

Town of Sunset Beach 2010 CAMA Land Use Plan Update



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The Town of Sunset Beach 2010 Land Use Plan Update

Town of Sunset Beach
700 Sunset Boulevard North
Sunset Beach, NC 28468-4337
Ph: 910-579-6297 Fax: 910-579-1840
<http://www.sunsetbeachnc.gov/>

Town Council

Ronald Klein, Mayor
Lou Devita, Mayor Pro-Tem
Bob Bobinski
Karen Joseph
Carol Scott
Wilson Sherill

Planning Board

William McDonald, Chairman
Russell Allen, Vice Chairperson
Al Siebert
Leon August
Sybil Kesterson

Town Administrator

Gary Parker
gparker@atmc.net

Town Attorney

Michael Isenberg

Town Clerk

Kim Cochran

North Carolina Department of Environment and Natural Resources
Division of Coastal Management
<http://www.nccoastalmanagement.net/>

Wilmington District

Serves Brunswick, New Hanover and Pender counties,
Onslow County south of the New River, and Topsail Island

District Manager

Jim Gregson
Jim.Gregson@ncmail.net

District Planner

Mike Christenbury
Mike.Christenbury@ncmail.net



Technical Assistance Provided By:

Cape Fear Council of Governments
1480 Harbour Drive
Wilmington, NC 28401
Ph: 910-395-4553 Fax: 910-395-4553
www.capefearcog.org

Scott Logel, AICP
Regional Planner/GIS
slogel@capefearcog.org

Penny Tysinger, Planner-in-Charge
ptytysinger@capefearcog.org

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Guide for Planning and & Special Issues Committee Review of the Core Land Use Plan Town of Sunset Beach	Page (s)
<u>Organization of the Plan.</u> If document does not follow the outline of Rules, a matrix shall be included showing the exact location of required elements.	_____
<u>Community Concerns and Aspirations:</u> Key issues & Vision statement:	<u>Page 6-9</u>
<u>Analysis of Existing and Emerging Conditions within the planning jurisdiction.</u> <u>Population, Housing, and Economy.</u> Including 5 - 10 – 20 year) projections.	<u>Section 3</u> <u>Page 10-28</u>
<u>Natural systems analysis.</u>	
o Mapping and analysis of natural features.	
o Composite map of environmental conditions: Breaks community into 3 classes of developability based on environmental conditions.	<u>Pg45 & Map 8</u> <u>Page 45</u>
o Description of Environmental conditions:	
<u>Analysis of Land Use and Development: Existing Land Use Map</u>	<u>Section 3</u>
o Analysis of conflicts, trends, and areas expected to grow within next 5 years and areas of any potential conflicts w/composite map.	
o <u>Projections of future land needs.</u> Short term (5-10-20 year) projections population & land needs. May be increased up to 50%. Low or no growth projections of land needs may consider economic strategies.	<u>Page 78</u>
<u>Analysis of Community Facilities.</u> Existing/planned capacity, location, & adequacy of key facilities that serve community's existing/planned population and economic base including:	
o Public and private water supply and wastewater systems.	<u>Page 79</u>
o Transportation systems.	<u>Page 79-88</u>
o Stormwater systems & other systems & services	<u>Page 89-98</u>
<u>Land Suitability Analysis & Map</u>	<u>Page 98-102</u>
<u>Review of Current CAMA Land Use Plan.</u>	<u>Map 14</u> <u>Page 104-112</u>
<u>Plan for the Future:</u> Land use and development goals & Policies	
<u>Land Use Plan Management Topics</u>	
<u>Public Access:</u> <u>Goal:</u> Maximize public access/ <u>Objective:</u> Access opportunities for the public	_____
<u>Requirements:</u> Establish local criteria for frequency and type of access facilities & criteria for areas targeted for beach nourishment.	<u>Page 113-116</u>
<u>Land Use Compatibility:</u> <u>Goal:</u> Ensure development/use of resources or preservation minimizes direct & secondary environmental impacts, avoids risks to public health, safety & welfare & is consistent w/capability of the land based on considerations of interactions of natural & manmade features.	<u>Page 117</u>
<u>Objective:</u> Policies balancing protection of natural resources/fragile areas w/economic development; provides clear direction for local decision-making, consistency findings for zoning, divisions of land, & projects.	
<u>Requirements:</u> Establish building intensity & density criteria for each land use designation on the FLUP Map; Establish local mitigation criteria and concepts.	<u>Page 118</u>
<u>Infrastructure Carrying Capacity:</u> <u>Goal:</u> Ensure public infrastructure systems are appropriately sized; located & managed so quality & productivity of AECs/fragile areas are protected or restored.	_____
o <u>Objective:</u> Establish level of service policies/criteria for infrastructure consistent w/Projections of Future Land Needs.	<u>Page 131</u>

- Requirements: Identify/establish service area boundaries; Correlate FLUPM categories w/existing and planned infrastructure.

Natural Hazard Areas: Goal: Conserve/maintain barrier dunes, beaches, flood plains, & other coastal features for natural storm functions & their natural resources w/recognition to public health, safety, and welfare issues.

- Objective: minimize threats to life, property, & natural resources from development located in/adjacent to hazard areas.
- Requirements: density/intensity criteria for new/existing development & redevelopment including public facilities and infrastructure to better avoid or w/stand natural hazards; Correlate existing and planned development with existing and planned evacuation infrastructure.

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Water Quality: Goal: Maintain/protect where possible enhance WQ in all coastal wetlands, rivers, streams & estuaries.

- Objective: help ensure that WQ is maintained if not impaired & improved if impaired.
- Requirements: Policies that help prevent or control nonpoint source discharges; policies & land use categories aimed at protecting open shellfishing waters/restoring closed or conditionally closed.

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Local Areas of Concern: Goal: Integrate local concerns with the overall goals of CAMA.

- Requirements: Evaluate local concerns and issues for the development of goals, policies and implementation strategies.

Future land use map. Depicts policies application for growth and development, desired future patterns of land use/development with consideration given to natural system constraints & infrastructure policies. Shall include at a minimum:

Section 9

- 14-digit hydrological units encompassed by the planning area;
- areas/locations planned for conservation/open space w/description of compatible uses
- areas/locations planned for future growth/development w/descriptions of:
 - predominant & supporting land uses that are encouraged in each area;
 - overall density/development intensity planned for each area;
- areas for infill, preservation, and redevelopment;
- existing/planned infrastructure, including major roads, water, and sewer.

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Page 144-149

Map 15

Tools for Managing Development. (initial five-year action plan for implementation)

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- Guide for land use decision-making
- Existing development program. This description of community's approach to coordinating these codes and rules to implement the LUP.

Policy Impact Analysis

- Contain description of type/extent of analysis to determine the impact of Plan policies on management topics; both positive & negative; description of policies/methods/programs & processes to mitigate negative impacts on applicable management topics.
- If local policies exceed the State and Federal requirements, such policies must be identified & to what extent. If the local body intends to rely on Federal/State laws & regulations it shall reference in the plan.
- ❖ If development patterns/uses are not consistent w/natural systems analysis, or the LSA, then includes description of steps local government will take to mitigate the impacts.
- ❖ Include estimate/cost of any facilities or services that shall be extended or developed.
- ❖ Amount of land allocated to various uses shall be calculated and compared to the projection of land needs. The amount of land area thus allocated to various uses may not exceed projected needs; except for slow growth communities.

Appendix V

Page 151-158

Section I. Executive Summary, Introduction to CAMA, and Public Involvement

I.1 Executive Summary

The purpose of the executive summary is to provide a brief overview of the main facts, figures, policies, and recommendations found within the Town of Sunset Beach Land Use Plan.

Background on the Land Use Plan Process

The Town began the update of their Land Use Plan in March of 2006 under the guidance of the Town Planning Board, the Town Administrator, the planning consultant, and citizen/property owner input. The Plan was conducted through funding provided by the National Oceanic and Atmospheric Administration, Division of Coastal Management and the Town of Sunset Beach. The Plan follows and adheres to the local government planning guidelines as required under the North Carolina Administrative Code Title 15A, Chapter 7 and the North Carolina Coastal Area Management Act (CAMA).

The first step in creating the Land Use Plan (LUP) was to evaluate the growth in land use and development over the past ten years from the time of the Town's last LUP update. The evaluation included the identification of any impacts to the quality of life, property values, public safety, environment, and infrastructure of the community. The impacts identified included both those from past development as well as any potential impacts anticipated from future development. The second step in creating the Land Use Plan was to determine the mechanisms needed to best manage or resolve those impacts. Those mechanisms make up the Town's development management program, which includes:

1. Ordinances and regulations establishing the standards and practices required of development (e.g. zoning ordinance, stormwater ordinance, state and federal laws, etc).
2. Official Town plans that evaluate a problem or issue and establish a recommended set of actions to resolve the issue (e.g. Land Use Plan, Hazard Mitigation Plan, etc.).
3. Town programs or services that are intended to aid in mitigating or managing the impacts of development (e.g. utilities provision and maintenance, and capital improvement programs to set budgeting priorities for needed infrastructure).
4. Official Town policy statements that are to provide overall guidance in the decision making process when making revisions, updates and/or additions to the Town's development management program.

Evaluation of Growth in Land Use and Development

Sunset Beach was incorporated in 1964. The first Census for the Town was in 1970, and showed the population to be 108. In 1980 the population was 140, and in 1990 it was 311. It should be noted that through these decades the jurisdiction of the Town included just the island and limited areas on the mainland. More recently, Sunset Beach has increased notably from its 1990 population level in terms of relative percent growth. The 2000 Census population for the Town was 1,852, which was a 495% growth from 1990. Much of the population growth during this

time was from annexation of areas that were developed, developing, and/or planned for development. Tables 1.1 and 1.2 in the Land Use Plan list the annexations between the 1990-2000 period which included 13 “tracts or developments” totaling 1,610 acres. This is a tripling of the Town’s size in area from its pre-1990 size. In addition, Tables 1.1 and 1.2 show annexations from 2000 to 2006, which added an additional 146 acres. The Town also annexed, in June 2007, a 500-acre development on its northern boundary called Sandpiper Bay. The continued annexations and infill of development have driven the Town’s population growth to its 2005 certified estimate of just over 2,200 permanent residents. The Town’s policy for annexations has been and continues to be to strategically advance its management of growth and development in its surrounding vicinity so as to ensure such development remains compatible with the Town’s infrastructure carrying capacity and community character and scale.

As described in Section 3 of the Plan, Sunset Beach has seen the same increased growth and development as many, if not all, of the municipalities with a beach in southeastern North Carolina. This growth is due to many factors, including the growth of the Myrtle Beach and Wilmington urban areas, the relatively recent completion of road networks such as I-40 making the area more accessible, the retiring baby boom population seeking warmer climates and lower priced housing, and a general increase in economic and disposable income levels which has allowed for more tourism and the construction of second or vacation homes. As mentioned previously, the population of the Town has grown from 311 in 1990 to 1,852 in 2000, which was a significantly higher growth rate as compared with all 20 municipalities with a beach strand in North Carolina for the same time period. Again, this was primarily due to the Town’s annexation activity. The growth rate for the Town between the years 2000 and 2005 was around 13%, which ranked 6th highest when compared with all 20 municipalities with a beach strand in North Carolina for the same time period. It is difficult to accurately project the Town’s future population as it plans to retain its option of using annexation as a means to manage growth in its surrounding area. Chart 2 in the Land Use Plan uses a simple population projection method based on historic growth rates for the Town and County to establish population projections for 2010, 2020 and 2025. Those figures include a population projection approaching 3,400 around 2010 and ranging between 4,600 and 5,200 between 2020 and 2025. In regards to peak season population for the Town, the majority (87% according to Census 2000) of single-family, duplex and multifamily dwellings on the island/mainland are primarily used as housing for the seasonal population. In addition, several mainland multi-family resort dwellings exist to serve the seasonal population. The seasonal population is estimated to boost the Town’s overall population to 6,000 to 13,000 in the summer (See Section 3.1.1 for more detail).

As discussed in Section 4, past and continued impacts to local surface waters presents a limiting factor in the types and scales of development that are appropriate in Sunset Beach without increased standards for containing and treating both stormwater runoff and wastewater generated from both new and existing development. Sunset Beach water quality classifications are SA for the Intracoastal Waterway and all other waters surrounding the island, except the ocean which is classified SB (See Water Quality Characteristics Map [Map 3]). Sunset Beach is located in the Lumber River Basin, and falls within subbasin 03-07-59. This subbasin contains the southwest corner of Brunswick County primarily east of Highway 17. There are no classified surface waters impaired for aquatic life or recreation in subbasin 03-07-59. At the time of the last Land Use Plan update in 1997, shellfishing had been an “impaired” use for all of the planning

area's estuarine waters and it continues to be impaired as of the date of this 2006/2007 Land Use Plan update (See Water Quality Characteristics Map [Map 3]). According to the Shellfish Sanitation Branch of the North Carolina Division of Environmental Health, the permanent closure and conditional approval of shellfishing areas in the jurisdiction has been attributed to long-term septic system use in flood prone areas as well as existing manmade canals and residential lawns with little or no vegetative buffers to filter stormwater runoff. Stormwater runoff has been cited as the main contributor to shellfish closures. The conditionally approved shellfishing sites in the planning jurisdiction (Jinks Creek and Tubbs Inlet area) are closed during every rain event causing .5 inch to 1.5 inches of rain primarily due to pollutants such as fecal coliform (i.e. pet, animal and human [septic system] waste) in the runoff. Portions of Jinks Creek and Tubbs Inlet were the only two areas conditionally open to shellfishing at the time of the 1997 Land Use Plan update. Good tidal flushing from water moving through Tubbs inlet is likely the reason these areas have remained conditionally open.

There is one Division of Water Quality (DWQ) water quality monitoring station (established in 1983) in the planning jurisdiction located near the Sunset Beach bridge. This station (Station I198800) has shown that fecal coliform in the water exceeded safe levels for shellfishing as of the 1997 Lumber River Basin Water Quality Plan and as of the 2003 Lumber River Basin plan. The DWQ's 2002 Lumber Basin Assessment also showed that there has been a statistically significant and steady decrease in pH and Dissolved Oxygen (DO) at this monitoring station since 1983 to the date of the report. While the Assessment could not pinpoint the source of the decrease in DO and pH, those types of decreases likely can be linked to higher levels of fecal coliform (septic waste) and phosphorus (fertilizers from lawns and golf courses and/or septic waste).

As described in Section 5 of the Plan, nearly the entire island portion of the planning jurisdiction is built-out with a majority of single-family detached homes. Some duplex, multi-family and tourist related commercial and office uses exist on the island but are limited to the oceanfront for duplex, and the street blocks bordering Sunset Boulevard South for multi-family and commercial. Typical lot sizes are regulated to range from 4,500 to 7,500 on the island with a density of 10 to 6 units per acre. The building height is strictly limited on the island which keeps all structures uniform at 35 feet in height. Much of the mainland portion of Sunset Beach is also developed or in a development transition stage. The mainland has a full mix of residential and commercial structures. Residential types include single-family, duplex, multi-family and manufactured housing. Commercial structures include regional and local commercial services including chain grocery stores, pharmacies, medical services, financial institutions, etc. There are several 18-hole golf courses on the mainland which account for over 40% of the total land use in the planning jurisdiction (See Table 20). Lot sizes typically range from 6,000-9,000ft² for manufactured housing areas, to 10,000-15,000 ft² for single-family areas, to 40,000 ft² for the primary multi-family areas. The Town also has mixed use districts that allow both residential and commercial/office uses. Building height is limited on the mainland to a maximum of 50 feet. A maximum of 35 feet in height for certain structures is also in effect on the mainland.

As detailed in Section 6, the Town had owned and operated a potable water distribution system servicing nearly the entire jurisdiction which purchased all of its water supply from Brunswick County and its water treatment and storage plants. However, in July 2007, the Town turned-

over the ownership and operation of the water system to Brunswick County. Wastewater treatment in the Town is currently handled (as of September 2007) through individual private septic systems, private package treatment plants, and limited County sewer service in some commercial and multi-family areas. The Town, in conjunction with the County, is in the final planning stages (as of September 2007) for construction of a sewer system to service the remaining un-sewered portions of the planning jurisdiction. The design of the sewer system was conducted to limit connections and capacity so as to avoid “induced development”. The limited design size of the sewer system will be a management measure to ensure that redevelopment to higher densities would not be feasible or allowable without substantial system upgrades. The Town plans to have the sewer system designed and built well within the five to ten year planning period of the Land Use Plan.

Identification of Growth and Development Issues

The Town’s evaluation of growth and development trends and the status of its environmental state contributed to the identification of several issues the community felt should be addressed within the Land Use Plan. Those issues include:

Priority Issues

- Expansion of Centralized Sewer/Elimination of Septic Systems
- Stormwater Runoff/Water Quality Improvement
- Proactively Managing Dimensional Size (lot size, density, and height) of Future Development and Redevelopment
- Retaining and Enhancing Community Appearance (landscaping, signage, buffers)

General Issues

- Impacts Associated with High-rise Bridge
- What Housing Types Should be Allowed? (e.g. “Mega-structures”, Single Family, Multi Family)
- Types and Scale of Commercial Growth
- Increasing Public Access/Boat Ramps
- Proactively Manage Intensity (building height and lot coverage) and Density (units per acre) of all new Development
- Assess Potential Impacts from Surrounding Area Growth (Myrtle Beach, Brunswick County and Wilmington)
- Assess Feasibility of More Parks/Recreation Opportunities in the Jurisdiction
- Ensure Infrastructure Capacity will Meet Expected Growth
- Protect Quality Green Space/Open Space (Protect sensitive areas)
- What Level of Continued Annexation & ETJ?
- Define the Town’s Character- Is it a Small Beach Town?
- Traffic/Transportation Issues and Needs
- Provide Adequate Public Parking/Restrooms for day trippers
- Town Responsibility for Remaining Consistent with Land Use Plan When Taking Public Action

Mechanisms to Manage Impacts from Growth in Land Use and Development

The Town's evaluation of growth in land use and development trends, and its identification of issues and impacts associated with such development, provided the basis for the establishment of:

1. A community vision statement;
 2. A set of development-related policy statements;
 3. A growth map and development standards table for future land use, development and redevelopment; and
 4. A schedule of recommended actions to make the Town's existing development management program consistent with the vision statement, the policy statements and the future land use and development standards established under the Land Use Plan.
1. The vision statement was established during the beginning of the Land Use Plan process and provided the overall tone and direction for the Land Use Plan. The vision statement follows:

“The Town of Sunset Beach intends to promote and support the orderly economic and aesthetic growth and development of the community in accordance with its adopted Land Use Plan and development-related ordinances. The Town of Sunset Beach desires to maintain its unique coastal-town character by promoting lower-density and single-family residential development as its primary growth pattern. The Town also recognizes that it coexists with a fragile coastal environment, and it shall seek to preserve and conserve the land and estuarine water, including its beach and golf course amenities that have made this community a highly desirable place to live. Furthermore, the Town values being responsive to the public and improving the quality of life for all its citizens, to this end, the Town shall continually seek the involvement, input and various viewpoints of its citizens during the Town's official consideration of land use and development decisions”.

