid rate. Consideration needs to be given to too much growth too fast. Parking and beach access on New River Inlet is horrible, especially in the middle (1200-1600 New River).	9/6/2018 8:09 PM
258	Need more County financial support.	9/6/2018 11:05 AM
259	More support from Onslow County is needed.	9/6/2018 9:02 AM
260	Get Onslow County to return the occupancy taxes to the town.	9/6/2018 8:38 AM
261	NTB should be more aggressive in obtaining Onslow County financial support.	9/6/2018 8:29 AM
262	I believe a jetty should be constructed on the south side of New River Inlet perpendicular to the beach.	9/4/2018 10:14 PM
263	I would really like to see the sandbags maintained as well as forward progress on the terminal groin.	9/4/2018 7:14 PM
264	I am very concerned with the mouth of theNew River. And why it was Moved? This caused noticeable destruction of the beach south of it. Dredging also causes immediate loss of beach. Why can't the Army Corp of Engineers and public officials see this? If you want money from tourism you must maintain the beach.	9/4/2018 10:33 AM
265	Keep NTB as a bedroom community, but increase direct services, such as convenience stores and restaurants. Keep general retail out.	9/4/2018 8:29 AM
266	Preserve the land, we live in one big park. Reduce runoff from new construction. Don't build the sidewalk past Shipwatch. Question 13 is misleading, increasing limits?, SO if the limit is increased more will be allowed? Keep all land that is zoned CON-D in CON-D. I like the view that I have, and I bought here to over look all of this great wildlife. If you change CON_D language, you are ensuring that someone will have a chance to build where no one thought anything would ever be built. North Topsail has been the poster child for Developers run afoul. Don't walk back years of effort to change that image.	9/4/2018 7:49 AM

267	Transportation- lower speed limit on New River road to 35 from Town Hall to pier or beyond if police support change	9/2/2018 7:43 AM
268	Questions do not provide for importance based on cost or feasibility of available land. Therefore a yes or no answer is not always applicable.	8/30/2018 10:19 AM
269	Keep up the good work!	8/29/2018 8:18 AM
270	Areas zoned com d should be preserved and not rezoned.	8/28/2018 9:53 PM

APPENDIX D. DEFINITIONS

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. Town staff and Planning Board involved at all levels from planning to implementation.

Shall/Will

Expresses determination to implement/take action.

Continue

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

Encourage

Foster the desired goal through Town policies. Could involve Town financial assistance.

Enhance

Improve current goal to a desired state using policies and Town staff at all levels of planning. This effort could include financial support.

Identify

Execute actions intended to guide the accomplishment of the plan recommendations.

Maintain

Keep the desired state of affairs in good condition using Town policies and staff. Financial assistance should be provided if needed.

Prevent

Stop described event using appropriate Town policies, staff actions, Planning Board actions, and Town finances, if needed.

Promote

Advance the desired state using Town policies and Planning Board and staff activity at all levels of planning. This effort may include financial support.

Protect

Guard against a deterioration of the desired state using Town policies, staff, and if needed, financial assistance.

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.

Support

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

APPENDIX E. ONSLOW COUNTY MJHMP MITIGATION STRATEGIES - NTB

III. MITIGATION STRATEGIES AND POLICIES

A. Objectives

The Town of North Topsail Beach supports Onslow County in the attainment of its objectives and essentially has the same basic goals and objectives (See [Onslow County MJ HMP](#)).

Implementation Strategies	Objectives
1,2,3,4, 14,15	Improve education and outreach to the community regarding flood hazards and flood mitigation.
1,2,3,4,6,8,9,11,13,14,15,16	Consider implementation of activities as outlined in the NFIP CRS Coordinator’s Manual to increase savings to insured property owners by improving CRS classification.
6	Improve Storm water drainage in NTB
2,3,8,9,11,12,13,14,15,16	Support activities that will modify and make structures less susceptible to damage during natural hazard events
4,12	Access Onslow County GIS and Planning Department resources relevant to hazard mitigation. Meet annually with Onslow County staff to coordinate progress of Hazard Mitigation Plans.
1,3,4,14	Provide effective evacuation prior to natural hazard events.