2. Policy statements were established under the Land Use Plan to respond to the existing and potential impacts identified during the evaluation of growth in land use and development. The policy statements are designed to address specific issues, and provide overall guidance for official Town decisions and actions so that those decisions and actions further the management or resolution of impacts associated with land use and development. All Town policies in the Land Use Plan are consistent with the minimum standards of the Coastal Area Management Act (CAMA). Town policies # 5 (C)(i) and #66 exceed CAMA and/or state minimum standards. **The following policies are numbered according to their order in Section 8 of the Land Use Plan.** Some of the key policy statements for the Town include:

I. Areas of Environmental Concern

- A) The Town will support and enforce through its CAMA minor permitting capacity the state policies and permitted uses in Areas of Environmental Concern (AECs). Such uses shall be in accord with the general use standards for coastal wetlands, estuarine waters, estuarine shorelines, ocean hazard areas and public trust areas as stated in 15A NCAC Subchapter 7H.
- B) The Town supports the major and general permitting process as implemented by the North Carolina Division of Coastal Management.

15. Annexation

The Town of Sunset Beach will institute annexation proceedings and the extension of the extraterritorial limits in a timely manner in order to guide growth in the surrounding areas adjacent to Sunset Beach.

16. Types, Density and Location of Anticipated Residential Development

The Town encourages both the development and preservation of a variety of housing types to meet the needs and desires of current and future citizens. To meet those needs and desires, the Town will administer the following policies:

Building Height Standards on the Island and Mainland

- A) The Town shall retain a 35-foot height limitation for residential, commercial and institutional structures on the island.
- B) As specified by the current zoning ordinance, the building height on the mainland will predominantly be 35-feet with the exception of a 50-foot building height maximum limit for multi-family units in the MR-3 Zoning District. In specified areas, single-family structures may be allowed to exceed 35 feet if 1 foot of additional setback for every 2 feet in additional height can be achieved on the lot, but in no case shall the structure exceed 50 feet in height.
- C) No structure on the mainland shall be allowed to exceed 50 feet in height. This restriction includes any and all uses and building types currently allowed in the Town.

Protection of Single-family Areas

- D) The Town shall maintain areas exclusively for conventional single-family dwellings for the growing population on the island and the mainland (as shown on the Future Land Use Map).
- E) The Town shall retain and maintain the predominantly single-family residential character of the island. Conversion of single-family homes to duplexes will be restricted to the residential lots in the existing BR-1 and BB-1 Zoning Districts (as shown on the Future Land Use Map and Town Zoning Map).

Multi-Family Areas

- F) The Town shall allow multi-family development in designated and appropriate areas within the “golf course oriented developments” (Sea Trail and Ocean Ridge Plantation) and as permitted in the MR-3, MB-1 and BB-1 commercial districts (as shown on the Future Land Use Map and Town Zoning Map).

Manufactured Housing Areas

- G) The Town shall provide areas for mobile home and manufactured housing development on the mainland (as shown on the Future Land Use Map and Town Zoning Map).

- H) Any redevelopment of existing manufactured housing areas shall only be allowed to develop as single-family detached housing. Manufactured housing shall continue to be an allowable housing type/use in these pre-existing areas.

18. Residential Density - Standards, Options and Mitigation of Environmental Impacts

- A) The Planning Board and Town Council will study the feasibility of establishing residential density limitations per acre, in addition to existing dimensional standards, for each zoning district.
- B) The Planning Board and Town Council will study the feasibility of revising the subdivision, zoning and Planned Residential Development regulations to promote greater conservation of natural areas. Cluster housing, with possible density bonus, and/or Low Impact Development standards may be studied as such conservation measures.

19. Potential For Transition of Golf Course Land to Residential Use

If any land currently utilized as a “golf course field of play” is requested to be transitioned to a residential use, the only allowable housing-type permitted by the Town for those areas shall be:

- A) Single-family detached, with a minimum lot size of one acre per unit;
- Or,
- B) Planned Residential Development, as permitted in the Zoning Ordinance, if it is able to retain an amount of open space superior to and an impervious lot coverage equal to or less than that created by the development of single-family housing on one acre lots as in option (A) above.

23. Density of Future Multi-family Developments

To assist in protecting its existing community character, scale and infrastructure capabilities, Town policy shall be to reduce the currently allowed density for multi-family structures below a gross of 21.7 units per acre.

30. Land Use and Development Decisions Consistent with the Land Use Plan

Any official Town land use and development related actions (e.g. re-zonings, text amendments, stormwater rules, etc.) shall remain consistent with the policies adopted in the Land Use Plan and any other applicable plan. Any Town actions that are inconsistent with such plans shall require a statement from the Town body approving such decisions, as to why those decisions are necessary and in the community’s interest, and how any negative impacts will be mitigated.

34. Public Boat Launch and Access Site

The Town shall pursue the construction of a public boat launch and access site to replace the boat launch removed due to the new bridge construction.

36. Continuation of On-Street Public Parking

The Town shall continue to allow regulated public parking on public street shoulders as a means to provide parking for beach access.

39. Development Encouraged to Use DOT's Access Management and Recommended Design Standards

The Town supports the principles of Access Management and encourages the use of the recommended street and driveway design standards found in the North Carolina Department of Transportation's "Policy on Street and Driveway Access".

66. Stormwater Program

A) The Town shall continue to participate in an interlocal agreement with Brunswick County for the implementation and administration of County stormwater regulations by County staff within the Sunset Beach planning jurisdiction. The Town shall be responsible for implementing legal proceedings for violations of the stormwater regulations within its planning jurisdiction.

B) The Town supports the continuance of provisions in the Brunswick County stormwater regulations which exceed state minimum requirements. Those provisions include requiring stormwater management rules for all commercial development regardless of site size, and rules for any development activity which uses more than four inches of fill on the site.

C) The Town shall continue to update its stormwater ordinances to remain consistent with changes in the County stormwater ordinance.

D) The Town shall retain the option of adopting additional local stormwater related standards if it is deemed necessary to further protect surface water quality.

69. Low Impact Development (LID)

B) The Town intends to evaluate the results of Low Impact Development practices implemented in the adjacent Lockwood's Folly watershed and other similar coastal watersheds to determine its practicality for use in the Sunset Beach planning jurisdiction. Such LID practices required may include retaining/infiltrating most of the runoff on-site, maximizing the use of permeable pavements, reducing the amount of impervious coverage, and clustering housing to allow a profitable development density while maximizing open space.

C) Key to LID practicality and effectiveness, Town policy shall be to first seek to establish coordination and interlocal agreement among local governments with jurisdiction over land development affecting the local watershed to both support and implement LID standards in their jurisdictions.

70. Elimination of Septic System Use

Town policy is to support the implementation of a sewer system and require the elimination of septic system and package treatment plant use. See Policies 48, 49 and 51.

71. **Septic System Decommissioning and Encouraged Re-use for Stormwater**

- A) When central sewer service becomes available, the Town shall require all septic systems in use in the Town’s jurisdiction to be professionally pumped-out and crushed, filled or retrofitted to be used as a “stormwater cistern”.
- B) The Town prefers the re-use of appropriate septic systems as “stormwater cisterns”, over crushing or filling, as an innovative method to help capture and retain stormwater on-site. This practice is intended to help minimize the volume of stormwater and pollutants entering local surface waters, streets and ditches.
- C) To encourage (b) above, The Town shall provide owners of septic systems with information on how to retrofit and re-use septic systems as stormwater cisterns.
- D) If and when a stormwater utility is established under Phase II stormwater rules, the Town shall encourage Brunswick County (Phase II stormwater administrator) to apply “credits” on any stormwater utility fees to those property owners who re-used their septic system as a stormwater cistern.

72. **Retrofitting of Existing Stormwater Drainage Systems**

- A) The Town supports the eventual retrofit, or elimination (where complete detention or infiltration is feasible), of Town-owned outfalls that are not able to treat stormwater runoff during targeted storm events. Those outfalls which carry runoff from existing development, including roads, through conveyances that may not adequately handle the removal of pollutants during certain storm events shall receive prioritization for retrofit. Testing of outfalls may be necessary to identify pollutant load, runoff volume and appropriate retrofits.
- B) Where complete retrofit or elimination of certain outfalls is not feasible, the Town and Brunswick County (as Phase II stormwater administrator) shall encourage and publicize private property practices that are intended to reduce stormwater volume and pollutant load entering the Town’s stormwater drainage system.

If the retrofit or elimination of certain outfalls is deemed feasible, the Town shall pursue funding from the Clean Water Management Trust Fund, other water quality improvement funding sources, or any other appropriate funding source to implement and utilize new technology and/or install vegetated systems to provide greater infiltration, filtration, retention and/or detention of runoff from existing development.

A complete listing of all the Town policies established in the Land Use Plan can be found in Section 8.

- 3. The growth map and development standards table for future land use, development and redevelopment can be found in Section 9 of the Land Use Plan. The growth map, which is officially called the *Future Land Use Classification Map (FLUCM)*, is meant to visually depict the major land use and development goals and policies to be followed and implemented by the Town. The Map is intended to show the community’s planned future growth patterns in

distinct areas within the Town’s planning jurisdiction. The Map also shows the planned future boundaries of those respective areas to ensure that incompatible uses or types of development do not encroach. The development standards table, which is officially called the *Future Land Use Classification Area Development Standards Table* (Table 40) is to be used in conjunction with the *Future Land Use Classification Map*. The table lists the desired predominant land uses and development characteristics for each respective area, as well as the intensity and density goals and standards for each area.

4. A schedule of recommended actions to make the Town’s existing development management program consistent with the vision statement, the policy statements, and the future land use and development standards within the Land Use Plan, include the following:

Ordinances/Regulations	To be Done in Fiscal Year	Department Responsibility
<p>Zoning Ordinance Amendments*</p> <ol style="list-style-type: none"> 1. Re-zone parcels currently used in a golf course field of play from MR-3 to “AF-1” or other zone with one acre minimum lot size, with allowable Planned Residential Developments as a Conditional Use if it meets the intent of Policy 19 (B) of the Land Use Plan. 2. Text Amendment to Section 151.191 (B) to include allowing duplex in the MR-3 zoning district. 3. Text Amendment to Section 151.003 to change the definition of multi-family to specifically refer to a structure as classified as multi-family if it contains “three or more attached units” on a single parcel. 4. Text Amendment to Section 151.213 (B) (2) to add Section 151.195 (A) (1) to the listing of required standards for multi-family developments in the MB-1 zoning district. 5. Text Amendment to Section 151.218 to add reference to Section 151.195 (A) (1) as a requirement for multi-family developments in the MB-2 zoning district. 6. Text Amendment to § 153.193 (I) to change density requirement to reference “net” property area instead of “gross” property area. The definition of “net” property area shall exclude counting the lot’s required 35% open space as part of the total buildable lot area when determining the required lot area per unit. <i>Example: a 40,000 ft² lot would have a total buildable lot area of 26,000ft² when factoring out the required open space lot area.</i> 7. Establish standards for density, open space, access management, architectural, landscaping, and types of allowable uses to establish an “island gateway” in the BB-1. 	<p>FY 10-11</p>	<p>Administration</p> <p>Administration</p> <p>Administration</p> <p>Administration</p> <p>Administration</p> <p>Administration</p> <p>Administration</p>

Ordinances/Regulations	To be Done in Fiscal Year	Department Responsibility
Stormwater Management Ordinance Amendments (<i>in conjunction with County</i>)	FY 10-11	Administration
<ul style="list-style-type: none"> 8. Incorporate Phase II NPDES coastal rules 9. Consider requiring use of permeable surfaces for driveways, Parking spaces and other related structures 10. Consider Stormwater Utility 11. Consider using decommissioned septic systems as stormwater/rain retention cisterns 		
12. Sewer Use Ordinance (<i>in conjunction with County</i>)	FY 10 - 11	Administration
<ul style="list-style-type: none"> a. To include requirement that mandatory connection apply for all private wastewater treatment systems in the Town. 		

Additional recommended and scheduled actions include:

Action	Management Topic Goal	Responsible Entity	2007-2008	2008-2009	2010-2011	2011-2012	2012-2013
1. Continue Expanding Public Participation in Land Use Planning.		Administration	→				→
2. Revise portions of the Zoning Ordinance to address internal consistency and to implement LUP goals and policies. See Table 42 for detailed list of recommended amendments.	Land Use Compatibility	Administration					
3. Construct sewer system to serve platted/developable areas (eliminate septic system and package treatment use).	Water Quality/ Infrastructure	Administration	→				
4. Revise stormwater management regulations to incorporate Phase II rules, and consider permeable surface provisions, LID and other management recommendations of County stormwater planning.	Water Quality	Administration	→				
5. Consider Establishing a Local Watershed Planning Group. Coordinate with adjacent jurisdictions and state agencies.	Water Quality	Administration	→				
7. Pursue mechanisms to preserve the existing 18-hole golf courses.	Land Use Compatibility	Administration	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
8. Conduct Bicycle and Pedestrian facilities planning to increase interconnectivity and access.	Land Use Compatibility/ Infrastructure	Administration	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
9. Implement public parking and public access enhancements as required by beach nourishment funding or other grant funding.	Public Access/ Land Use Compatibility	Administration	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing

Conclusion

The Land Use Plan (LUP) contains the adopted goals and policies for the Town of Sunset Beach. Those goals and policies are to be implemented and followed over the next five to ten year planning period, and beyond if an update is not conducted within 10 years. The intent of the policies and actions detailed in this plan are to be carried out in good faith by current and future elected officials and Town staff. Any public decisions by Town officials regarding growth and development (e.g. re-zonings, land use related ordinance revisions, conditional use permits, capital improvement projects, public grants, etc.) are to remain consistent with the policies, goals and objectives in this plan. To allow flexibility if circumstances or community preferences change, the Land Use Plan can be updated or amended. Current Land Use Plan updates are conducted through a grant from the Division of Coastal Management and are on a seven to ten year cycle, which is primarily determined by funding availability. The Town may undertake an amendment of the Land Use Plan at any time, but must follow the regulations found in North Carolina Administrative Code Title 15A, Chapter 7, Subchapter 7B, Section .0900-.0901.

1.2 Introduction to the CAMA Land Use Plan Process

The Town of Sunset Beach, like most coastal communities in southeast North Carolina and northeast South Carolina, has seen steadily increasing growth and development in its jurisdiction over the last fifteen years. This increase in development pressure has been primarily attributed to increases in coastal tourism and increases in the nation-wide retirement age population relocating to coastal areas. Other contributing factors include the development of roads, highways and bridges that make the coast more accessible to the entire population. The desire to live in and visit coastal areas has inevitably led to certain types of development and land uses that stress and degrade some of the very characteristics that make the coast a desirable place to be. Land use planning can be an integral part in avoiding or mitigating some of the negative side effects of rapid development by anticipating potential problems and trying to establish courses of action and management programs to handle those problems in advance.

The U.S. Congress initiated the first structured form of coastal land use planning in the country with the passage of the Coastal Zone Management Act (CZMA) in 1972. CZMA encouraged coastal states to preserve their coasts by establishing programs to manage and protect coastal resources. North Carolina passed its Coastal Area Management Act, known as CAMA, in 1974. CAMA established the Coastal Resources Commission (CRC) to oversee the regulation of the coast. CAMA also provided a program framework for regulating development activity in coastal areas and required local land use planning in the 20 coastal counties. The required Land Use Plan consists of policies, maps and relevant technical data that serve as a community's blueprint for growth. Land Use Plans can provide guidance for both individual development projects and a broad range of policy issues at the local level. Such policy issues could include creating Town regulatory ordinances and prioritizing public investment programs.

CAMA also established the Division of Coastal Management (DCM), which is the official government agency responsible for administering CAMA regulations and programs. DCM uses a jurisdiction's Land Use Plan in making decisions on whether to grant CAMA permits for proposed development projects that are in that jurisdiction. Proposed projects and activities must be consistent with the enforceable policies of the jurisdiction's land-use plan, or DCM cannot permit a project to go forward.

More specifically, Land Use Plans include policies that address growth issues such as the Town's desired types of economic and residential development. An important aspect of the planning process is that the policies included in a Town's plan are those formulated and agreed upon by the local government, and are not policies dictated by the state. In addition to overseeing the land use planning process for the entire coast of North Carolina, DCM awards grants for local planning and management projects, such as funding public access sites. DCM also has four technical assistance planners throughout its four NC coastal districts to assist local governments with coastal planning and management issues.

1.3 The Function and Utility of the Land Use Plan

There are four key functions of planning and a Land Use Plan. First, a Land Use Plan provides a source of information for basing public policy and governmental decisions. The planning process helps provide knowledge and understanding of the local area's population, demographics, economy, natural environment, community capacity for growth, and overall development trends. Secondly, a plan's policies provide guidance for government decisions in formulating future decisions on public and capital investment, as well as zoning and other development regulations. The third function of a plan is to provide a preview or predictor of future government action. The public, local government staff and developers are better informed and able to understand and predict how a government will make decisions if a plan and its policies are in place and followed. The fourth function of a plan and the on-going planning process is to provide the general public, the Planning Board, staff, and elected officials the opportunity to address and discuss issues important to the local area and to shape policies and regulations to best meet the goals of the community.

NOTE: An additional important day-to-day function of a Land Use Plan is basing approval of CAMA development permits for projects in the local community on whether the impacts and purpose of the proposed project are consistent with the policies set forth in the plan. Types of development projects that require CAMA permits are discussed later.

The following section provides background information on CAMA permitting for development and the role the Land Use Plan plays in determining whether development permits will be issued.

1.4 The CAMA Permit Process

The Coastal Area Management Act (CAMA) requires permits for any development in specially designated areas called **Areas of Environmental Concern (AEC)**. In Sunset Beach, AECs are generally those areas that are in close proximity to water (ocean, ICWW, creeks, etc.) or marsh (wetlands). A CAMA permit must be acquired if a development project meets all of the following conditions:

- The project is located within one of the 20 coastal counties of North Carolina
- The project is considered "development" under CAMA
- The project is within, or affects, an Area of Environmental Concern established by the Coastal Resources Commission;
- The project does not qualify for an exemption.

What Qualifies as a CAMA Regulated Development Project?

Besides construction of residential and commercial buildings in an AEC, "development" also generally includes activities such as dredging or filling coastal wetlands or waters, and construction of marinas, piers, docks, bulkheads, oceanfront structures and roads. The Coastal Area Management Act (NCGS 113A-103(5)(a)) defines a development project as: "any activity in a duly designated area of environmental concern ... involving, requiring or consisting of the construction or enlargement of a structure; excavation; dredging; filling; dumping; removal of

clay, silt, sand, gravel or minerals; bulkheading; driving of pilings; clearing or alteration of land as an adjunct of construction; alteration or removal of sand dunes; alteration of the shore, bank or bottom of the Atlantic Ocean or any sound, bay, river, creek, stream, lake or canal".

What is an Area of Environmental Concern?

According to DCM's *CAMA Handbook for Development in Coastal North Carolina*, protecting and managing Areas of Environmental Concern is the basis for the CAMA permitting program. An AEC is generally an area of natural significance, which requires special management because it may be easily destroyed by erosion, flooding, or human activity; or it may have environmental, social, economic or aesthetic values that make it a valuable resource. The CRC designates particular areas as AECs to protect them from unmanaged development, which may cause irreversible damage to property, public health or the environment. AECs cover almost all 'navigable' coastal waters and about 3 percent of the land in the 20 coastal counties. As mentioned earlier, in Sunset Beach the AECs are generally those areas that are in close proximity to water (ocean, ICWW, creeks, etc.) or marsh (wetlands).

The CRC has established the following four categories of AECs:

- The Estuarine and Ocean System (coastal wetlands, public trust and estuary waters, and estuarine shoreline);
- The Ocean Hazard System (ocean erodible setback area, un-vegetated beach area, inlet hazard area, and high hazard flood area);
- Public Water Supplies (small surface water supply watershed and public water supply well-fields);
- Natural and Cultural Resource Areas (coastal complex natural areas, coastal areas that sustain remnant species, unique coastal geologic formations, significant coastal archaeological resources and significant coastal historical archeological resources).

A development project is likely in an AEC if it is:

- in, or on the shore of, navigable waters within the 20 CAMA counties;
- on a marsh or wetland;
- within 75 feet of the normal high water line along an estuarine shoreline;
- near the ocean beach (e.g. within 60'-120');
- within an ocean high hazard flood area (VE Zones on official flood maps);
- near an inlet;
- within 30 feet of the normal high water level of areas designated as inland fishing waters by the N.C. Marine Fisheries Commission and the N.C. Wildlife Resources Commission;
- near a public water supply;
- within 575 feet of Outstanding Resource Waters defined by the Environmental Management Commission.

For more information on the *CAMA Handbook for Development in Coastal North Carolina* and for mitigating steps required during development, see the following web-page;

<http://www.nccoastalmanagement.net/Handbook/contents.htm>

What Are the Types of CAMA Permits?

There are currently three types of development permits: major permits, general permits and minor permits. The Division of Coastal Management makes permit decisions after considering agency and public comments, and after determining whether a proposed project meets CRC rules and is consistent with the policies of the local government's Land Use Plan.

The CAMA permit system is divided into major and minor permits, based on the potential impacts and size of a development project.

Major permits are necessary for activities that **require other state or federal permits** (such as stormwater and sedimentation control), for projects that cover more than 20 acres or for construction covering more than 60,000 square feet. Applications for major permits are reviewed by 10 state and 4 federal agencies before a decision is made.

Minor permits are required for projects, such as single-family houses, that do not require major permits or general permits. Permits are reviewed, issued and administered to CRC standards by local governments under contract with the Division of Coastal Management.

The Town of Sunset Beach issues CAMA minor permits.

General permits are used for routine projects that usually have little or no threat to the environment.

For detailed information on permit categories refer to *Section 5: Applying for a CAMA Permit*, located at this web address <http://www.nccoastalmanagement.net/Handbook/contents.htm>.

Some development may be authorized by exemption certificate. Section 103(5)(b) of the Coastal Area Management Act exempts the following activities from permitting requirements:

- road maintenance within a public right-of-way;
- utility maintenance on projects that already have CAMA permits;
- energy facilities covered by other laws or N.C. Utilities Commission rules;
- agricultural or forestry production that doesn't involve the excavation or filling of estuarine or navigable waters or coastal marshland (Note: these activities are not exempt from permitting requirements under the state's Dredge and Fill Law);
- agricultural or forestry ditches less than 6 feet wide and 4 feet deep;
- emergency maintenance and repairs when life and property are in danger;
- the construction of an accessory building usually found with an existing structure, if no filling of estuarine or navigable waters or coastal marshland is involved.

1.5 Public Involvement

Formulating policies based on community consensus covering a wide range of issues relies on adequate public involvement. In addition to providing the public an opportunity to provide their concerns on growth and development, the Land Use Plan is intended to inform the public on the importance of planning, the role their town government plays in managing development,

the possible impacts of un-managed development, and the utility of preserving natural resources.

The 2006 Sunset Beach Land Use Plan Update established a Citizen Participation Plan (See Appendix II) which provides the public with the Land Use Plan meeting schedule and the methods by which the Town will use to distribute Land Use Plan materials to the public. Those methods include: newspaper advertisements, Town website: <http://www.sunsetbeachnc.gov/>, email list serve, and a hardcopy of materials available at Town Hall located at 700 Sunset Blvd. N.

1.5.1 Citizen Participation Plan

The Town Council adopted Phase I of the Citizen Participation Plan in April 2006, and Phase II in March 2007. See Appendix II for the Phase I and Phase II Citizen Participation Plans.

For detailed information on how to use the document see phase II '*Tools for Managing Development*', sections 10.1 – 10.2.

Section 2. Community Issues and Vision

2.1 Growth Related Concerns and Goals

The identification of community concerns and goals by the public and local leaders helps to identify the most problematic issues facing the community and what the community wants to accomplish. The key issues facing the community are usually the result of growth related conditions that are beginning to directly impact the quality of life of residents and property owners. After key issues are identified and prioritized for action, a community 'vision' and local policies are established to guide growth in accordance with the Town's desired direction.

2.2 Key Planning Issues Impacting Sunset Beach

The list of dominant issues facing the Town were established from public meetings, staff input, Planning Board and Town Council guidance, and from lingering issues from the 1997 Land Use Plan.

Given the number and complexity of issues, and the Town's limited capacity to address them all, the Town will likely only fully address or attempt to resolve a handful of community issues. Therefore, a priority list of issues will be established. The prioritized issues are generally those key issues that have recently emerged and those which the Town can proactively address. The priority issues will be thoroughly addressed under the policy statements in this Land Use Plan (*to be established in phase II*). Furthermore, a set of objectives will be established to adequately and feasibly address the top issues. The objectives to accomplish will make-up the Town's Implementation Schedule (*to be established in phase II*). The Implementation Schedule is a list of items to be carried out by the Town over a five-year period. The purpose of the Schedule is to ensure that policies are actually implemented and town goals are being actively pursued.

Clarification Between Goals, Objectives and Policies

A **Goal** is a desired outcome. *Ex. Improve surface water quality.*

An **Objective** is a specific step or action taken to reach a goal. *Ex. Implement specific stormwater management measures to reduce runoff to surface water.*

A **Policy** is an official course of action or guiding principle that is followed to ensure actions taken are consistent with goals. *Ex. The Town shall take steps to pursue the improvement of surface water quality in its jurisdiction.*

2.2.1 General Issues Identified

The following list is the complete list of growth related issues identified by the Town and through public input. The list is not in any particular order.

- Storm Water Management
- Expansion of Sewer System
- Impacts Associated with High-rise Bridge
- What Housing Types Should be Allowed (e.g. “Mega-structures”, Single Family, Multi Family)
- Types and Scale of Commercial Growth
- Increasing Public Access/Boat Ramps
- Proactively Manage Intensity (building height and lot coverage) and Density (units per acre) of all new Development
- Assess Potential Impacts from Surrounding Area Growth (Myrtle Beach, Brunswick County and Wilmington)
- Assess Feasibility of More Parks/Recreation Opportunities in the Jurisdiction
- Ensure Infrastructure Capacity will Meet Expected Growth
- Protect Quality Green Space/Open Space (Protect sensitive areas)
- What Level of Continued Annexation & ETJ?
- Define the Town’s Character- Is it a Small Beach Town?
- Traffic/Transportation Issues and Needs
- Provide Adequate Public Parking/Restrooms for day trippers
- Town Responsibility for Remaining Consistent with Land Use Plan When Taking Public Action

2.2.2 Priority Issues and Goals

- Expansion of Centralized Sewer/Elimination of Septic Systems
- Stormwater Runoff/Water Quality Improvement
- Proactively Managing Dimensional Size (lot size, density, and height) of Future Development and Redevelopment
- Retaining and Enhancing Community Appearance (landscaping, signage, buffers)

2.2.3 Key Goals of CAMA To Be Integrated With Town Goals

In addition to the Town’s list of priority issues and associated goals, the Coastal Resource Commission (CRC) and the Division of Coastal Management (DCM) have integrated a set of goals to assist the Town in meeting the planning requirements of the Coastal Area Management Act (CAMA). These goals are related to five development-related “Management Topics” established by the CRC. **The Management Topic areas include: 1) Public Access; 2) Land Use Compatibility; 3) Infrastructure Carrying Capacity; 4) Natural Hazards; and 5) Surface Water Quality.** Consistency with the goals of the CAMA Management Topics is felt to be essential for the proper use, development, and protection of coastal resources.

Many of the issues and goals identified and prioritized by the Town already address the broad CAMA goals and will be integrated and combined where applicable. However, where Town identified goals may lack, the Town is required to integrate and attempt to meet all the goals under the Management Topics.

The additional goals under the CAMA Management Topics that are to be integrated with Town goals include:

- Maximize public access to the beaches and the public trust waters of the jurisdiction.
- Ensure that development and use of resources or preservation of land minimizes direct and secondary environmental impacts, avoids risks to public health, safety and welfare and is consistent with the capability of the land based on considerations of interactions of natural and manmade features.
- Ensure that public infrastructure systems are appropriately sized, located and managed so the quality and productivity of areas of environmental concern and other fragile areas are protected or restored.
- Conserve and maintain barrier dunes, beaches, flood plains, and other coastal features for their natural storm protection functions and their natural resources giving recognition to public health, safety, and welfare issues.
- Maintain, protect and where possible enhance water quality in all coastal wetlands, rivers, streams and estuaries.

2.3 Vision Statement

The Vision Statement of Sunset Beach is intended to be a general and brief statement about the Town's main preferences for future growth. The Vision Statement should be based on a consensus of the views of community citizens and community representatives.

The Town should establish a community vision that ...“consists of a description of the general physical appearance and form that represents the local government’s plan for the Town. The community vision shall include statements of general objectives to be achieved by the plan. These objectives shall serve as the foundation for more specific objectives and policies stated elsewhere in the Land Use Plan. The objectives shall include changes that the local government feels are needed to achieve the planning vision”.

To maximize the utility and scope of the Vision Statement of Sunset Beach, community priority issues, local citizen input, and the preferences of the local government were all considered during the statement creation process.

2006/2007 Sunset Beach Vision Statement

The Town of Sunset Beach intends to promote and support the orderly economic and aesthetic growth and development of the community in accordance with its adopted Land Use Plan and development-related ordinances. The Town of Sunset Beach desires to maintain its unique coastal-town character by promoting lower-density and single-family residential development as its primary growth pattern. The Town also recognizes that it coexists with a fragile coastal environment, and it shall seek to preserve and conserve the land and estuarine water, including its beach and golf course amenities that have made this community a highly desirable place to live. Furthermore, the Town values being responsive to the public and improving the quality of life for all its citizens, to this end, the Town shall continually seek the involvement, input and various viewpoints of its citizens during the Town’s official consideration of land use and development decisions.

Section 3. Analysis of Trends and Emerging Conditions

The analysis of trends and emerging conditions section provides information on the population, housing and economic characteristics of Sunset Beach. Such information is intended to allow Town officials to make growth management decisions based on an understanding and knowledge of where the Town has come from, where it is and where it may be heading. The sources of data used include the 1990 and 2000 U.S. Census, U.S. Census 2004 municipal estimates, NC State Demographer 2004 estimates and 2010 –2030 projections, and a 2005 Claritas, Inc. (www.claritas.com) demographics projection for southeast Brunswick County and northeast Horry County (South Carolina).

Population, Housing and Economy

The current population size, both permanent and seasonal, and the level to which it will change during the planning period determines the amount of land that should be allocated for future uses and the related pressure that may be expected on coastal resources. Also, demands placed on community infrastructure (roads, sewer, stormwater, etc.) are directly related to growth in population and development. Population characteristics such as age and income help predict requirements for different types of housing and land uses. (NC DCM, *Technical Manual for Coastal Planning*)

Information on the existing housing stock and related household information in the Sunset Beach community provides a base for planning for future housing needs. Household size, the types of housing units, and the number of owners and renters, can all be considerations when formulating development policies.

3.1 Population Characteristics and Trends in Sunset Beach

Table 1: Population Change from 1990 to 2004

(Source: U.S. Census 1990 and 2000, U.S. Census Estimates 2004, and NC State Demographer)

Municipality	1990 Pop.	2000 Pop.	% Growth (1990-2000)	2001 Pop.	2002 Pop.	2003 Pop.	2004 Pop.	% Growth (1990-2004)	% Growth (2000-2004)
Sunset Beach Town Limits	311	1,852	495%	1,942	2,018	2,098	2,095	573%	13%
ETJ*		370					418**		

*Derived from counting population totals in the census blocks in the ETJ area. **Estimated applying the 13% growth rate to the 2000 ETJ population.

Table 1 shows that the population of Sunset Beach has increased considerably from its 1990 level. However, it must be noted that several annexations of pre-existing housing units and populations occurred on the mainland portion of Town between 1990 and 2000. Such annexations help explain the substantial percent increase in population as compared to adjacent municipalities which is seen in later tables. While there were additional annexations between 2000 and 2004, the percent growth of only 13% between 2000 and 2004 shows that the scale of

annexations decreased and therefore the scale of population growth decreased. The tables below show the annexations between 1990 and 1996 and the annexations between 1997 and 2006. The 1990-1996 annexations included many developments/subdivisions with pre-existing occupied housing units, or units which were subsequently developed and occupied before the Census 2000 count. The only comparatively large annexation between 1997 and 2006 was part of the Sea Trail golf course (Jones Byrd course), which did not contain many pre-existing housing units and therefore did not increase the Town population as substantially as some of the large annexations in the 1990's. However, portions of this annexation are currently being subdivided and are planned for residential lots along the golf course, which could boost population numbers again. The tables below list the Town's annexations over the last 16 years.

Table 1.1 Annexations 1990 -1996

Name	Year	Acres
King's Trail	1990	25
Sea Trail Phase I and II	1990	210
Sugar Sands	1990	24
Oyster Point Phase I and II	1991	66
Colony	1991	21
Woodstork, Baroney Place, Osprey Watch	1994	59
Seaside Station, Shoreline Woods, Oyster Bay Golf Course	1995	454
Planter's Ridge	1995	108
TOTAL		967

Table 1.2 Annexations 1997-2006

Name	Year	Acres
Rice Mill Phase III & IV	1998	29
Seatrail at NC 179	1998	3.5
Discovery Lake at Seatrail Plantation	1998	11
Sea Trail	1999	592
Colony II	1999	8
Georgetown Estates	2001	32
Rice Mill Phase II	2003	20.5
Ransom Tract	2005	29
Lake Medcalf/Lake Shore	2005	45
Frink Property	2006	18
Meyers Park	2006	2
TOTAL		790

Analysis using Geographic Information Systems (GIS) processing by the Cape Fear Council of Governments shows that there is currently approximately 4,000 acres of total area in the Town Limits. This total area not only includes land, but water, marsh, dunes and unvegetated beach as well. The amount of land area* in the corporate limits is approximately 2,600 acres (2,300 mainland + 300 Island). By comparing the land area annexed over the last 16 years (approx. 1,750 acs.) to the total land area in Town as of 2006 (2,600 acs.), shows that the Town has more than tripled in land area size since its pre-1990 land area amount of approximately 750 acs.

*Land area in this case refers to land that is more likely to be suitable for development.

Table 2: Population Growth Comparison for NC and SC Coastal Municipalities 1990-2004

(Source: U.S. Census 1990 and 2000, U.S. Census Estimates 2004, NC State Demographer)

Municipality	1990 Pop.	2000 Pop.	% Growth Rate (1990-2000)	2004 Pop.	% Growth Rate (2000-2004)
Bald Head Island	78	173	121%	246	42%
Calabash	1,210	715	-40%	1,346	6%
Carolina Beach	3,630	4,778	32%	5,192	8%
Caswell Beach	175	370	111%	457	23%
Holden Beach	626	792	26%	835	5%
Kure Beach	619	1,512	144%	2,020	33%
Oak Island	4,550	6,627	45%	7,281	9%
Ocean Isle Beach	534	430	-19%	483	12%
Shallotte	965	1,381	43%	1,533	11%
Southport	2,369	2,374	0%	2,612	10%
Sunset Beach	311	1,852	495%	2,095	13%
Surf City	970	1,413	46%	1,641	16%
Topsail Beach	362	473	31%	523	10%
Wrightsville Beach	2,937	2,593	-11%	2,539	-2%
Emerald Isle	2,434	3,486	43%	3,648	4%
Kitty Hawk	1,937	2,991	54%	3,313	10%
Kill Devil Hills	4,238	5,897	39%	6,425	8%
Brunswick County	50,985	73,143	43%	85,034	16%
SOUTH CAROLINA					
Atlantic Beach	446	351	-21%	364	3%
North Myrtle Beach	8,636	11,121	29%	13,160	18%
Myrtle Beach	24,848	23,401	-.05%	25,410	8%
Surfside Beach	3,845	4,439	15%	4,661	5%
Horry County	144,053	196,629	36%	217,608	10%
Average					12%
Sunset Beach Rank*	3rd Lowest	11th Highest	Highest	12th Highest	6th Highest

*Ranking includes municipalities only. There are 21 municipalities in the ranking.

Table 2 shows the considerable growth rate that the Town experienced since 1990 in comparison with the growth rates of similar municipalities. Similar in this case refers to either its similar coastal geography or its adjacency to the Sunset Beach area. In 1990, with limited mainland territory and a small on-island permanent population, the Town's population was the third lowest out of all the communities in the above comparison. Between 1990 and 2000, the Town undertook several large-scale annexations of mainland golf communities which led to a nearly 500% increase from its 1990 population. This growth rate far exceeded the growth rates of other North Carolina beach communities. While the Town's growth rate was exponential, its actual population in 2004 was still ranked only seventh highest among North Carolina municipalities with a beach strand, behind Oak Island, Carolina Beach, Kill Devil Hills, Kitty Hawk, Emerald Isle and Wrightsville Beach. Sunset Beach will likely surpass Wrightsville Beach in the next few years as Wrightsville Beach is built-out and actually experiencing a decline in population. Surf City may also rise much higher in the ranking as it continues to accept a high-level of voluntary annexations and expands its mainland boundaries. The positive and negative experiences with mainland expansion in Surf City may be a good case study for Sunset Beach as it plans for further expansion. Despite its much higher growth rate during the

1990's, the Sunset Beach growth rate from 2000 to 2004 became more in line with the other community growth rates compared in the table above. The rate was only slightly above the 12% average for all jurisdictions.

Table 3: Population Demographics Comparison of All North Carolina “Municipalities with Beaches” from Census 2000

(Source: U.S. Census 2000 Population and Housing and U.S. Census 2000 Employment and Income)

Municipality	Median Age	% in Labor Force – 16 & Over	Median Household Income	Median Family Income	Per Capita Income
Atlantic Beach	48.7	63.3%	\$38,312	\$52,411	\$31,339
Bald Head Island	56.3	56.7%	\$62,083	\$56,964	\$45,585
Carolina Beach	43.6	68.0%	\$37,662	\$44,882	\$24,128
Caswell Beach	59.9	39.9%	\$57,083	\$63,750	\$41,731
Emerald Isle	50.1	54.3%	\$53,274	\$60,257	\$31,316
Holden Beach	55.4	48.8%	\$59,583	\$70,000	\$36,113
Indian Beach	58.8	52.7%	\$47,250	\$45,250	\$25,826
Kill Devil Hills	36.7	76.6%	\$39,712	\$44,681	\$20,679
Kitty Hawk	40.6	69.9%	\$42,813	\$48,656	\$22,960
Kure Beach	50.5	60.8%	\$47,143	\$55,875	\$26,759
Nags Head	42.7	67.0%	\$53,095	\$61,302	\$30,157
North Topsail Beach	45.1	64.4%	\$45,982	\$53,125	\$33,972
Oak Island	49.2	56.1%	\$40,496	\$48,775	\$23,964
Ocean Isle Beach	53.4	49.6%	\$67,639	\$65,625	\$42,605
Pine Knoll Shores	61.8	36.8%	\$53,800	\$60,662	\$34,618
Southern Shores	51.4	51.3%	\$61,676	\$68,250	\$35,933
Sunset Beach	60.2	37.8%	\$47,356	\$57,019	\$36,181
Surf City	48.1	61.7%	\$40,521	\$48,654	\$25,242
Topsail Beach	55.6	53.7%	\$55,750	\$64,167	\$35,838
Wrightsville Beach	37.1	65.6%	\$55,903	\$71,641	\$36,575
Brunswick County	42.2	57.7%	\$35,888	\$42,037	\$19,857
North Carolina	35.3	65.7%	\$39,184	\$46,335	\$20,307
NC Beach Municipal Average	50.26	56.7%	\$50,356	\$57,065	\$32,118
Sunset Beach Rank Among North Carolina Communities with Beaches*	2 nd Highest	2 nd Lowest	11 th Highest	10 th Highest	5 th Highest

*Ranking includes municipalities only. There are 20 municipalities in the ranking.