B. Mitigation Strategies

The following mitigation strategies have been decided upon to achieve the stated objectives and goals. A number of these are similar to the strategies adopted by Onslow County (See [Onslow County MJ HMP](#)).

1. Develop and implement hazard mitigation education programs to minimize risk to property and individuals. (Community Rating System (CRS) Coordinator - ongoing).
2. Assist local real estate agents, insurance companies, banks and other lending institutions by notifying them of the availability of flood plain information. (Community Rating System (CRS) Coordinator - ongoing).

3. Provide flood information in the Town newsletter and direct mailing to homeowners. (Community Rating System (CRS) Coordinator - annual).
4. Post map indicating the evacuation routes, as outlined in the Town's Storm Preparedness Plan. (Police & Fire Department - ongoing).
5. Continue the restriction of bulk fuel storage facilities in accordance with the CAMA Land Use Plan. (Zoning Administrator/CAMA LPO - ongoing)
6. Continue the limitation of impervious surface for each lot to minimize storm water runoff in accordance with the NTB Town Code and CAMA regulations. (Zoning Administrator/CAMA LPO - ongoing)
7. Continue the prevention of dune disturbance and restriction of structures in the inlet hazard area to single-family dwellings only in accordance with the CAMA Land Use Plan. (Zoning Administrator/CAMA LPO - ongoing)
8. Continue the requirement of structures damaged more than 50% to be rebuilt in compliance with current standards in accordance with CAMA regulations and NTB Town Code Chapter 8 Flood Ordinance. (Zoning & Floodplain Administrator/ CAMA LPO - ongoing)
9. Continue the requirement of 2-foot freeboard for all new construction in accordance NTB Town Code Chapter 8 Flood Ordinance. (Zoning & Floodplain Administrator/ Building Inspector - ongoing)
10. Continue the enforcement of 48 foot height maximum for new structures in accordance with NTB Town Code Chapter 7 Planning & Zoning. (Zoning Administrator - ongoing)
11. Continue the enforcement of VE Zone Construction Standards in accordance with NTB Town Code Chapter 8 Flood Ordinance. (Zoning Administrator/ Building Inspector - ongoing)
12. Support activities in the development of Army Corps of Engineers Federal Shoreline Protection Project. (Town Manager - ongoing)
13. Continue the setback requirements for Ocean Hazard and Inlet Hazard Areas in accordance with CAMA regulations. (Zoning Administrator/ CAMA LPO - ongoing)
14. Maintain Town web site providing safety and flood information. (CRS Coordinator/Town Clerk – ongoing)
15. Provide list of contractors skilled in retrofitting techniques. This will be applied Town wide. (Floodplain Administrator/ Building Inspector - ongoing)
16. Continue requirement of buffer area from mean high water in accordance with CAMA regulations (CAMA LPO – ongoing).

C. Mitigation Actions and Policies

1. The Town of North Topsail Beach adopts the following actions:
 - a. To Counter Rising Water/ Flooding:

- North Topsail Beach deals with NC DOT for flooding on State highways as the need arises.
 - The Town complies with CAMA requirements and has restored several wetlands sites.
 - North Topsail Beach has participated in the NFIP since 1990 and the Community Rating System since its inception.
 - The Town will comply with NFIP requirements for repairs, remodeling, and additions, and opportunities for retrofitting in coastal hazard areas, outlined in FEMA 499 Technical Fact Sheet No. 3
 - Duties of the Flood Plain Administrator have been assigned.
 - The Flood Damage Prevention Ordinance addresses freeboard.
 - The White Oak River LIDAR mapping has been completed. New DFIRMS are available.
 - North Topsail Beach addresses drainage issues as the need arises.
 - Local TV stations have sophisticated equipment to predict and accurately report weather. They are even able to pinpoint geographic areas. There is a special audible alert that precedes weather advisories.
 - State building codes establish specifications for construction.
 - State and CAMA buffer rules are enforced to improve the quality of storm water runoff.
 - State requirements are adhered to for erosion and sedimentation plans.
 - North Topsail Beach removes debris as soon as possible after a heavy storm event.
 - Culverts and drains are kept free of debris.
 - North Topsail Beach provides technical assistance to property owners regarding protecting their property.
 - North Topsail Beach's ordinances have established laws, which address Base Flood Elevations.
- b. To Counter High Winds:
- The Jones-Onslow Electric Membership Cooperative provides electric power to the community and they have a continuous program of tree trimming and updating lines.
 - Mobile home owners are educated via the radio and television when severe weather is threatening.
 - The National Weather Service monitors and reports wind speeds and storm conditions.