Table 3 shows that according to Census 2000 information, the Sunset Beach population is on average ten years older than the populations of the other North Carolina beach communities. The Town also has a lower percentage of its population working in the labor force. Sunset Beach is around the median (half of the other communities above and half below) in household and family income levels in the table above. However, Sunset Beach was the 5th highest in per capita income (total income divided by total population) in the 2000 Census. As housing costs have substantially increased since 2000, it is likely that median income levels have also been

increasing as the new residents coming in must have higher income levels to afford the housing. The increase in the Market Value of housing in Sunset Beach is shown in Table II.

Table 4: Median Age in Sunset Beach and Adjacent Municipalities 1990-2005

(Source: U.S. Census 1990 and 2000, 2005 Claritas Demographics Report)

Municipality	1990 Median Age	2000 Median Age	2005 Median Age (estimate)*
Sunset Beach	49.9	60.2	58.2
Calabash	63.6	57.9	59.7
Carolina Beach	37.6	43.6	N/A
Caswell Beach	44.5	59.9	N/A
Holden Beach	53.3	55.4	N/A
Kure Beach	44.9	50.5	N/A
Oak Island	N/A	49.2	N/A
Ocean Isle Beach	50.3	53.4	N/A
Sunset Beach Rank	3 rd Highest	Highest	

*Estimate part of 2005 Claritas Inc. Demographic Profile of Myrtle Beach and surrounding area.

Table 4 shows that the median age in Sunset Beach has increased by about ten years between 1990 and 2000. If the population was static this would be attributed to natural aging between the ten year census, but due to the large increase in population between 1990 and 2000 we can assume that it is the age of the residents moving into Sunset Beach which has become older. The data in the table above and the table below show that the people who have recently moved into the Town and those making up the majority of the Town's population are retirees or of retirement age, and that the proportion of middle-aged people is decreasing.

Table 5: Population by Age in Sunset Beach 1990-2005

(Source: U.S. Census 1990 and 2000, 2005 Claritas Demographics Report)

1990 Aged 55 or over	2000 Aged 55 or over	2005 Aged 55 or over (estimate)*
42%	64%	57%
1990 Aged 35 to 54	2000 Aged 35 to 54	2005 Aged 35 to 54 (estimate)*
33%	23%	20%
1990 Aged 18 or less	2000 Aged 18 or less	2005 Aged 18 or less (estimate)*
13%	7%	10%

*Estimate part of 2005 Claritas Inc. Demographic Profile of Myrtle Beach and surrounding area.

Table 6: 2005 Estimate of Median Household Income and Per Capita Income in Sunset Beach and Adjacent Areas*

(Source: 2005 Claritas Demographics Report)

Municipality	Median Household Income in 2005 (estimate)	Per Capita Income in 2005 (estimate)
Sunset Beach Area	\$54,732	\$38,882
Shallotte Area	\$37,628	\$19,835
Ocean Isle Beach Area	\$45,124	\$29,489
Calabash/Carolina Shores Area	\$42,424	\$26,205
North Myrtle Beach Area	\$41,418	\$26,843
Little River Area	\$44,361	\$25,522

*Tabulation areas are done by zip code boundaries not municipal boundaries.

While Table 6 above is based on zip code boundaries instead of Town Limits for data gathering, the zip code boundaries do not overlap municipal boundaries and are small enough so that the data is still useful for comparison. Table 6 shows that the Sunset Beach area has considerably higher median and per capita income than adjacent municipalities in Brunswick and Horry counties. The income level of an area is likely to determine the types of housing and commercial retail, service, and recreational development that seeks to enter the local market with the higher income levels.

3.1.1 Seasonal and Peak Population Estimates

When planning for infrastructure, housing, commerce and recreation needs that may occur as a result of permanent population growth, it is also necessary to consider the impact vacationers, visitors and temporary residents present to the planning area on a seasonal basis.

Persons who reside in the planning area for the majority of the year, or refer to it as their primary residence, make up the permanent population. Persons who temporarily vacation or visit for at least one night in the planning area during the peak season comprise the seasonal population. The permanent population plus the seasonal population make up the peak population. While there is no standard method for tabulating seasonal population for a given jurisdiction, there are a few methods that can be used to estimate the population. A frequently used way to estimate seasonal populations is to use the number of housing units and occupancy rates to determine how many people per housing unit occupy different types of housing units. A problem with using housing units and occupancy rates to estimate population is that it is difficult to know the true number of housing units being used and how many people are staying in each unit. There is a wide variance in assuming three people per unit versus six people per unit in estimates, but such wide variance exists from unit to unit.

Seasonal Estimate by Housing Unit

According to Census data there were approximately 2,000 vacant units categorized as seasonal use in the year 2000. Census 2000 also shows that around 60% of the total housing in Town has been used for seasonal use. Since Census 2000, there have been 828 total housing units built. If it

is assumed that the 60% ratio for seasonal housing continues, it can be assumed 60% of the 828 new housing units will be used for seasonal use. 60% of 828 is 497. The 2,000 already existing seasonal units plus 497 new units equals approximately 2,500 units for seasonal use today. To try and account for variation in the number of persons per unit, it will be assumed that 50% of the seasonal units have 3 persons and 50% has 6 persons. In addition, a low seasonal estimate will be derived by assuming occupancy of only 75% of the seasonal units. A high seasonal estimate will be derived by assuming 100% occupancy of the seasonal units. The permanent population has been estimated to be 2,219 for 2006, which is shown in Chart 2 later in this section.

High Estimate (100% Occupancy)

$[1,250 \text{ units} \times 3 \text{ persons} = 3,750] + [1,250 \text{ units} \times 6 \text{ persons} = 7,500] = 11,000 \text{ seasonal pop.}$

$11,000 \text{ seasonal} + 2,219 \text{ permanent} = 13,219 \text{ peak pop.}$

Low Estimate (75% Occupancy)

$[(1,250 \times .75) \times 3 \text{ persons} = 2,812] + [1,250 \times .75 \times 6 \text{ persons} = 5,625] = 8,437 \text{ seasonal pop.}$

$8,437 \text{ seasonal pop.} + 2,219 \text{ permanent} = 10,656 \text{ peak pop.}$

Seasonal Estimate by Water Consumption

Another technique to estimate seasonal population is to compare the metered water consumption rates in the off-season to the metered water consumption in the high season. Water consumption totals during the off-season gives a base number that can be assumed to be an amount consumed by permanent residents only. If it is known how much water the permanent population alone uses in the off-season, it can be compared with how much water is being used in the high season. For example, if there was a known permanent population of 1,000 people using one million gallons per day in the off-season month of February, we could assume that a 2 million gallon per day usage in July could infer that twice as many people were using water, and therefore there could be 2,000 people in the Town. Using water consumption comparisons is problematic if there is a large presence of private water wells in Town, which would not show in the water use data. However, the Town of Sunset Beach estimates that near 100% of residences are connected to water service.

It is important to note that there are variables that could skew this simplified comparison approach, and it is reiterated that seasonal and peak population figures are best-guess estimates.

The water consumption comparison table follows. **Peak season population estimates are in the bottom row of the table.**

Table 7: Water Usage in Peak Season Versus Usage in Off-Season

(Source: Town of Sunset Beach Finance Department)

Year	Peak Season			Low Season
	June	July	August	February
2005 Water Use	23,032,602	29,196,923	26,055,399	
2006 Water Use				7,690,290 (.274 MGD) 8,239,596 (adjusted for 30 days)
% Increase over February	280%	354%	316%	
Estimated Population for the Month	6,213*	7,855*	7,017*	2,219 (permanent residents)

*Numbers are the peak population, they already include both seasonal and permanent pops.

The months used for comparison were February and the peak season months of June, July and August. February was used because it has the least water usage of any month, meaning this likely isolates the water consumption level for only the permanent or year-round population. Three peak season months were used to get a range of peak populations over the summer. The year 2005 water use data was used for the peak season months, because this data has not yet been collected for 2006.

Since February only has 28 days, an additional 2 days of water usage was added to the February total to give a 30 day use period for comparison with the peak season months. It is therefore inferred that the permanent population of 2,219 people uses 8,239,596 gallons of water in 30 days. The next step was to compare this monthly total consumption to the consumption level in the peak season. As shown in Table 7 above, there is an increase in water use during the peak season over the low season ranging between 280-354%. The “estimated population for the month” numbers in the bottom row in the above table reflect increasing the population of 2,219 by the respective percent increase in water use for each peak season month. For example, a population of 2,219 increased by 354% is 7,855. $[2,219 \times 3.54 \text{ (or } 354\%) = 7,855]$

Using water consumption data, the peak seasonal over-night population estimate ranges from 6,200 to 7,900 people.

It is also important to note that the 6,200 to 7,900 range could be overestimating the peak population when you consider that during the summertime, extra consumption of water can be caused from watering lawns, taking more showers after swimming or being in the heat, and increased commercial and restaurant water usage in the summer, rather than from an increase in population.

Summary of Peak and Seasonal Population Estimates

Two methods of estimating seasonal and peak populations have been used showing a wide range of possible peak populations. Since there are several variables that could alter any of the estimates, it may be best to use the entire range (6,000 – 13,000) or a mid-point (9,500) when considering the Town's peak over-night population.

Day-trip Visitors

Another consideration when gauging seasonal population impact on community infrastructure is the effect of 'day-trippers'. Unlike estimates of overnight visitors above, 'day-trippers' travel for brief stays in the community, typically for recreation activities like going to the beach. 'Day-trippers' would primarily have an impact on traffic congestion and parking availability. Again, there is no standard method for calculating 'day-trippers'. One of the best indicators for the number of day-trip visitors is the number of parking spaces available. The availability of public parking in the Town has not changed significantly since the 1997 Land Use Plan update. The 1997 Land Use Plan estimated day-trippers as follows:

[3 shifts of parking x 433 parking spaces (283 public + 150 pay spaces at the fishing pier)] x 2.8 persons per vehicle = **3,637 day-trip visitors per day**

Again, many variables including fewer shift changes and more persons per car, and even illegal parking could make the day-trip visitor total vary widely.

Peak Population and Day-Trip Visitors

Considering the peak over-night population estimates plus the day-trip visitor estimate, the Town of Sunset Beach could have between 9,000 to 16,000 people in its jurisdiction on a peak day. It is unlikely, given current road and bridge capacity, that these peak levels are sustained constantly over the summer months, and are probably only reached during weekends with good weather or holidays such as the 4th of July.

3.1.2 Population Projections

Much like seasonal and peak population estimates, population projections can vary widely due to intervening factors such as the strength of the economy, availability of jobs, housing prices, and the quality of life in the area. However, projecting potential population can create an awareness of the potential challenges and needs that may confront the community in the near future. Sunset Beach is a community with vacant land available for residential development and annexation, as well as the potential for redevelopment and in-fill. Sunset Beach is located in Brunswick County, which is one of the fastest growing counties in North Carolina, and has recently been named one of the fastest growing counties in the United States. Sunset Beach is also on the state border with South Carolina and the high growth area of North Myrtle Beach and Little River. It is almost universally accepted that the Town will continue to grow over the next twenty years. The question is how big will the population get in Sunset Beach. If it desires, one way the Town can play a role in determining its future population is to place limitations on the density of future development, or allowing dense development but requiring more open

space dedication in Town as part of those developments. Open space dedication will remove land for further development while also improving the quality of life and aesthetic value of the community.

Population projections for the total population in the County are provided by the North Carolina State Demographer. Municipal population projections are not done by the State Demographer because of the difficulty in predicting things such as annexations. The State Demographer's population growth for Brunswick County shows that **the growth in population will occur solely from migration into the county**, while natural growth from births will be offset by the natural population decline from deaths. It may also be assumed that this trend of all in-migration growth and zero natural population growth will be the same for Sunset Beach.

Chart 1 below shows the State Demographer's projected population growth for Brunswick County.

Chart 1: County Permanent Population Projections to 2010, 2020 and 2030

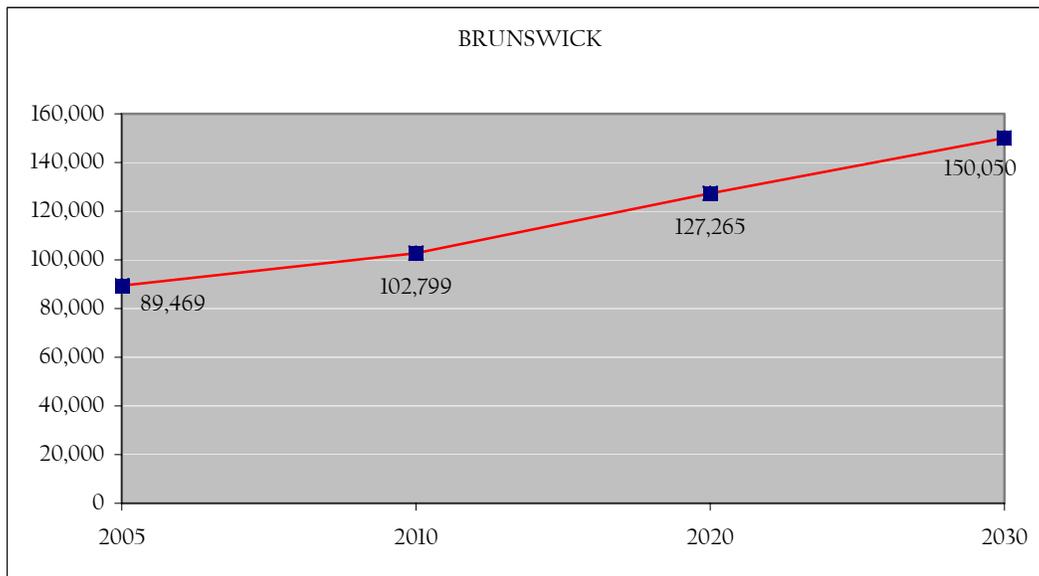
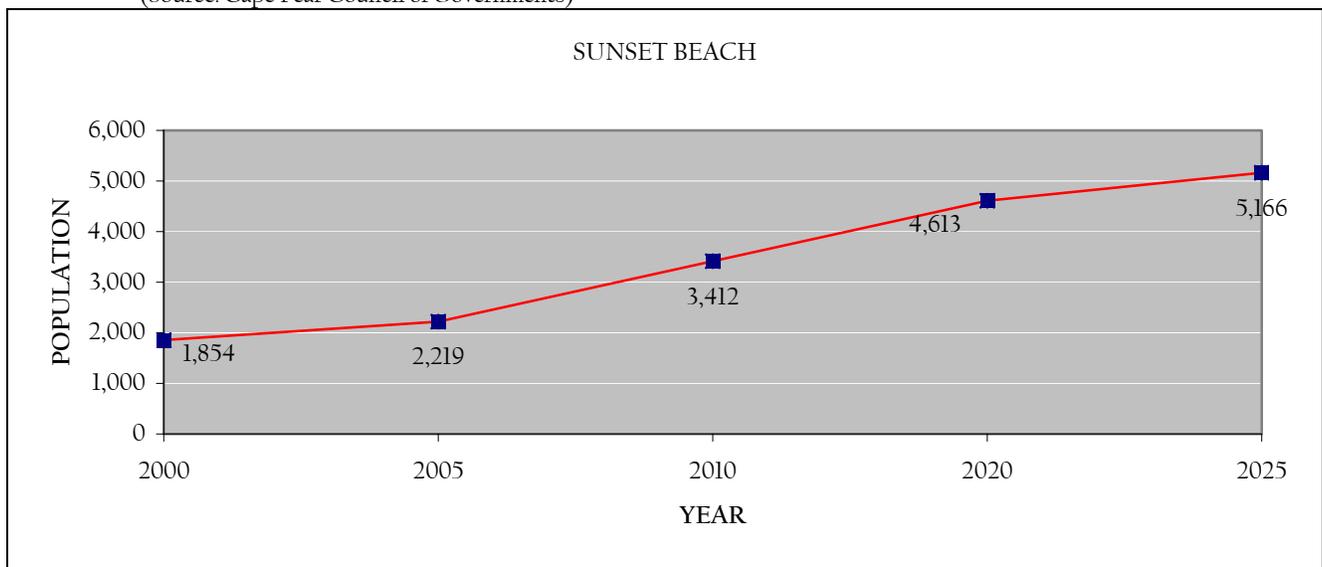


Chart 2 shows a projection of population growth in Sunset Beach from 2005 to 2020. An annual growth rate of 3.2% was applied to Sunset Beach for the year 2010 estimate, which is in line with the Town’s growth rate trend from 2000-2004. In addition, the annex of the “Sandpiper Bay” and “Wyndfall” tracts in June 2007 was also included in estimating the 2010 population estimate (assumes 59%* of the 711 housing units in Sandpiper Bay and Wyndfall will be occupied by a household of 2 permanent residents). An annual growth rate of 2.4% was applied to show growth from 2010 to 2025, which is based on the projected growth rate of the County during this time period.

*59% is the County’s permanent resident to seasonal resident occupation rate as of the latest census.

Chart 2: Sunset Beach Permanent Population Projections*

(Source: Cape Fear Council of Governments)



Based on the estimates in Chart 2, the 2010 projection is a 84% increase from the Census 2000 Sunset Beach population of 1,854. Any variation in the population increase will likely be caused by further annexations by the Town, infill of existing lots, and/or re-zonings allowing more or less dense development.

3.2 Housing Characteristics and Trends in Sunset Beach

Analyzing the type of existing housing stock enables the community, elected officials and planners to get an overall picture of the range of housing opportunities available or needed in the jurisdiction. Other housing attributes such as the building year of the structure, owner versus renter occupation, and value, act as indicators to the nature and characteristic of the existing housing stock.

Table 8: Type of Housing Units Comparison For All North Carolina Municipalities with “Beach Strand”

(Source: U.S. Census 2000 Population and Housing)

Municipality	Total Number of Housing Units	Number of Units as Single-Family	% Single Family out of Total Housing Units	Number of Units in Multi-Family Developments	% Multi-Family out of Total Housing Units	% Duplex and Townhome out of Total Housing Units	% Manufactured Housing out of Total Housing Units
Atlantic Beach	4,728	1,460	30.8%	1,002	21.1%	20.2%	27.9%
Bald Head Island	599	518	87.5%	27	4.6%	7.8%	0.0%
Calabash	508	293		146	28.1%	1.5%	13.9%
Carolina Beach	4,086	1,743	42.8%	1,754	43.1%	11.6%	2.5%
Carolina Shores	838	817		20	2.4%	0.6%	0.2%
Caswell Beach	571	251	43.7%	266	46.3%	9.7%	0.3%
Emerald Isle	6,017	3,505	58.7%	764	12.8%	11.6%	16.7%
Holden Beach	2,062	1,731	84.7%	53	2.6%	12.7%	0.0%
Indian Beach	1,218	34	2.7%	366	29.4%	0.2%	66.9%
Kill Devil Hills	5,302	4,383	82.9%	569	10.8%	4.1%	2.2%
Kitty Hawk	2,618	1,778	67.8%	264	10.1%	9.2%	12.7%
Kure Beach	1,560	961	61.2%	323	20.6%	13.6%	4.5%
Nags Head	4,149	3,459	83.3%	284	6.8%	7.5%	1.6%
North Topsail Beach	2,085	533	25.7%	1,030	49.6%	19.0%	5.6%
Oak Island	6,651	5,562	83.5%	132	2.0%	2.5%	11.5%
Ocean Isle Beach	2,507	1,743	69.3%	664	26.4%	4.2%	0.1%
Pine Knoll Shores	2,049	981	47.7%	758	36.8%	15.4%	0.1%
Southern Shores	1,921	1,882	97.4%	3	0.2%	2.2%	0.2%
Sunset Beach	2,983	1,591	51.8%	652	21.2%	6.7%	20.3%
Surf City	2,578	1,437	55.6%	245	9.5%	6.4%	28.5%
Topsail Beach	1,149	920	81.1%	79	7.0%	11.7%	0.3%
Wrightsville Beach	3,050	968	31.3%	1,077	34.8%	33.4%	0.5%
Brunswick Co.			55.6%				
North Carolina			64.4%				
NC Beach Municipal Average	2,692	1,661	59.4%	476	19.3%	9.6%	9.8%
Sunset Beach Rank Among North Carolina Communities with Beaches*	8 th Highest	10 th Highest	13 th Highest	8 th Highest	9 th Highest	14 th Highest	4 th Highest

*Ranking includes municipalities only. There are 22 municipalities in the ranking.

NOTE: Calabash and Carolina Shores do not have a “beach strand” within their jurisdiction, but were added for comparison because of their proximity to Sunset Beach.

Table 8 above shows that Sunset Beach is well above the “North Carolina municipalities with a beach” average for the number of total housing units. However, this relatively large number of housing units is concentrated on the mainland portion of the Town. The island contains 1,094 units (or 36%) of the housing units according to Census 2000. Sunset Beach is slightly below the median for percentage of housing units in single-family, and slightly above the median for percentage of housing units in multi-family. Meaning that slightly more than half of the other beach communities have larger shares of single family housing in their housing stock, and Sunset Beach has slightly larger shares of multi-family in its housing stock than over half of the other North Carolina beach communities. The data also show that Sunset Beach is well below the median for percentage of duplex and townhomes within the housing stock. According to Census 2000, the Town is 4th in the percentage of mobile homes in its housing stock. While this figure will likely reverse as land values continue to increase and redevelopment of mobile homes occur, there are still permits for new mobile homes being sought and issued within the Town.

Table 9: Housing Occupancy Comparison For All North Carolina Municipalities with “Beach Strand”

(Source: U.S. Census 2000 Population and Housing)

Municipality	Total Number of Housing Units	% Housing Units Occupied All Year	% Housing Units Owner Occupied	Number of Vacant Units	% of Vacant Units Designated as Seasonal, Recreational or Occasional Use
Atlantic Beach	4,728	20.5%	64.7%	3,757	92.0%
Bald Head Island	599	14.7%	87.5%	511	64.8%
Calabash	508	74.2%	74.8%	131	67.2%
Carolina Beach	4,086	56.2%	65.7%	1,790	69.1%
Carolina Shores	838	91.4%	97.5%	72	61.1%
Caswell Beach	571	32.7%	89.8%	384	86.7%
Emerald Isle	6,017	27.3%	80.2%	4,373	94.7%
Holden Beach	2,062	18.4%	87.3%	1,683	64.8%
Indian Beach	1,218	4.1%	82.0%	1,168	98.0%
Kill Devil Hills	5,302	48.8%	67.4%	2,717	96.1%
Kitty Hawk	2,618	48.3%	74.7%	1,353	94.8%
Kure Beach	1,560	46.3%	76.1%	837	42.0%
Nags Head	4,149	27.4%	73.6%	3,011	98.0%
North Topsail Beach	2,085	21.6%	61.4%	1,634	85.9%
Oak Island	6,651	46.2%	78.9%	3,575	91.2%
Ocean Isle Beach	2,507	8.3%	86.1%	2,298	64.0%
Pine Knoll Shores	2,049	37.9%	90.6%	1,273	98.7%
Southern Shores	1,921	49.2%	93.7%	975	98.3%
Sunset Beach	2,983	30.5%	90.3%	2,074	87.9%
Surf City	2,578	26.7%	74.7%	1,889	92.8%
Topsail Beach	1,149	21.9%	78.2%	897	83.1%
Wrightsville Beach	3,050	41.8%	55.0%	1,775	62.0%
Brunswick County		59.2%			
NC Beach Municipal Average	2,692	31.4%	78.6%	1,735	81.5%
Sunset Beach Rank Among North Carolina Communities with Beaches*	8 th Highest	10 th Highest	4 th Highest	7 th Highest	11 th Highest

*Ranking includes municipalities only. There are 22 municipalities in the ranking.

NOTE: Calabash and Carolina Shores do not have a “beach strand” within their jurisdiction, but were added for comparison because of their adjacency to Sunset Beach.

Table 9 shows that Sunset Beach is around the median for all North Carolina municipalities with beaches in the ratio of occupied to vacant housing. Implying that Sunset Beach is typical as far as its availability of housing for seasonal visitors. The Town is also among the highest in the amount of owner occupied units, meaning that of those units occupied year round in Town, almost all are occupied by the owner of the unit rather than by a long-term renter. Sunset Beach is the median of all North Carolina municipalities with beaches for the percentage of its housing stock used for seasonal or recreational rentals, again implying that Sunset Beach sits in the middle as a seasonal tourism focused community. Meaning that about half the other beach communities draw or want to draw more seasonal visitors, and half of the other North Carolina beach communities have a smaller portion of its housing available for seasonal visitors.

Table 10: Median Year Built, Tenure, Number of Rooms, and Value Comparison of All North Carolina Municipalities with “Beach Strand”

(Source: U.S. Census 2000 Population and Housing)

Municipality	Median Year Units Built	Median Year Householder Moved Into Unit (Owner Occupied)	Median Number of Rooms in Units	Median Value of Owner Occupied Housing
Atlantic Beach	1979	1993	4.4	\$207,800
Bald Head Island	1992	1996	5.3	\$525,000
Calabash	1987	1994	4.9	\$107,400
Carolina Beach	1983	1994	4.4	\$156,000
Carolina Shores	1988	1993	6.1	\$153,000
Caswell Beach	1986	1995	5.3	\$242,300
Emerald Isle	1986	1994	5.2	\$200,000
Holden Beach	1985	1994	5.7	\$247,300
Indian Beach	1985	1992	4.1	\$625,000
Kill Devil Hills	1983	1994	4.9	\$104,500
Kitty Hawk	1985	1995	5.3	\$144,600
Kure Beach	1983	1996	4.9	\$188,300
Nags Head	1985	1995	5.5	\$143,900
North Topsail Beach	1986	1996	4.4	\$137,500
Oak Island	1983	1995	5.1	\$119,400
Ocean Isle Beach	1987	1996	5.9	\$340,700
Pine Knoll Shores	1989	1993	5.8	\$220,500
Southern Shores	1991	1994	6.6	\$221,500
Sunset Beach	1988	1995	5.3	\$219,600
Surf City	1985	1996	4.7	\$177,100
Topsail Beach	1982	1993	5.3	\$281,300
Wrightsville Beach	1978	1992	5.3	\$480,600
Brunswick County				\$95,200
North Carolina				\$108,300
NC Beach Municipal Average	1985	1994	5.2	\$249,145
Sunset Beach Rank Among North Carolina Communities with Beaches*	4th In Newest Units	Tied for 2nd in Most Recent Move-ins	Tied for 7th Highest in Number of Rooms	10th Highest

*Ranking includes municipalities only. There are 22 municipalities in the ranking.

NOTE: Calabash and Carolina Shores do not have a “beach strand” within their jurisdiction, but were added for comparison because of their proximity to Sunset Beach.

Table 10 above suggests that compared to the other beach communities, Sunset Beach is among those with the newest housing stock. The trend coast wide is actually for beach community housing stock to become newer, as older and smaller beach-box houses are either demolished and the lot redeveloped, or are damaged over time by storms and are eventually replaced with structures built to stricter standards. The Town is also tied for 2nd for having some of the most recent move-ins, meaning those occupying the housing in Sunset Beach have typically only lived in the Town for a short time. According to Census 2000 data, Sunset Beach sits around the median of the beach communities for housing value.

Table II: Sunset Beach Building Permit Data from 2000-March 2006

(Source: Town of Sunset Beach Inspections Department)

Year	Single Family	Average Market Value of SF Home*	Multi-Family	Duplex	Manufactured Home	Commercial	Demolition	
2000	54	\$111,230	7	5	5			
2001	69	\$120,335	17	6	9	4		
2002	70	\$145,370	103	4	16	1		
2003	62	\$171,022			5	2		
2004	82	\$182,030	84	1	13	2	3	
2005	73	\$185,480	60		10	1	8	
Through March 2006	17 (On pace for 68)	\$163,484	52		4		4	
TOTAL	427		323	16	62	10	15	
Total Housing Units	828							

*Based on total market value of new housing divided by total housing units. Does not include land value.

Table II shows that single family homes represented 52% of the total housing developed since the year 2000. This percentage is almost identical to the pre-existing town-wide ratio (as shown by Census 2000 data) of single family to other housing types. Of the housing developed since 2000, multi family has made up 39% of the total. This number is higher than its Census 2000 town-wide share of only 21%, suggesting that multi-family unit development is increasing in Town and taking some of the percent share of the housing stock once held by duplex and manufactured homes. Duplex development has only accounted for 2% of the housing developed in the last six years. Manufactured housing totals 7% of the housing developed since 2000.

3.3 Local Economy

Background

Like any smaller community with a beach strand, the traditional local economy is predominantly driven by seasonal tourism and recreation. However, Sunset Beach's location will play a major role in the types of commercial activities that develop in the Town in the next five to ten years. Sunset Beach is located within two miles of the Town of Calabash, which has been and plans to continue to be a regional center for seafood restaurant activity. Sunset Beach is also within ten miles of North Myrtle Beach, which is expanding as a regional commercial center with large-scale retail, recreation, entertainment, and service industries. Sunset Beach's proximity to other growing commercial centers plays a part in determining whether such commercial activities are needed or desired in Town. Other quickly growing areas with substantial commercial activities near Sunset Beach include Shallotte, which is about twenty miles away, and Wilmington which is about sixty miles away. Sunset Beach is in a position to determine its future by having the ability to choose to remain a largely residential community because of a large supply of nearby commercial activity, or it may choose to take advantage of the growth around it and encourage commercial development in Town to service its growing population. Sunset Beach's Land Use Plan policies should reflect the Town's position on these near future commercial development decisions.

As shown previously in Table 8, there is a relatively low full-time housing occupancy level of around 30%. This implies that the local economy of Sunset Beach is still primarily dependent on seasonal tourism, recreation and housing rental activity for generating the bulk of economic revenue in the Town. However, the Town's growing permanent population (over 2,000) and the growing permanent population in the immediate area suggest that within the next five to ten years it is likely that the local economy could shift from seasonal services towards servicing year-round residents. Such commercial activities are already occurring, with developments such as a medical facility and chain grocery stores and pharmacies. Furthermore, as these communities increase in full-time residents, primarily retirees, the local economy will likely move away from solely serving vacationers to an economy specialized in serving full-time residents who are typically moderate to upper income and older in age.

The Town of Sunset Beach will begin to see development pressure in the next five to ten years for chain and big-box developments as the population levels in the area continue to increase and make those large-scale developments more feasible for year-round operation. These types of developments are known for generating more traffic congestion, their unappealing architectural design, and taking commerce away from local businesses, but these types of developments also generate sales and property tax revenue, provide convenient shopping, and provide jobs (albeit lower wage jobs). Sunset Beach will have to evaluate, create policy and plan for this type of development pressure in the very immediate future.

Seasonal Accommodation Activity

While seasonal vacationers are substantial to the local economy, the Town does not have a large presence of traditional motels, hotels, resorts or inns. The largest resorts in Sunset Beach are the Sea Trail Plantation Resort with 545 rooms and the Colony at Oyster Bay with 120 rooms. These

resorts are located on the mainland portion of Town. There is also the Sunset Inn, which contains 14 rooms. Most of the seasonal rental activity is of “beach box” houses, duplexes and condos on the island portion of Town. According to the Census 2000 Population and Housing report, there were over 2,000 housing units being used for seasonal, recreational or occasional use with around 5 total rooms per unit (2-3 bedrooms or 4-6 persons per unit). With 828 new units constructed since the Census in 2000, and 41% of those being multi-family and duplex, it estimated that up to 60% of the 828 recently constructed units may be used for seasonal rental. With the 2,000 existing units classified as seasonal or recreational use, there could be a total of nearly 2,500 housing units used as seasonal rentals today.

The Town assesses a 6% accommodation tax on rental unit activity (5% Town and 1% County). For comparison, the accommodation/occupancy tax rates of other Brunswick County municipalities are listed below.

- Brunswick 1%
- Bald Head Island 5%
- Caswell Beach 5%
- Holden Beach 5%
- Oak Island 5%
- Ocean Isle Beach 3%
- Shalotte 3%
- Southport 3%
- Sunset Beach 5%

As a way to provide an indication of growth in rental activity since the last Land Use Plan update in 1997, below is a comparison of the total rental and accommodation tax revenue of 1995-96 to the total rental and tax revenue figures from 2004-2005 (most currently available). The value of 1996 dollars was converted to the value of 2005 dollars using the Consumer Price Index (CPI) for uniform comparison. Also, the tax rate in 1996 was 4% as compared to a 6% tax rate in 2005. The additional 2% was factored into the 1996 amount for uniform comparison. The accommodation tax total for 1995-96 was \$400,472. In 2005 dollars that is \$498,719, and adding an additional 2% from total rental revenues in 1996 to match the tax rate of 2005 provides an additional \$249,359 for a total of \$748,078.

1996 Seasonal Rental Revenue Comparison to 2005 Rental Revenue

1996 Total Rental Revenue	= \$12,467,995 (already adjusted to 2005 dollars)
1996 Total Accommodation Tax Revenue	= \$ 748,078 (already adjusted to 2005 dollars and a 6% tax rate)
2005 Total Rental Revenue	= \$17,629,786
2005 Total Accommodation Tax Revenue	= \$ 1,057,787

The increase in rental revenue from the 1997 level to 2005 is 71%. Factors contributing to this increase likely include development of additional units for rent over the years, annexations by the Town which may have brought in rental units, or increased demand which may have driven rental prices substantially higher than were asked in 1997. It is likely that it is a combination of

all of the above, but it still shows a substantial rise not a decrease or flattening of seasonal rental activity in the Town.

Employment Statistics

According to Table 3 previously, approximately 38% of the population 16 and over in Sunset Beach was part of the labor force*. This percentage was the second lowest for all North Carolina municipalities with a beach strand, and was 20% lower than Brunswick County and 30% lower than the state percentage. This low number of ‘workers’ and the Town’s comparatively high median age suggests that the Town is predominantly inhabited by retired or semi-retired persons. The table below shows the employment industry of those living in Sunset Beach and part of the labor force. However, Census 2000 data also showed that 65% of those people living in Sunset Beach and in the labor force, worked outside the Town jurisdiction.

*Labor force meaning those employed at a place of business or in private practice.

Table 12: Sunset Beach Employment by Industry for Persons 16 years and Over

(Source: U.S. Census 2000 Population and Housing)

Employment Industry	2000 Sunset Beach Employed	% of Total
Agriculture, forestry, fishing and hunting	0	
Mining	0	
Construction	62	10.0%
Manufacturing	21	3.4%
Wholesale trade	18	2.9%
Retail trade	107	17.3%
Transportation and warehousing, and utilities	19	3.1%
Information	16	2.6%
Finance and insurance	5	0.8%
Real estate and rental and leasing	63	10.2%
Professional, scientific, management, administrative, and waste management services	78	12.6%
Educational, health and social services	59	9.5%
Arts, entertainment, and recreation	81	13.1%
Accommodation and food services	33	5.3%
Other services (except public administration)	40	6.5%
Public administration	18	2.9%
TOTAL Employed Persons 16+	620	100%

Brunswick County Economy

Tourism is the leading industry in the County generating \$313.65 million in 2004 (latest reporting year) and providing 4,750 jobs. Brunswick County ranked tenth out of North Carolina’s counties in tourism revenue (see table 12.1). Brunswick County was also ranked in

the 100 fastest growing counties in the United States by the U.S. Census Bureau in its latest population estimates (2004). Business and commercial development in the County is expected to increase as the increasing population requires additional retail, entertainment and professional services. Continued and sustainable growth in the County and its municipalities relies on the ability to provide adequate water, sewer and stormwater infrastructure. The County has placed water and sewer expansion as one of its top priorities in its Vision 2020 Plan. The Town of Sunset Beach will need to continue to work with The County on the provision of County infrastructure within the Town's jurisdiction. The Town's growth will be dependent on the ability of County infrastructure to keep pace.

Table 13: Brunswick County Tourism Revenue (1990-2004)

(Source: North Carolina Department of Commerce, Tourism Research)

Year	Dollars in Millions
1990	\$115.83
1991	\$122.61
1992	\$136.04
1993	\$149.16
1994	\$162.97
1995	\$176.22
1996	\$188.76
1997	\$194.57
1998	\$215.01
1999	\$238.01
2000	\$243.51
2001	\$248.00
2002	\$269.92
2003	\$272.58
2004	\$313.65

Table 13.1 Top 10 Tourism Revenue Generating Counties in 2004

(Source: North Carolina Department of Commerce, Tourism Research)

County	Revenues (\$millions)	Payroll (\$millions)	Employment (thousands)	State Tax Receipts (\$millions)	Local Tax Receipts (\$millions)
Mecklenburg	2,701.42	1,088.62	38.69	134.22	74.03
Wake	1,136.58	422.19	17.07	57.38	33.35
Guilford	894.35	259.00	12.85	48.43	22.20
Dare	619.14	152.08	10.91	31.85	30.26
Buncombe	538.61	141.19	8.48	29.05	17.70
Forsyth	486.46	98.11	5.76	29.52	9.82
Durham	442.24	107.16	7.19	25.04	13.81
New Hanover	327.98	86.36	5.21	17.02	13.18
Cumberland	316.73	72.64	4.10	17.78	7.16
Brunswick	313.65	70.28	4.75	15.62	20.91

Section 4. Natural Systems Analysis

The Natural Systems Analysis section of the Land Use Plan is intended to define, describe and analyze the natural features and environmental conditions found in the Sunset Beach planning jurisdiction (Town limits and ETJ). There are a total of **14 natural features and environmental conditions** identified in this Land Use Plan that contribute to quality of life and property values for residents, and could impact development suitability for certain types of new development and redevelopment in Sunset Beach. A general assessment of the capabilities and limitations for certain types of development, based on the presence or lack thereof of natural features and environmental conditions, is depicted in the Town's Environmental Composite Map [Map 8].

This Section also contains a series of natural features maps and inventories used to visually display the condition, location and extent of the natural environment in the planning jurisdiction. The inventory (Section 4.2) in this section calculates an approximate acreage (from the best available data) of natural features and environmental conditions in the planning jurisdiction. This information can be used as a benchmark to track changes in these features in future studies and land use plans. The maps associated with this section can be used by the Town in situations such as deciding on what densities or land uses would be most compatible within particular areas of its jurisdiction based on the natural environment.