- Local TV stations have sophisticated equipment to predict and accurately report weather. They are even able to pinpoint geographic areas. There is a special audible alert that precedes weather advisories.
 - North Topsail Beach removes debris as soon as possible after a high wind event utilizing Town employees, volunteers, contractors, and other assistance.
- c. To Counter Winter Storms:
- The National Weather Service monitors and reports winter storms.
 - Local TV stations have sophisticated equipment to predict and accurately report weather. They are even able to pinpoint geographic areas. There is a special audible alert that precedes weather advisories.
 - North Topsail Beach clears roads on Town-maintained street system and assists the State on State-maintained highways.
 - County Health Department and DSS provide information on heating assistance.
- d. To Counter Wild Fires:
- The NC Forestry Service has an ongoing wildfire education program.
 - Fire risk is broadcast via FIRENET, communications from the State forestry agency to counties and local fire departments.
 - Emergency staff meets with the NC Forestry Service personnel at least yearly.
- e. To Counter Drought:
- The National Weather Service monitors and reports rainfall.
 - North Topsail Beach supports Onslow County's water conservation plan that is in effect.
 - Local TV stations have sophisticated equipment to predict and accurately report weather. They are even able to pinpoint geographical areas. There is a special audible alert that precedes weather advisories.
- f. Miscellaneous/ General:
- County Health Department and State Division of Social Services both provide educational information and information on resources.
 - TV and radio stations continue to educate residents on various types of weather/ hazard events and offer suggestions for addressing.
 - North Topsail Beach Town Code Chapter 7 addresses nonconforming buildings.
 - Duties of all code enforcement staff (i.e., Building Code, Zoning, CAMA LPO, Floodplain Administrator) incorporate mitigation strategies.

- Police alert special needs population of need to evacuate.
 - Regulations exist and are enforced to prevent erosion of the land due to construction.
 - County Schools continue to teach about and prepare children for disasters.
 - Mitigation strategies are incorporated into the environmental impact review of projects.
2. The Town of North Topsail Beach adopts the following policies:
- a. Make use of North Topsail Beach's flood plain, parcel data, and aerial photographs in digital format. The Onslow County GIS is capable of overlaying this coverage on its geographic information system (GIS) and furnishing the Town of North Topsail Beach with this support. This is an existing program.
 - b. Ensure that North Topsail Beach maintains documents about flood insurance, flood protection, flood plain management, and natural and beneficial functions of flood plains. Many documents are available free of charge from the Federal Emergency Management Agency (FEMA). This is a continuation of work performed for the CRS program.
 - c. Continue to stay current with all Community Rating System reporting requirements to ensure continued program participation. Actively pursue activities that will lower our CRS rating.
 - d. Continue to actively pursue State and Federal grant funds to assist in the hazard mitigation recommendations included in the plan.
 - e. North Topsail Beach will continue to encourage projects undertaken by the Town's Police Department, Fire Department, and Public Works, which will lessen the vulnerability of the Town and its residents to natural hazards.
 - f. When projects are found to address hazard mitigation, the availability of State and Federal grant funds should be investigated that may assist the Town with the cost. This is a continuation of current policy.
 - g. Continue to update and use the existing Town's Storm Preparedness Plan.
 - h. Fire Department is working on a computer system to accommodate the National Fire Information Reporting System. This is a continuation of an existing program.
 - i. Town staff will stay current with Onslow County's water conservation plan.
 - j. The mitigation strategies will be reviewed at least yearly to evaluate progress on the mitigation strategies selected and identify new strategies and update plans every five years.
 - k. Town will evaluate the current building and development forms for evidence that they identify and address mitigation strategies.

1. Codes and adopted plans and how they will influence mitigation measures are listed below and described in [Appendix C](#):
 - CAMA Land Use Plan
 - Zoning Ordinance
 - Building Codes and Inspections
 - Subdivision Ordinance
 - Flood Damage Prevention Ordinance
 - NFIP and Community Rating System
 - NCAC 15A CAMA Regulations
 - Town's Master Plan

D. Geographic Planning Area

The Geographic Planning Area is comprised of the two flood zones (AE and VE) found in North Topsail Beach. Flooding generally occurs with occurrence of storm surge affecting the ocean front lots and rising waters effecting lots adjacent to the sound. All hazards could potentially affect all property within the Town limits.

IV. IMPLEMENTATION

A. Process

The North Topsail Beach annex of the Onslow County Hazard Mitigation Plan will be implemented through the delegation of assignments by the Town Manager, and as specified within this plan. In the [Section III, Mitigation Strategies and Policies](#), 22 mitigation actions are listed and assigned to specific departments or divisions. Established policies support the goals and objectives of the Hazard Mitigation Plan. These are indicated in [Worksheet #5 –Geographic Planning Areas \(GPA\) Polices – Town Wide \(Town of North Topsail Beach\)](#).

It will be the responsibility of the Town Manager to ensure that these actions are completed by associated deadlines. The completion of each proposed mitigation action is feasible within the timeframe allowed. Many of these mitigation actions are ongoing and are accomplished as a matter of routine.

B. Funding Sources

Funding sources are identified as local funds obtained during the annual budgeting process. Additional grant funding shall be pursued.

**WORKSHEET # 2: GEOGRAPHIC PLANNING AREA POLICIES
TOWN OF NORTH TOPSAIL BEACH**

Policy (Classify each a new initiative, a continuation and support of existing policies, or a recommended change to an existing policy.)	Type(s) of Hazard This Policy will Target	Funding	Responsible Party/ Start & Completion Date	(Monitoring and Evaluation) Benchmarks and Indicators of Progress	Priority (High, Medium, Low)
<p>Public Education and Outreach.</p> <p>Work with the County to ensure implementation of a viable public education and outreach program for mitigation, preparedness, response, and recovery. Refer to the OC MJ-HMP for more information.</p>	<p align="center">All Hazards</p>	<p align="center">Town of North Topsail Beach General Fund</p>	<p align="center">Community Rating System Coordinator Ongoing</p>	<p align="center">This is an ongoing activity, year-round</p>	<p align="center">High</p>
<p>Make use of NTB flood plain, parcel data, and aerial photographs in digital format. Onslow County GIS should be capable of overlaying this coverage's on its GIS.</p>	<p align="center">Flooding</p>	<p align="center">Town of North Topsail Beach General Fund</p>	<p align="center">Planning Department</p>	<p align="center">This is an ongoing activity, year-round</p>	<p align="center">High</p>

Worksheet # 2: Geographic Planning Area Policies Town of North Topsail Beach - Cont:

Policy (Classify each a new initiative, a continuation and support of existing policies, or a recommended change to an existing policy.	Type(s) of Hazard This Policy will Target	Funding	Responsible Party/ Start & Completion Date	(Monitoring and Evaluation) Benchmarks and Indicators of Progress	Priority (High, Medium, Low)
<p>Ensure NTB continues to maintain flood insurance, flood protection, flood plain management, and natural and beneficial functions of flood plains. Many documents are located at Town Hall and Sneads Ferry Public Library; many Documents are from (FEMA).</p>	<p align="center">Flooding</p>	<p align="center">Town of North Topsail Beach General Fund</p>	<p align="center">Planning Department</p>	<p align="center">This is an ongoing activity, year-round</p>	<p align="center">Medium</p>