The overall purpose of this section is to provide the Town and its decision-making officials with insight on the presence and function of environmental characteristics that exist in the jurisdiction. This information should be considered during Town land use decisions which could increase density, impervious coverage, and/or stormwater runoff in environmentally sensitive areas.

A **primary goal** of the Town of Sunset Beach found in previous Land Use Plans and as a part of this Land Use Plan update is to preserve, conserve, and/or otherwise protect valuable and beneficial natural resources. Those natural resources primarily being the "Areas of Environmental Concern" (AECs), which include coastal wetlands, the vegetated dune system, the unvegetated beach areas, and estuarine shorelines.

The Town also intends to **preserve and improve surface water quality** through the;

- 1) continued enforcement of its stormwater management ordinance,
- 2) on-going improvements in design and proper maintenance of its existing stormwater management infrastructure (i.e. vegetated buffers, swales, ditches, outfall systems), and
- 3) through the elimination of septic systems in the planning jurisdiction. The **elimination of septic systems is a priority goal** of the Town and will be done through the provision of a county-operated centralized sewer system. Sewer will remove the wastewater seepage and discharge associated with septic systems away from coastal waters to a Wastewater Treatment Plant in the interior portion of Brunswick County.

4.1 Defining Natural Features and Areas of Environmental Concern

As stated in the introduction to CAMA and the permit process, the Division of Coastal Management places emphasis on protecting Areas of Environmental Concern (AECs). Definitions for AECs can be found in the *CAMA Guide to Development in Coastal North Carolina* <http://dcm2.enr.state.nc.us/Handbook/contents.htm>

Features 1 – 7 following are all considered and regulated as Areas of Environmental Concern.

1) **Coastal Wetland AEC** - Coastal Wetlands are any marsh (salt, brackish, or freshwater) in the 20 coastal counties that regularly or occasionally floods by lunar or wind tides, and that includes one or more of 10 plant species: Salt Marsh (Smooth) Cord Grass, Black Needlerush, Glasswort, Salt (or Spike) Grass, Sea Lavender, Bulrush, Saw Grass, Cattail, Salt Meadow Grass, Salt Reed or Giant Cord Grass.

Coastal Wetlands in Sunset Beach

The type of coastal wetlands found in the Sunset Beach planning jurisdiction is Salt/Brackish Marsh primarily in the extensive tidal marsh and creek system surrounding the island and running along the Intracoastal Waterway. There are approximately 1,863 acres of coastal wetlands in the planning jurisdiction. See the Areas of Environmental Concern Map [Map 1] and natural features inventory table for additional information.

The Town of Sunset Beach supports the preservation of coastal wetlands for their aesthetic qualities, flood and erosion prevention benefit, and for their water cleansing ability. The Town supports state regulations {15A NCAC 7H .0205 - .0208} which limit the use and disturbance of coastal wetlands.

2) **Inlet Hazard Area AEC** - These areas cover the lands next to ocean inlets. Inlet shorelines are especially vulnerable to erosion and flooding and can move over relatively short time periods. For each inlet along the coast, the Division of Coastal Management prepares a hazard area map. Each area is mapped based on a statistical analysis of inlet migration, previous inlet locations, narrow or low lands near the inlet, and the influence of man-made features, such as jetties and channelization projects.

Inlet Hazards in Sunset Beach

Sunset Beach has two inlet hazard areas, Tubbs Inlet and Mad Inlet. Mad Inlet is closed to water movement but remains a threat area. The closing of Mad inlet now connects the state estuarine reserve of Bird Island to Sunset Beach. See the DCM Erosion Rate Map [Map 2] for visual depiction.

Because of their dynamic and constant movement, dense or large-scale development (such as multi-family or buildings in excess of 5,000 total square feet) should be discouraged or not allowed by the Town in an inlet hazard area. Examples of dangers from moving inlets to development can be seen in communities such as Ocean Isle Beach, Wrightsville Beach and North Topsail Beach. In Sunset Beach, there are approximately 384 recorded lots totaling 93 acres intersected by the Inlet Hazard Area (IHA) in the Town limits (Island). According to County Tax records, 65 of those lots totaling 37 acres

are vacant. Current zoning in the IHA includes Beach Residential 1, Beach Residential 2, Beach Residential 2A, and Conservation I. Beach Residential 1 contains all the oceanfront properties (28% of island). The vast majority of the interior of the island is zoned BR-2. Overall, BR-2 makes up 65% of the island. These zoning districts allow only single family units, with some duplex units depending on district, on already subdivided lot sizes of 4,500 - 7,500 square feet up to 1 acre. See table below for breakdown of vacant lots per zoning district in the IHA.

Table 14: Vacant Lots Per Zoning District in the IHA

# of Vacant Lots	Acres	Zoning District	Housing Types Allowed	Lot Size
4	4	BR-1	Single-Family and Duplex	7,500
51	10	BR-2	Single-Family	4,500
1	7	BR-2A	Single-Family and Duplex	7,500
10	16	CR-1	Single-Family	1 acre

Source: Brunswick County Tax Data and Cape Fear Council of Governments GIS

3) **Estuary Waters and Estuarine Shoreline AEC** - Estuarine Waters are oceans, sounds, and tidal rivers and creeks (including the ICWW), which link to the other parts of the estuarine system: public trust areas, coastal wetlands and coastal shorelines.

Estuarine Shorelines include all lands within 75 feet of the normal high water level of estuarine waters. Development in this 75 foot “zone” must not cover more than 30% of the area with impervious surface. Along Outstanding Resource Waters (ORW), this definition includes lands within 575 feet of the normal high water level. There are no ORW waters in the planning jurisdiction.

Estuarine Shoreline in Sunset Beach

The estuarine shoreline AEC in Sunset Beach extends 75 feet landward from the mean high water line of all the shoreline of the Intracoastal Waterway, tidal creeks extending into the mainland, and all the navigable creeks in the coastal wetlands surrounding the Sunset Beach island (See the Areas of Environmental Concern Map [Map 1] for the location of estuarine waters in the planning jurisdiction). Development in this 75 foot “zone” must not cover more than 30% of the area with impervious surface, and development within 30’ of the high-water line must be water dependent (i.e. dock, pier, etc.). Existing zoning in Sunset Beach along the Intracoastal Waterway estuarine waters additionally prohibits no more than 30% impervious coverage for the entire lot. Existing zoning in Sunset Beach on the island has varying lot coverage due to smaller lots (4,500 sq. ft.) and smaller property line setbacks, therefore impervious coverage per lot may exceed 30% of the site in some zoning districts on the island. However, the 30% impervious coverage for the estuarine shoreline 75’ zone still applies.

4) **Ocean Erodible Area Setbacks AEC** – This area covers beaches and any other oceanfront lands that are subject to long-term erosion and significant shoreline changes. The landward limit of this AEC is measured from the first line of stable natural vegetation. The first line of stable natural vegetation is the area on the oceanfront beach where natural dune-stabilizing plants are present. Such plants include sea oats and American beachgrass.

The Ocean Erodible Area Setback AEC is determined by adding:

- a distance equal to 30 feet (for small structures)* or 60 feet (for large structures)* times the long-term average annual erosion rate for that stretch of shoreline.

*Small structures include single-family homes and other units under 5,000 square feet of total area. Large structures generally include multi-family and commercial uses which are 5,000 square feet or more in total area.

Ocean Erodible Setback Area in Sunset Beach

Sunset Beach has an erosion rate of 2' per year on all stretches of beach in its planning jurisdiction (including inlet areas). For Sunset Beach, the Ocean Erodible setback is 60' back from the first line of stable vegetation for "small" structures and 120' for "large" structures. All oceanfront property is currently zoned Beach Residential-1, with some minimal Beach Business-1 zoned around the pier. BR-1 only allows single family and duplex on minimum 7,500 square foot lots. Building height (35') and number of bedroom (8) limitations regulate intensity of development in this zone.

The Town has additional setback limitations codified in its BR-1 zoning district which limit seaward development to 150' from Main Street (most seaward road running parallel to the ocean). Given the distance of the ocean and unvegetated beach from Main Street (700' to 300'), the Town has seaward development restrictions that exceed the Ocean Erodible AEC setback requirements. This regulation is a desired management tool in Sunset Beach intended to provide long-term protection for existing properties and reduce the need for public expenditures caused from the natural movement (erosion) of the beach.

5) Un-vegetated Beach Area AEC – This area is the un-vegetated (sand) portion of the main beach strand from the low tide level up to the first line of stable vegetation.

6) High Hazard Flood Area AEC- (Combination of storm surge and flooding) – covers lands subject to flooding, high waves and heavy water currents during a major storm. These are the lands identified as coastal flood with velocity hazard, or "VE" zones," on the Town's official flood insurance rate maps (FIRMs). The high hazard flood AEC often overlaps with the ocean erodible and inlet hazard AECs.

High Hazard Flood Areas in Sunset Beach

Sunset Beach's high hazard flood area (VE Zone) encompasses roughly 3,038 acres or 47% of the planning jurisdiction (See Special Flood Hazards Area Map [Map 4]). This total includes the extensive and undevelopable marsh system in the jurisdiction. However, the area between Cobia Street to 2nd Street on the island is completely within the VE zone from the ocean to the backside of the island. Also on the island, the areas around 40th Street and Bay and Inlet Streets are within the VE zone. Overall, approximately 60% of the island area is within the VE zone. As stated earlier, residential zoning in these areas are primarily BR-1 and BR-2. On the mainland, the properties immediately adjacent the Intracoastal Waterway and tidal creeks are within the VE zone. Zoning in these areas include Mainland Residential 1 (MR-1) and Mainland Residential 2 (MR-2). MR-1 zoning allows single-family on 15,000 square foot lots (i.e

2.9 units per acre density). MR-2 zoning allows single-family on 10,000 square foot minimum lots (i.e. 4.3 units per acre density). See table below for approximation of total home value in the planning jurisdiction within a VE zone.

Table 15: Number of Lots in VE Flood Zone

Total Number of Lots	Total Value of Homes (does not include land
1,000	\$81.3 Million

Source: Brunswick County Tax Data and Cape Fear Council of Governments GIS

Sunset Beach is a participating community in the National Flood Insurance Program (NFIP) and enforces a Flood Damage Prevention Ordinance through its Building Inspections Department. The Flood Prevention Ordinance was adopted in the Spring of 2006 after completion of the North Carolina Floodplain Mapping Project for the Lumber River Basin.

7) **Public Trust Areas AEC** – These areas include the coastal waters and submerged lands that belong to the “public” to use for activities such as boating, swimming or fishing. These areas often overlap and include estuarine 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 doesn’t have access rights;
- all water 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.

Public Trust Areas in Sunset Beach

The public trust waters within or adjacent the Sunset Beach planning jurisdiction include the Atlantic Ocean, the Intracoastal Waterway, all the navigable creeks surrounding the Sunset Beach island, and coastal wetlands (if “navigable” at high tide). Bird Island on the southeastern edge of the planning jurisdiction is a state estuarine reserve in public trust.

Sunset Beach recognizes the rights of riparian property owners to access navigable surface water from their riparian property. However, the Town will consider proactively managing the construction of private piers and docks so as not to allow the creation of impediments to navigation in public trust areas. Such management can include establishing limits on the length of private piers.

4.1.1 Additional Natural Features and Environmental Conditions

Other natural features and environmental conditions in the Sunset Beach planning jurisdiction in addition to AECs are described below.

8) Water Quality Classifications - Definitions for Water Quality Classifications come from the NC Division of Water Quality (<http://h2o.enr.state.nc.us/csu/swc.html>). All surface waters in North Carolina are assigned a primary classification by the NC Division of Water Quality (DWQ). The tidal/salt water classifications that are applicable to the Sunset Beach planning jurisdiction are SA and SB.

SB - Surface waters that are used for primary recreation, including frequent or organized swimming. Stormwater controls are required under CAMA and there are no categorical restrictions on discharges.

SA - Surface waters that can be used for shellfishing, and all SB uses. All SA waters are also HQW by definition. Stormwater controls are required under CAMA. No domestic discharges are permitted in these waters.

Regulations over SA waters

The North Carolina Sediment and Erosion Control Act has established additional design standards for “sensitive watersheds” which can be found in 15A NCAC 4B .0124 (<http://www.dlr.enr.state.nc.us/images/sedimentrules.doc>). The Act applies to development activities that disturb one acre or more of land, and is generally intended to protect water quality during the construction stage. If a Sedimentation and Erosion Permit is required, a Stormwater Control Permit is also required. The Stormwater Permit is intended to protect water quality after the construction stage and through the life of the development. Stormwater permits allow either a low or high-density development option. In a low-density development, the amount of impervious surface is limited and vegetated buffers are required along shorelines. In a high-density development, impervious surfaces can be increased but engineered stormwater control systems (i.e. retention ponds) must be included to control runoff. The Stormwater Permit rules can be found at 15A NCAC 2H .1000.

Sunset Beach Stormwater Quality Management and Discharge Control

The Town adopted a stormwater ordinance in 2006 based upon the Brunswick County ordinance. The Town’s stormwater ordinance will be enforced by Brunswick County through an interlocal agreement. The ordinance requires Stormwater Management Plans and approved control systems and BMPs to be developed for:

- any commercial development (includes developments of any lot size). This requirement exceeds state stormwater regulations.
- any subdivision of a parcel into 6 or more residential lots (could include residential development under one acre). This requirement exceeds state stormwater regulations.
- any development that increases the original grade of the lot by 4 inches or more (could include residential development under one acre). This requirement exceeds state stormwater regulations.

Water Quality in Sunset Beach

Sunset Beach water quality classifications are SA for the Intracoastal Waterway and all other waters surrounding the island, except the ocean which is classified SB (See Water Quality Characteristics Map [Map 3]). Sunset Beach is located in the Lumber River Basin, and falls within subbasin 03-07-59. This subbasin contains the southwest corner of Brunswick County primarily east of Highway 17. There are no classified surface waters impaired for aquatic life or recreation in subbasin 03-07-59. However, all waters are impaired for fish consumption. Impaired fish consumption generally means there is an ongoing advisory (since 1996) regarding mercury levels in tissue of certain fish species found east of Interstate 85 (piedmont area) which exceeds state safety standards for large levels of consumption (added 9/20/06). For more information on fish consumption impairment, visit: <http://www.epi.state.nc.us/epi/fish/info.html>.

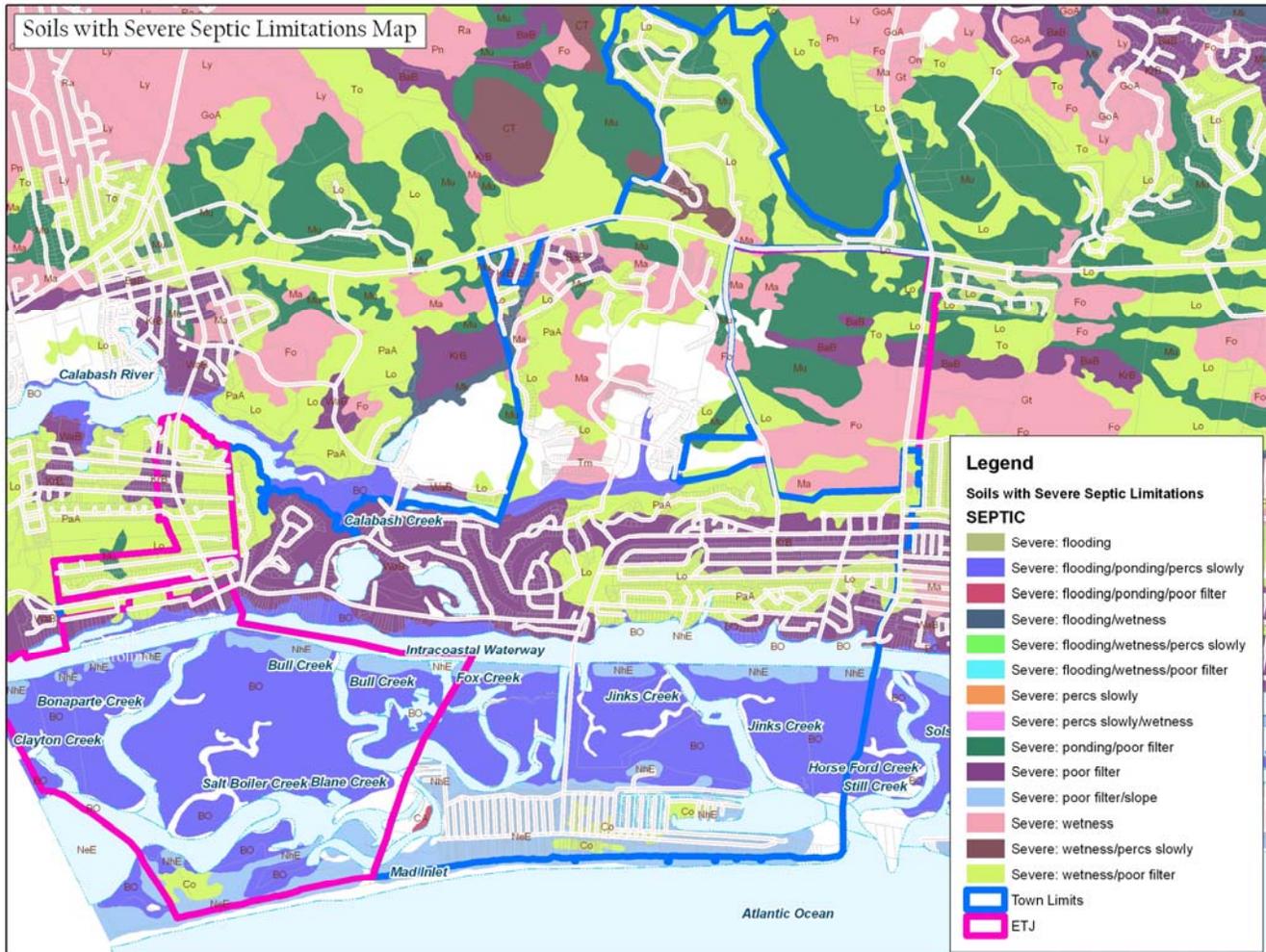
At the time of the last Land Use Plan update in 1997, shellfishing had been an “impaired” use for all of the planning area’s estuarine waters and it continues to be impaired as of the date of this Land Use Plan update (See Water Quality Characteristics Map [Map 3]). According to the Shellfish Sanitation Branch of the North Carolina Division of Environmental Health, the permanent closure and conditional approval of shellfishing areas in the jurisdiction has been attributed to long-term septic system use in flood prone areas as well as existing manmade canals and residential lawns with little or no vegetative buffers to filter stormwater runoff. Stormwater runoff has been cited as the main contributor to shellfish closures. The conditionally approved shellfishing sites in the planning jurisdiction (Jinks Creek and Tubbs Inlet area) are closed during every rain event causing .5 inch to 1.5 inches of rain primarily due to pollutants such as fecal coliform (i.e. pet, animal and human (septic system) waste) in the runoff. Portions of Jinks Creek and Tubbs Inlet were the only two areas conditionally open to shellfishing at the time of the 1997 Land Use Plan update. Good tidal flushing from water moving through Tubbs inlet is likely the reason these areas have remained conditionally open.