Worksheet # 2: Geographic Planning Area Policies Town of North Topsail Beach - Cont:

Policy (Classify each a new initiative, a continuation and support of existing policies, or a recommended change to an existing policy.)	Type(s) of Hazard This Policy will Target	Funding	Responsible Party/ Start & Completion Date	(Monitoring and Evaluation) Benchmarks and Indicators of Progress	Priority (High, Medium, Low)
Assist local real estate agents with information handouts that will advise potential buyers to investigate the flood hazard for the property they are considering purchasing.	Flooding	Town of North Topsail Beach General Fund	Planning/ CAMA	This is an ongoing activity, year-round	Medium
Continue to send flood protection flyer to all property owners in NTB through a community newsletter. The flyer should include a general identification of the local flood hazard, flood safety, flood insurance, property protection, flood plain development permit requirements and drainage system.	Flooding	Town of North Topsail Beach General Fund	Planning	This is an ongoing activity, year-round	Medium

Worksheet # 2: Geographic Planning Area Policies Town of North Topsail Beach - Cont:

Policy (Classify each a new initiative, a continuation and support of existing policies, or a recommended change to an existing policy.	Type(s) of Hazard This Policy will Target	Funding	Responsible Party/ Start & Completion Date	(Monitoring and Evaluation) Benchmarks and Indicators of Progress	Priority (High, Medium, Low)
Continue staying current with all Community Rating System reporting requirements to ensure continued program participation. Actively pursue activities that will lower our CRS rating.	Flooding	Town of North Topsail Beach General Fund	Planning	Annual evaluation and report submitted to ISO for CRS credit	High
Request courtesy review by ISO/CRS Coordinator's to identify additional CRS credit activities.	Flooding	Town of North Topsail Beach General Fund	Planning	Yearly basis starts October and end in December	Medium

Worksheet # 2: Geographic Planning Area Policies Town of North Topsail Beach - Cont:

Policy (Classify each a new initiative, a continuation and support of existing policies, or a recommended change to an existing policy.)	Type(s) of Hazard This Policy will Target	Funding	Responsible Party/ Start & Completion Date	(Monitoring and Evaluation) Benchmarks and Indicators of Progress	Priority (High, Medium, Low)
Continue to actively pursue State and Federal grants to assist in the hazard mitigation recommendations included in the plan.	All Hazards	Town of North Topsail Beach General Fund	Police Department Fire Department Planning	This is an ongoing activity, year-round	Medium
NTB will continue to encourage projects undertaken by the NTB PD, NTB FD, Public Works Dept	All Hazards	Town of North Topsail Beach General Fund	Police Department Fire Department Planning	This is an ongoing activity, year-round	Medium

Worksheet # 2: Geographic Planning Area Policies Town of North Topsail Beach - Cont:

Policy (Classify each a new initiative, a continuation and support of existing policies, or a recommended change to an existing policy.)	Type(s) of Hazard This Policy will Target	Funding	Responsible Party/ Start & Completion Date	(Monitoring and Evaluation) Benchmarks and Indicators of Progress	Priority (High, Medium, Low)
When projects are found to address hazard mitigation, the availability of State and Federal grant funds should be investigated that may assist the Town with the cost.	Flooding	Town of North Topsail Beach General Fund	Planning Police Department Fire Department	This is an ongoing activity, year-round	Medium
Maintain a map and listing of streets that would be advised to evacuate in the event of a hurricane. At the appropriate time, Police and Fire will assist in the evacuation of those residents who are unable to leave on their own	Flooding	Town of North Topsail Beach General Fund	Police Dept Fire Dept	This is an ongoing activity, year-round	Medium