There is one Division of Water Quality (DWQ) water quality monitoring station (established in 1983) in the planning jurisdiction located near the Sunset Beach bridge. This station (Station I198800) has shown that fecal coliform in the water exceeded safe levels for shellfishing as of the 1997 Lumber River Basin Water Quality Plan and as of the 2003 Lumber Basin plan. The DWQ’s 2002 Lumber Basin Assessment also showed that there has been a statistically significant and steady decrease in pH and Dissolved Oxygen (DO) at this monitoring station since 1983 to the date of the report (<http://h2o.enr.state.nc.us/esb/Basinwide/Lumber%20River%20Basin%202002%20Report.Final.pdf>).

While the Assessment could not pinpoint the source of the decrease in DO and pH, those types of decreases likely can be linked to higher levels of fecal coliform (septic waste) and phosphorus (fertilizers from lawns and golf courses and/or septic waste).

Soils with Septic System Limitations

The following map graphic shows that the majority of the planning jurisdiction contains soils with some type of limitation to the use of septic systems.



The Town of Sunset Beach has begun or will undertake certain activities that should reduce or stabilize the contributing factors to the surface water quality problems in the jurisdiction. Those activities include:

- replacing septic systems with centralized sewer
- requiring stormwater runoff controls and vegetative buffer and/or BMP standards for new developments and substantial redevelopments

Additional steps that are recommended to help reduce runoff and improve water quality are available, however, it should be noted that careful coordination and planning should be taken as these steps may seem inconsistent with other Town goals, such as wanting to increase public parking and maximizing bike/pedestrian interconnectivity. Some of those additional steps to improve water quality in the planning jurisdiction could include:

- requiring vegetated buffers in excess of the minimum 30 foot buffers required by state legislation for estuarine waters
- minimizing impervious lot coverage allowances (25% maximum lot coverage is used by the state for low-density stormwater thresholds)
- revising street standards to reduce number and width of residential streets or commercial accessways, and limiting sidewalks to one side of the street
- minimize size of parking areas by requiring angled parking and/or narrower spaces
- encourage the planting of vegetated buffer zones around existing developments that have no stormwater controls and are adjacent to surface waters or connect directly to the overall stormwater drainage system

9) **Special Flood Hazard Areas (100-yr flood zones)** - The SFHA is defined as an area of land that would be inundated by a flood having a 1% chance of occurring in any given year (previously referred to as the base flood or 100-year flood).

AE - Zone AE is the flood insurance rate zone that correspond to the 100-year floodplains that are determined in a Flood Insurance Study by FEMA.

VE - Zone VE is the flood insurance rate zone that corresponds to the 100-year coastal floodplains that have additional hazards associated with wave action caused by storm events.

Flood Zones in Sunset Beach

According to the new NC Floodplain Mapping Program information, the 100-yr flood zones in the Sunset Beach planning jurisdiction are AE and VE. 99% of the island is within either the VE or AE zone. The VE zone accounts for a little over 60% of that total on the island. The AE zone encompasses 520 acres or 8% of the total planning jurisdiction (See Special Flood Hazards Area Map [Map 4]). The VE zone, as mentioned earlier, encompasses roughly 3,038 acres or 47% of the planning jurisdiction (See Special Flood Hazards Area Map [Map 4]). See table below for information on the number of lots and home value intersecting the Special Flood Hazard Areas (AE and VE).

Table 16: Number of Lots in SFHA Flood Zones

Flood Zone	Total Number of Lots (Approximately)	Total Value of Homes (does not include land)
VE	1,000	\$81.3 Million
AE	930	\$78.2 Million

Source: Brunswick County Tax Data and Cape Fear Council of Governments GIS

Sunset Beach is a participating community in the National Flood Insurance Program (NFIP) and enforces a Flood Damage Prevention Ordinance through its Building Inspections Department. The Flood Prevention Ordinance was adopted in the Spring of 2006 after completion of the North Carolina Floodplain Mapping Program for the Lumber River Basin. According to historical NFIP claims data from 1978 to 2006, Sunset Beach has one of the lowest damage claim and damage payout levels for all North Carolina communities with a beach strand (see the table following for comparison).

Table 17: NFIP Claims and Payments Among North Carolina Municipalities with a Beach

Municipality	Total Claims* (1978-2006)	Total Payments (1978-2006)
Atlantic Beach	623	\$ 3,174,239.90
Bald Head Island	293	\$ 2,001,376.87
Brunswick County (Unincorporated Areas)	346	\$ 3,751,602.87
Carolina Beach	2,338	\$ 30,399,551.88
Caswell Beach	129	\$ 634,111.94
Emerald Isle	1,330	\$ 7,577,616.07
Holden Beach	2,023	\$ 11,405,465.37
Indian Beach	24	\$ 69,021.26
Kill Devil Hills	1,259	\$ 10,237,411.04
Kitty Hawk	947	\$ 9,828,751.89
Kure Beach	472	\$ 14,984,255.11
Nags Head	2,226	\$ 21,671,368.28
North Topsail Beach	1,149	\$ 12,088,871.35
Oak Island	2,168	\$ 18,844,246.53
Ocean Isle Beach	1,534	\$ 7,252,406.86
Pine Knoll Shores	231	\$ 866,974.44
Sunset Beach	212	\$ 292,587.00
Surf City	1,732	\$ 15,238,558.78
Topsail Beach	2,134	\$ 21,090,817.22
Wrightsville Beach	3,112	\$ 45,468,942.76
Sunset Beach Rank	3rd Lowest	2nd Lowest

* Loss claims are for damages in excess of 25-50% of the property value

10) **Hurricane Storm Surge Inundation Area (Fast Moving Storm)** - The National Hurricane Center, in cooperation with the North Carolina Center for Geographic Information and Analysis, developed the GIS data set, Hurricane Storm Surge Inundation Areas (1993), to reevaluate the extent of the areas affected by hurricane inundation along the North Carolina coast. The data depicts the extent of hurricane storm surge inundation areas based on SLOSH (Sea, Lake, and Overland Surges from Hurricanes) models, for the North Carolina coast. The FAST model depicts hurricanes with forward velocities greater than 15mph (See Storm Surge Inundation Map [Map 5]).

Storm surge is water that is pushed toward the shore by the force of the winds swirling around the storm. This advancing surge combines with the normal tides to create the hurricane storm tide, which can increase the mean water level 15 feet or more. In addition, wind driven waves are superimposed on the storm tide. This rise in water level can cause severe flooding in coastal areas, particularly when the storm tide coincides with the normal high tides. The storm surge inundation area data used for the planning jurisdiction is based on the SLOSH Model developed by NOAA's National Weather Service.

Storm Surge Inundation Areas in Sunset Beach

In Sunset Beach, approximately 735 acres or 15% of the planning jurisdiction is considered outside of possible hurricane storm surge inundation. These areas are the most inland portions of the Sea Trail development and the former Angel's Trace development. 55% of the total area in the planning jurisdiction is likely to be inundated during a Category 1 or 2 hurricane, 65% in a Category 3 hurricane, and 85% of the total area in the corporate limits is likely to be inundated in a Category 4 or 5 hurricane (See Storm Surge Inundation Map [Map 5]).

II) Non-coastal wetlands/propable 404 wetlands (NC-CREWS) –

Section 404 of the Federal Water Pollution Control Act (“the Clean Water Act”) defines wetlands as “areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted to life in saturated soil conditions.”

“Any person, firm, or agency (including Federal, state, and local government agencies) planning to work in navigable waters of the United States, or discharge (dump, place, deposit) dredged or fill material in waters of the United States, including wetlands, must first obtain a permit from the Army Corps of Engineers (ACOE)”. If an activity requires an ACOE ‘404’ permit, the state of North Carolina requires that a ‘401’ water quality certification be obtained as well. The ‘401’ certification is basically a verification by the state that a given project will not degrade waters of the State or otherwise violate water quality standards.

The North Carolina Coastal Region Evaluation of Wetland Significance, or NC-CREWS, is a watershed-based wetlands assessment model that assesses the level of water quality, wildlife habitat, and hydrologic functions of individual wetlands. The primary objective of the NC-CREWS wetland functional assessment is to provide local government planners with information about the relative ecological importance of wetlands for use in land use planning and the overall management of wetlands. NC-CREWS produces 3 possible overall wetland rating scores: Exceptional Significance, Substantial Significance, or Beneficial Significance. NC-CREWS also evaluates the potential risk to watershed integrity if identified wetlands were “lost”.

Non-Coastal Wetlands identified as NC –CREWS in Sunset Beach

The types of non-coastal wetlands located in the Sunset Beach planning jurisdiction are:

- Estuarine Shrub Scrub (13 acres)
- Estuarine Forest (1 acre)
- Managed Pineland (625 acres)
- Pine Flat (12 acres)
- Pocosin (52 acres)
- Bottomland Hardwood (30 acres)
- Swamp Forest (52 acres)
- “Human Impacted Wetlands” (32 acres)

The bulk of the wetlands are located within or adjacent to the Sea Trail development and the former Angel's Trace development. In addition, the newly annexed (June 2007) "Sandpiper Bay/Wyndfall" areas account for much of the jurisdiction's non-coastal wetland inventory. (See The NC Coastal Resource Evaluation of Wetland Systems CREWS Map [Map 6]).

While most of these types of wetlands will be regulated by the Army Corps of Engineers 404 Permitting Unit and the State's 401 Water Quality Certification Program, the Town of Sunset Beach can help protect these areas by not allowing future re-zonings to a more dense use in areas where these wetlands may be present. Allowing and retaining "planned or clustered unit development" options in the zoning ordinance can also help by allowing the developer to determine their own lot configuration and setbacks and still achieve the allowable density or number of units without having to disturb productive wetland areas on the site.

A description of the types of wetlands found in the planning jurisdiction are below.

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

Estuarine Forest - Forested wetlands subject to flooding by tides.

Managed Pinelands - Seasonally saturated, managed pine forests occurring on hydric soils. This wetland category may also contain non-managed pine forests occurring on hydric soils. Generally these are areas that were not shown on National Wetland Inventory maps. These areas may or may not be jurisdictional wetlands.

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

Bottomland Hardwood - Riverine and non-riverine forested or scrub/shrub habitat that are seasonally flooded.

Swamp Forest - Non-riverine forested or shrub/scrub habitat that are temporarily flooded.

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

For more information on wetland types go to:

<http://www.nccoastalmanagement.net/Wetlands/WTYPEMAPDOC.pdf>

12) Fish Nursery Areas - Salt marshes and estuaries (salt and freshwater mix) along our coast serve as nursery grounds for 90 percent of our fisheries.

Primary Nursery Areas are located in the upper portions of creeks and bays. These areas are usually shallow with soft muddy bottoms and surrounded by marshes and wetlands. Lower salinity and the abundance of food in these areas are ideal for young fish and shellfish. To protect

juveniles, many commercial fishing activities are prohibited in these waters; including the use of trawl nets, seine nets, dredges or any mechanical methods used for taking clams or oysters. Marina activities that will require new dredging activities are not allowed in Primary Nursery Areas.

Special Secondary Nursery Areas are located adjacent to Secondary Nursery Areas but closer to the open waters of sounds and the ocean.

Fish Nursery Areas in Sunset Beach

There are 80,144 acres designated as Primary Nursery Areas in North Carolina, the Sunset Beach planning jurisdiction contains 2,712 acres or about 3.4% of the states total. There are 31,362 acres designated as Special Secondary Nursery Areas, the Sunset Beach planning jurisdiction does not contain special secondary or secondary nursery areas. See the Primary Nursery Areas and Significant Natural Heritage Areas Map [Map 7].

The Division of Marine Fisheries prohibits new dredging in waters classified as Primary Fish Nursery areas. Areas where dredging has occurred in the past is grandfathered and allowable with conditions. The new dredging prohibition includes any activity including piers, docks and marinas. As with 404 wetlands, a final site survey is necessary for verification of the area's environmental condition (e.g. whether the exact site is a functional Primary Nursery or not).

13) Environmentally Fragile Areas (Significant Natural Heritage Areas) - Significant Natural Heritage Areas (SNHA) are areas identifying sites (land or water) that have special environmental significance. A site's significance may be due to the presence of rare species, rare or high quality natural habitat, or other important ecological features.

Significant Natural Heritage Areas (SNHA) in Sunset Beach

Bird Island

Bird Island (262 acs.) on the southwestern side of the Sunset Beach barrier island is considered a Significant Natural Heritage Area. It was identified in the Town's 1997 Land Use Plan Update as a priority protection area and has since been acquired by the state as an estuarine reserve. See the Primary Nursery Areas and Significant Natural Heritage Areas Map [Map 7]

Bonaparte Landing Maritime Forest

The Bonaparte Landing Maritime Forest (55 acs.) in the westernmost portion of the mainland Town limits is listed as an SNHA. The Bonaparte site is currently undeveloped and largely unsubdivided, but privately owned and zoned by the Town as MR-1 and MR-2. Those zones allow single family at 2.9 to 4.3 units per acre. If no vested rights are in place and the Town wished to better conserve this area, the Town could consider re-zoning this area to AF-1 or CR-1 which would allow single family on minimum lot sizes of one acre. See the Primary Nursery Areas and Significant Natural Heritage Areas Map [Map 7].

Wood Stork Ponds

The Wood Stork ponds area is 554 acres north of Shoreline Drive on the mainland, which includes parts of Sea Trail (Clubhouse Dr.) and Lake Shore Dr. The area is subdivided and developed as residential and golf course use. The existing zoning is primarily MR-2 (single family/4.3 units/acre) with some MR-3 (single family and multi family/21 units per acre max.). See the Primary Nursery Areas and Significant Natural Heritage Areas Map [Map 7].

- 14) **Closed Shellfishing Areas** –Closed shellfish areas are areas where shellfish harvesting is prohibited by law due to unsafe levels of pollutants caused by conditions such as wastewater discharge and non-point source stormwater run-off.

Closed Shellfishing Areas in Sunset Beach

Within the planning jurisdiction of Sunset Beach, all waters are classified as permanently closed to shellfishing except conditionally open areas around Jinks Creek and Tubbs Inlet (See #8 Water Quality in this section for more description on water quality in the planning jurisdiction). Also See the Water Quality Characteristics Map [Map 3].

Hazard Mitigation Plan

The Town shall refer to its adopted Hazard Mitigation Plan for policy guidance and recommendations on any Town restructuring, reorganizing or development of any programs regarding the provision of emergency services, emergency services preparedness, emergency command procedure, public awareness, or evacuation procedure.

4.2 Natural Features and Environmental Conditions Inventory

The information on natural features and environmental conditions in the table below was gathered by the Cape Fear Council of Governments through geo-processing and summarization of geographic data using geographic information systems (GIS). The majority of spatial (geographic) data used in this Land Use Plan was provided by the North Carolina Center for Geographic Information and Analysis and the Division of Coastal Management.

The table below has similar information to what was just discussed in Section 4.1 and 4.1.1, it is just presented in table format for quicker viewing.

NOTE: These acreage calculations are derived from generalized data and are for general planning and informational purposes only.

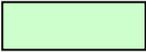
Table 18: Natural Features Inventory

	Acres in Corporate Limits	Acres in ETJ	Comments
Total Area in Planning Jurisdiction	Approx. 4,500 (Includes Sandpiper Bay annex)	Approx. 2,500	Source: County GIS Corporate Limits Data and Town of Sunset Beach Jurisdiction Data
“Land above MHW” “Water/Wet Marsh/Spoils”	3,000 (or 67%) 1,500 (or 33%)	1,100 (44%) 1,400 (56%)	Totals are approximations using Aerial Photography and Soils Data to establish “dry land” versus “wet” areas.
Natural Features and Environmental Conditions	Acres in Planning Jurisdiction (Town Limits and ETJ)		Comments
Areas of Environmental Concern (AECs)			
Coastal wetlands	1,863		99.9% of wetland types are Salt/Brackish Marsh in the Town Limits and ETJ.
Estuarine waters	700 SA		All estuarine surface waters in the Town Limits and ETJ (Intracoastal Waterway and creeks between ICWW and barrier island) are classified as SA by the NC DWQ.
State, Federal or Institutional Protected Areas (Land and wet areas)	1,228		The state of North Carolina and the Corps of Engineers own portions of Bird Island and much of the marsh system between Bird island and the ICWW.
High hazard flood area	See comment and flood and storm surge acreage		SFHA/100 Yr wave Velocity (VE) Flood areas and storm surge areas are considered High Hazard Flood Areas
Inlet hazard area	250		Of the total, 90 acres of the actual barrier island land above MHW in the Town limits is in the Inlet Hazard “area”. 160 acres of Bird Island is also in the IHA.
Historic/Archaeological Area			
Land inside HD	N/A		
Land w/in 500’ of historic area	N/A		
Soils			
Severe Septic Limitations	Almost Entire Jurisdiction		All soils within the entire jurisdiction have severe septic limitations. (i.e. ponding, poor filter, wetness) except approx. 260 acs. in the Sea Trail development.

Natural Features and Environmental Conditions	Acres in Planning Jurisdiction (Town Limits and ETJ)	Comments
Non-coastal wetlands (CREWS)		Wetlands not classified as “coastal wetlands”, but have hydric soils and/or land cover conducive to wetlands.
Exceptional significance, high potential risk to watershed quality if lost	90	In the jurisdiction, wetland type is primarily “swamp forest” and “human impacted”, with some “bottomland hardwood”.
Exceptional significance, not high potential risk to watershed if lost	32	Wetland type is “managed pineland”.
Substantial significance, high potential risk to watershed quality if lost	46	Wetland types are primarily “managed pineland” with some “pine flat”, “swamp forest” and “bottomland hardwood”.
Substantial significance, not high potential risk to watershed if lost	320	Wetland types are “managed pineland” primarily found in the former Angel’s Trace.
Beneficial, high potential risk	N/A	
Beneficial, not high potential risk	45	These wetland types are “cutover swamp forest” and cutover pine flat”.
Natural Hazards		
Within 100-yr flood	520 or 8% of the planning jurisdiction is in the (AE) zone; 3,038 or 47% of the planning jurisdiction in the (VE) zone.	AE and VE zones are considered to be Special Flood Hazard Areas (SFHA).
Inundated by Hurricane Storm Surge	2,780 acres of the planning jurisdiction are in a Category 1 & 2 hurricane or 48% of the jurisdiction. In addition to the 2,780 from the Cat. 1 & 2, another 515 acres of the planning jurisdiction are modeled to be inundated during a Category 3 hurricane. For a total of 3,295 acres or 57% of the jurisdiction. In addition to the 3,295 from the Cat. 3, another 1,154 acres of the planning jurisdiction are modeled to be inundated during a Category 4 & 5 hurricane. For a total of 4,449 acres or 78% of the jurisdiction.	Fast Moving Hurricane Model used to calculate inundation acreage. See Map 5 for inundation areas.
Hazardous Substance Disposal Site	N/A	
NPDES	N/A	
Water Quality		
HQW/ORW watershed (drainage basin)	See Comment	The entire planning jurisdiction drains to SA waters.
Water supply protection watersheds	N/A	
Significant Natural Heritage Area	871	262 acs of “Bird Island”. 55 acres of Bonaparte Landing Maritime Forest. 554 acres of Wood Stork Ponds.
Fish Nursery Areas	2,712 (out of approx. 2,800 acres of marsh/water in jurisdiction)	All fish nursery areas in the planning jurisdiction are PRIMARY fish nursery areas.
Closed Shellfishing Areas	1,125 (out of approx. 2,800 acres of marsh/water in jurisdiction)	The closed areas include the man-made canals on the Island, the ICWW, and most of the creeks and marsh around the island.