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Policy (Classify each a new initiative, a continuation and support of existing policies, or a recommended change to an existing policy.)	Type(s) of Hazard This Policy will Target	Funding	Responsible Party/ Start & Completion Date	(Monitoring and Evaluation) Benchmarks and Indicators of Progress	Priority (High, Medium, Low)
Continue to send public information newsletter to repetitive loss structures and to identify new losses, maintain repetitive loss database.	Flooding	Town of North Topsail Beach General Fund	Planning	Annual evaluation and report submitted to ISO for CRS credit	Low
Continue to maintain ditching along streets to facilitate drainage.	Flooding	Town of North Topsail Beach General Fund	NC DOT and NTB Public Works	we do not do this	Medium
Continue to update and use the existing NTB Storm Preparedness Plan Review the plan on a yearly basis with all departments.	All	Town of North Topsail Beach General Fund	All Departments	Yearly meeting and testing program	High
NTB continue to enforce storm water regulations established by the State and incorporate regulations in Zoning Ordinance.	Flooding	Town of North Topsail Beach General Fund	Planning	incorporate regulations in Unified Development Ordinance	High

Worksheet # 2: Geographic Planning Area Policies Town of North Topsail Beach - Cont:

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The Town has revised its Flood Damage Prevention Ordinance to require 2-foot freeboard and VE Flood Zone construction requirements. Continue to review and update as necessary.	Flooding	Town of North Topsail Beach General Fund	Planning	This is an ongoing activity, year-round	Medium
Town has required all electrical panels on the wastewater pumping stations be raised.	Flooding	Town of North Topsail Beach General Fund	Planning	This is an ongoing activity, year-round	Medium
NTB requires tie-down requirements for LP tanks and above ground oil heating tanks.	Hurricanes Flooding Nor'easters Tornadoes	Town of North Topsail Beach General Fund	Planning	This is an ongoing activity, year-round	Medium

Worksheet # 2: Geographic Planning Area Policies Town of North Topsail Beach - Cont:

Policy (Classify each a new initiative, a continuation and support of existing policies, or a recommended change to an existing policy.)	Type(s) of Hazard This Policy will Target	Funding	Responsible Party/ Start & Completion Date	(Monitoring and Evaluation) Benchmarks and Indicators of Progress	Priority (High, Medium, Low)
Continue the requirement of structures damaged more than 50% to be rebuilt in compliance with current standards in accordance with CAMA regulations and NTB Town Code Chapter 8 Flood Ordinance.	Flooding Hurricanes Nor'easters	Town of North Topsail Beach General Fund	Planning	This is an ongoing activity, year-round	High
NTB has a Master Plan for the Town and will continue to review and update the master plan on and yearly basis	Flooding	Town of North Topsail Beach General Fund	Planning	Yearly basis during November completed December	Low
The NTB CAMA Land Use Plan will require updating in the year 2014. the Town will work to establish new goals for addressing flooding in all areas of the Town and protection of all AEC's.	Flooding	CAMA Grant through the state with the matching funds from the Town	Planning	Starting planning process for LUP 2014 for 2015 completion.	Medium

Worksheet # 2: Geographic Planning Area Policies Town of North Topsail Beach - Cont:

Policy (Classify each a new initiative, a continuation and support of existing policies, or a recommended change to an existing policy.	Type(s) of Hazard This Policy will Target	Funding	Responsible Party/ Start & Completion Date	(Monitoring and Evaluation) Benchmarks and Indicators of Progress	Priority (High, Medium, Low)
The town will continue to support and enforce State rules and guidelines for AEC located within the Town limits.	Flooding	Reimbursed by State program Town of North Topsail Beach General Fund	Planning	This is an ongoing activity, year-round	High
The mitigation strategies will be reviewed at least yearly to evaluate progress on the mitigation strategies selected and identify new strategies, to incorporate into the Master Plan.	All Hazards	Town of North Topsail Beach General Fund	Yearly meeting with all departments during May	Plan is updated with new information	High
Beach Nourishment Project. NTB will continue to support its Federal Beach Nourishment Project.	All Hazards	Federal Project through Army Corps of Engineers Fund Town matching	All	This is an ongoing activity, year-round	High