4.3 The Environmental Composite Map

The environmental composite refers to the geographic extent and overlap of the natural features and environmental conditions described previously in this section. The Environmental Composite Map categorizes the area of the planning jurisdiction into three classes of land based on the land's suitability for various types of development. The "Class" a particular area of the jurisdiction is in is based on the extent and the characteristics of natural features and conditions present in that particular area. For example, land in the flood zone will be in a "Class" that has limited or restricted development suitability. Table 1 below shows the three general but distinct classes of land established for the composite map. The table also identifies the natural features and environmental conditions that determine which "Class" the area will be placed.

Environmental Class	Mapping Symbol (Graduated Color Scale)	Natural Features and Hazards Constraints
Class I – Land containing only minimal hazards and having only slight limitations that may be addressed by sound land planning and development practices		<ul style="list-style-type: none"> -Non-wetland area or wetland rated beneficial and not high potential risk (NC-CREWS) -Land located outside 100 year flood hazard area -Land located outside storm surge area
Class II – Land containing development hazards and limitations that may be addressed by methods such as restrictions on types of land uses, special site planning, or provision of public services		<ul style="list-style-type: none"> -Estuarine shoreline -High hazard flood area -Soils with moderate to severe septic limitations -Soils with moderate to severe erosion hazards - Non-coastal wetland area rated beneficial and high potential risk or substantial significance (NC-CREWS) -Land located within a 100 year flood hazard area -Land located within storm surge area
Class III – Land containing serious hazards for development or lands where the impacts of development would cause serious damage to the values of natural systems		<ul style="list-style-type: none"> -Coastal Wetland -Estuarine Waters -Public Trust/Protected lands -Unvegetated beach area -Non-coastal wetlands rated as substantial significance with high potential risk or exceptional significance with or without high potential risk (NC-CREWS) -Significant Natural Heritage Area -Inlet Hazard area

4.4 Land Suitability Analysis

The land suitability analysis is a CAMA required process for estimating the supply of land in the planning area that is suitable for development. The supply of land and its suitability rating is depicted in the Land Suitability Map (See Map 14). The overall purpose of the analysis is to provide the local planning team with information on the apparent best and least suited areas for development in order to guide the formulation of policies. The supply of land in the analysis primarily refers to actual undeveloped land which may experience future development, but all land in the planning jurisdiction was evaluated whether developed or undeveloped. Therefore, for the purposes of describing the suitability process, we will from now on primarily refer to the evaluation of land, as the evaluation of undeveloped land. As a result of the overall analysis process, the undeveloped land was rated based on the degree to which it was suitable for future development. The rating system for the analysis is based on the Division of Coastal Management's recommended weights for each factor (See the Table following). The suitability ratings for undeveloped fall into one of four categories ranging from Least Suitable for Development, Low Suitability, Medium Suitability, and Highly Suited for Development

The suitability rating is based on several 'factors' that may exist on or near the undeveloped land which would affect its overall suitability. For example, consider an acre of undeveloped land which has access to water and sewer infrastructure (a positive 'factor' for development suitability), but also has a wetland area present (a negative 'factor' for development suitability), therefore the overall rating of this land would probably be medium suitability. This example was a simplification however, and each acre of undeveloped land was evaluated based on a number of 'factors' in addition to the 'factors' of access to water and sewer, or presence of a wetland.

It is important to note that the coastal wetland, exceptional and substantial wetland, estuarine water, protected lands, and state and federal land factors were automatically categorized as least suited for development and were excluded from Town ranking. Also note that for the purposes of measuring suitability across different areas or pieces of land, the land of the planning jurisdiction was divided into one-acre grid cells. Each one-acre grid cell was measured for suitability based on the totality of 'factors' affecting it.

Some of the 'factors' used to evaluate undeveloped land are generalized below:

- The presence or lack thereof of all the natural features characteristics that were included in the *Environmental Composite Map*
- Proximity to existing development and man-made features (whether services are near and other development has occurred in proximity)
- Compatibility with nearby existing land uses (proximity or presence of negative uses such as NPDES site or WWTP, etc. to the undeveloped land)
- Potential impact of development on historically, culturally significant, or scenic Sites (proximity or presence of such features to the undeveloped land)
- Availability and capacity of community facilities (proximity of the undeveloped land to existing water and sewer, roads, and other adequately supporting infrastructure)
- Regulatory restrictions on land development (whether the undeveloped land is owned or restricted from development by local, state, or federal governments)

The following factor criteria table shows the applicable factors found in the planning jurisdiction and the relevancy weights that were assigned to each of these factors to produce the Town's Land Suitability Map.

Factor Name		Least Suitable	Low Suitability	Medium Suitability	High Suitability	Assigned Weight (1, 2 or 3)
Coastal Wetlands	Exclusion	An Area Inside		An Area Outside		Not Ranked
Exceptional and Substantial Noncoastal Wetlands	Exclusion	An Area Inside		An Area Outside		Not Ranked
Estuarine Waters	Exclusion	An Area Inside		An Area Outside		Not Ranked
Protected Lands	Exclusion	An Area Inside		An Area Outside		Not Ranked
Federal Lands		An Area Inside		An Area Outside		Not Ranked
State Lands		An Area Inside		An Area Outside		Not Ranked
Beneficial Noncoastal Wetlands	Weighted		An Area Inside		An Area Outside	1
High Quality Waters			An Area Inside		An Area Outside	1
Storm Surge Areas	Weighted		An Area Inside		An Area Outside	2
100 Yr Flood Zones	Weighted		An Area Inside		An Area Outside	2
Significant Natural Heritage Areas	Weighted		Area < 500' from		Area > 500' from	2
Hazardous Substance Disposal Sites	Weighted		Area < 500' from		Area > 500' from	1
NPDES Sites	Weighted		Area < 500' from		Area > 500' from	1
Wastewater Treatment Plants	Weighted		Area < 500' from		Area > 500' from	1
Developed Land	Weighted		Area > 1 mi from	.5 - 1 mi	< .5 mi	1
Primary Roads	Weighted		Area > 1 mi from	.5 - 1 mi	< .5 mi	2
Water Pipes	Weighted		Area > .5 mi from	.25 - .5 mi	< .25 mi	3
Sewer Pipes	Weighted		Area > .5 mi from	.25 - .5 mi	< .25 mi	3
Assigned Weight: 1 = Important 2 = Very important 3 = Highest importance for development						

Section 5. Existing Land Use Analysis

This section provides the local elected officials, appointed boards, citizens and local planning staff with an overall 'picture' of the existing land use patterns in the planning jurisdiction. An assessment of these patterns, and the identification of available areas for development, helps in forecasting where, what type and how much development will and can occur. Part of the planning and policy forming process will be to determine whether the forecasted types and quantities of development are consistent with and desired under the Town's vision for growth.

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

More specifically, included in this Section are:

- An explanation of land use related terms and the creation of the existing land use analysis and maps;
- Tables listing existing land use statistics throughout the planning jurisdiction;
- Graphics and maps showing the existing land use;
- Identification of significant land use compatibility problems;
- Identification of areas experiencing or likely to experience changes in the existing predominant land uses;
- Identification of areas expected to develop in the next five to ten years; and
- Identification of significant land use effects on surface water quality.

Definitions of Land Use Related Terms

The following are definitions of terms used to describe the types of structures and land uses discussed in this Section. Definitions were taken from Section 151.003 of the Sunset Beach Zoning Ordinance in order to remain consistent with Town standards.

Dwelling – a building or portion thereof designed, arranged or used for permanent living quarters for one or more families. Dwellings do not include motel/hotels.

Single-Family – a detached building consisting of one dwelling unit, with the following characteristics:

- one water and one power connection;
- served by one septic tank, the capacity of which cannot exceed the generated waste capacity of a four-bedroom dwelling; and
- one cooking facility.

Single-Family Attached (Townhouse)- a single-family dwelling unit constructed in a series or group of attached units with property lines separating the units.

Duplex - a detached building, designed for two single-family dwelling units, divided horizontally or vertically.

Multi-Family- three or more separate dwelling units which may share means of egress and ingress and other facilities.

Manufactured Housing (mobile home) – a residential dwelling unit that:

- is not constructed in accordance with the standards set forth in the State Building Code;
- is composed of one or more components, each of which was substantially assembled in a manufacturing plant and designed to be transported to the lot on its own chassis; and
- exceeds 40 feet in length and 8 feet in width.

The following terms are used in this Section but are not defined in the Town’s Zoning Ordinance. The definitions come from common usage of the terms in planning and real estate applications.

Common Area – an area which is mutually owned and for the private use of residents within a development. Usually found as open land around a multi-family development which individual residents can use in lieu of having a private yard.

Parcel – a single tract or plot of land with an official boundary established, usually for the purpose of designating ownership.

Tract – a single piece of land that has not been subdivided, but is typically large enough to be subdivided.

Plot/lot – a single piece of land that was created from the subdivision of a larger tract.

Plat – A map showing the property boundaries of land subdivided into lots, blocks and streets from a larger tract.

Source of Existing Land Use Analysis and Map

The Existing Land Use Map and associated analysis and tables were created by the Cape Fear Council of Governments using Brunswick County Tax Records updated on July 2006, full-color orthophotos (map quality aerial photos) taken in the winter of 2004, windshield surveys conducted on August 10th and September 14th, 2006, and a review of a land use survey conducted by URS Corporation in 2005 as part of the Environmental Impact Report for the Town’s Wastewater User Rate Study.

Creation of the Existing Land Use Map

The Existing Land Use Map shows the primary land use identified on each parcel in the planning jurisdiction. For parcels classified as “Residential”, the Map shows the type of housing found on each parcel, such as single-family. The specific types of businesses found in the “Commercial” use parcels were not identified (i.e. shopping center). The general classification of “Commercial” was used for all of these parcels. Parcels that were used as parking lots for an associated commercial parcel were classified as a commercial use. Parcels used as common areas for hotel/motel were also classified as commercial use.

Due to island characteristics such as erosion, accretion and inlet change, several parcels that may have been subdivided and platted at a time when the area was dry land, now appear to be unsuited for development, or at most only suited for development at a low density (i.e. single-family). This is due to the current substantial presence of water, marsh, or unvegetated beach within the parcel. These parcels are primarily located in the eastern tip of the island (east of 19th St.) and are classified as “Marsh/Beach/Natural State” on the Existing Land Use Map and in a few Tables in this Section. This classification is a generalization used in this Section, and does not infer that every one of these parcels have been evaluated by state, federal or local officials to certify whether they are or are not actually developable.

5.1 Existing Land Use in Planning Jurisdiction

Table 19 following re-caps the land, water and size characteristics of the planning jurisdiction, which was previously discussed in Section 4. Table 19 shows that approximately 4,100 acres in the entire planning jurisdiction (Limits and ETJ) are “above the mean high water (MHW) line”, meaning it is generally dry land and not inundated during high tide.

- There are approximately 100 to 150 acres of inland waterbodies, which are primarily in the Sea Trail and Sandpiper Bay developments as natural creeks, lakes and stormwater ponds. This amount has been accounted for in reaching the 4,100 acres of land total.
- Using the 4,100 acre total shows that 59% of the planning jurisdiction is land [4,100 dry land acres divided by 7,000 total jurisdiction acres]. See Table 19 for percentages of land in the Town Limits and ETJ individually.
- The 4,100 acre land total for the entire planning jurisdiction and the approximately 3,000 acres of land counted in the Town Limits will be used for calculating population density later in this Section. Note: In Table 20, the sub-total of acres of existing land use is 2,783, this amount plus the ROW (street surface) total the approximately 3,000 acres.

While there may be acreage of land above the MHW in the spoil and marsh islands between the mainland and the island, these areas were not included in the total because of their characterization as highly unsuitable for development due to low elevation, isolation from infrastructure and presence of coastal wetlands.

The parcel count totals in Table 19 are for all parcels found within the planning jurisdiction. Some parcels included in the total may be of traffic islands or other rights-of-way. These parcels were included because the intent is to calculate the gross total of land in the jurisdiction. Calculating the net total of “developable” land is a lengthy and difficult process, and could not be achieved unless each parcel was evaluated and factored for characteristics such as regulated wetlands, zoning setbacks, parking requirements, open space requirements, easements (private or public), planned rights-of-way, and other variables that would factor into producing a net total of acres for developable land.

Table 19: Planning Jurisdiction Characteristics for Geography, Hydrography and Parcels

(Source: Cape Fear Council of Governments GIS, Brunswick County Tax Records)

Area	Parcels	Acreage (Approximations)
Total Area in Planning Jurisdiction (Limits and ETJ)	5,380	6,500
Total Corporate Limits	4,852	4,500
“Land Above Mean High Water”	4,772*	3,000 (or 63%)
“Water/Marsh/Spoil”	80**	1,500 (or 37%)
Extraterritorial Jurisdiction	528	2,500
“Land Above Mean High Water”	523*	1,100 (or 44%)
“Water/Marsh/Spoil”	5**	1,400 (or 46%)

*This number includes all of the parcels with a portion of land within the parcel above MHW, a portion of the parcel still may also be Water/Marsh/Spoil.

** This number includes all of the parcels which are more or less completely inland waterbodies, marsh or spoil islands, or otherwise unattached to other adjacent dry land.

Land Uses Identified in the Planning Jurisdiction

The existing land uses in the planning jurisdiction include:

- **Residential**
 1. Single-Family
 2. Single-Family Attached (Townhouse)
 3. Duplex
 4. Multi-Family
- **Commercial**
 1. Retail shops/stores (incl. grocery stores, pharmacies, etc.)
 2. Offices/Professional services (incl. medical, etc.)
 3. Entertainment (incl. pier, arcade, planetarium, etc.)
 4. Convenience stores
 5. Restaurants (all food service)
 6. Hotel/motel
- **Recreation** (golf course, clubhouse and/or common area)
- **Vacant** (undeveloped land, likely suitable for development)
- **Government** (state, federal or local government owned)
- **Institutional** (churches or cemeteries)
- **Marsh/Beach/Natural State** (areas where development of the parcel is unlikely due to environmental constraints)
- **Utilities**
 1. private maintenance facilities (Sea Trail)
 2. public utilities (phone, electricity, etc.)
- **Road Rights-of-way**

The *Existing Land Use Table* (Table 20 below) shows the breakdown of the planning jurisdiction based on the identified land uses listed above. The three columns on the right in the table below show a total for either parcels (Column 2), acres (Column 3) or percentage of acres (Column 4) for each land use (Column 1). These three columns also show a breakdown of that total into the amounts found in the Town Limits and ETJ individually. For example, “Single-Family” in Row 1 shows that there are 2,826 total parcels in the entire jurisdiction being used for single-family residential. This total amount is further broken down into the amount of that total in Town Limits, which is 2,675, and the amount of that total in the ETJ, which is 151.

Column 4 compares the acreage for each land use to the total acres in the jurisdiction to calculate the “percent of the total” [e.g. 763.5 acres of single-family divided by 4,100 land acres = 18.6%]. For the Limits/ETJ part of Column 4, the amount represents the acreage for that land use in the Town Limits and ETJ, respectively, divided by the total land acres in the Town Limits and ETJ. For example, 688.5 acres of single-family in Town Limits divided by 3,000 acres of land in Town Limits equals 23%. For single-Family in the ETJ, it is 75 acres divided by 1,100 total land acres in the ETJ.

Table 20: Existing Land Use in the Planning Jurisdiction

(Source: Cape Fear Council of Governments GIS, Brunswick County Tax Records, URS Corporation Land Use Survey)

Land Use	Parcels	Limits/ETJ	Acres	Limits/ETJ	% of Total*	Limits/ETJ
Single-Family	2,826	2,675 /151	763.5	688.5 /75	18.6%	23%/7%
Single-Family Attached	54	54/0	5.5	5.5/0	.1%	.2%/0%
Duplex**	82	82/0	34	34/0	.8%	1%/0%
Multi-Family***	165	164/1	93.5	93/.5	2.2%	3%/0%
Manufactured Housing	796	628/168	186	145/41	5.1%	6%/4%
Res. Common Area	38	36/2	19.5	14.5/5	.5%	.5%/ .5%
Commercial	62	62/0	113	113/0	3%	5%/0%
Golf Course (includes “course w/clubhouse” and “course w/ common area”)	27	25/2	1,834.5	1,138/697	44%	38%/63%
Vacant	1,250	1,053/197	691	553/138	16.8%	18%/13%
Utilities	4	4/0	15	15/0	.4%	.6%/0%
Institutional	4	2/2	8.5	2.5/6	.2%	.1%/ .5%
Government	3	3/0	4	4/0	.1%	.1%/0%
Sub-Total	5,295	4,772/523	3,768	2,806/962	91.7%	
Rights-of Way**** (e.g. road surface)			332 (Approximately)		8.3%	
TOTAL Land Use	5,295	4,772/523	4,100		100%	
Marsh/Beach/ Natural State	85	80/5	2,169	696 /1,473		
Water****			730 (Approximately)			
Total Jurisdiction	5,380	4,852/528	7,000			

* Means % total of acres. Total acres is 3,600 acres. Limits/ETJ is percent that land use is of total land acres in Town Limits and ETJ, Respectively.

** Only counts the number of parcels with a duplex use. The number would have to multiplied by 2 to get a total number of units.

*** Only counts the number of parcels with a multi-family use, not the number of units in the multi-family structure.

****The ROWs and water areas were generally not delineated as parcels with complete boundaries, therefore an approximate acreage calculation was made.

Table 20 above shows that the largest single land use for the entire planning jurisdiction is for golf course related uses (44%). Single-family residential is the second largest land use, consuming 18.6% of the land in the jurisdiction. Vacant land is the third largest 'use', representing 16.8% of the total. These three uses account for 79% of the total land use in the planning jurisdiction. Commercial use represents only 3%, but will likely increase with the approximately 25 acres of road fronting vacant tracts along Sunset Boulevard North, which are zoned Mainland Business (MB-2) Mixed Use District which allows commercial activity. There are no industrial uses in the planning jurisdiction.

Other vacant tracts with major road frontage where development pressure for commercial activity may occur are found in the ETJ along Highway 904 entering the Town from the north from Highway 17. However, these tracts are zoned by the Town as Multi-Family Residential (MR-3), which specifically prohibits commercial and industrial uses [Section 151.190 (B) (2) of the Town Zoning Ordinance]. The zoning of land in the County jurisdiction adjacent to the Town's MR-3 tracts on Highway 904 is Medium Density Residential (6,000 sq² lots). Therefore, it is likely that the current zoning in place will prohibit commercial activity along this portion of Highway 904, as it may conflict with residential uses by increasing traffic congestion, and noise and lighting nuisances. Alternatively, mixing residential and commercial uses could increase pedestrian and bicycle accessibility, and decrease the need for vehicle travel to commercial centers farther away. These types of issues should be considered by the Town during the planning process, and this is an area where policy could be formed addressing whether the current situation is desired and should be maintained or whether these areas should be re-evaluated.

Also to consider as part of the potential for commercial expansion in Town, is the zoning for the surrounding County Jurisdiction (See map graphic later in this Section). The County zoning north of the Town's ETJ at the intersection of Highway 904 and Highway 179, is Commercial Low Density (CLD), which is intended to allow commerce adjacent to major thoroughfares. This zoning designation runs north from the 904/179 intersection along Highway 904 all the way to Highway 17.

5.2 Existing Land Use in Planning Jurisdiction Sub-Areas

For the purposes of providing more detail on the existing land use patterns discussed in this Section, the Town's planning jurisdiction was divided into six sub-areas. These sub-areas were established based on their location in generally uniform segments of the jurisdiction, and not necessarily based upon common land use patterns, zoning or housing types. The Future Land Use Map to be created later in the planning process can be used to establish sub-areas of the Town based on similar desired development patterns such as land use, density and housing types.

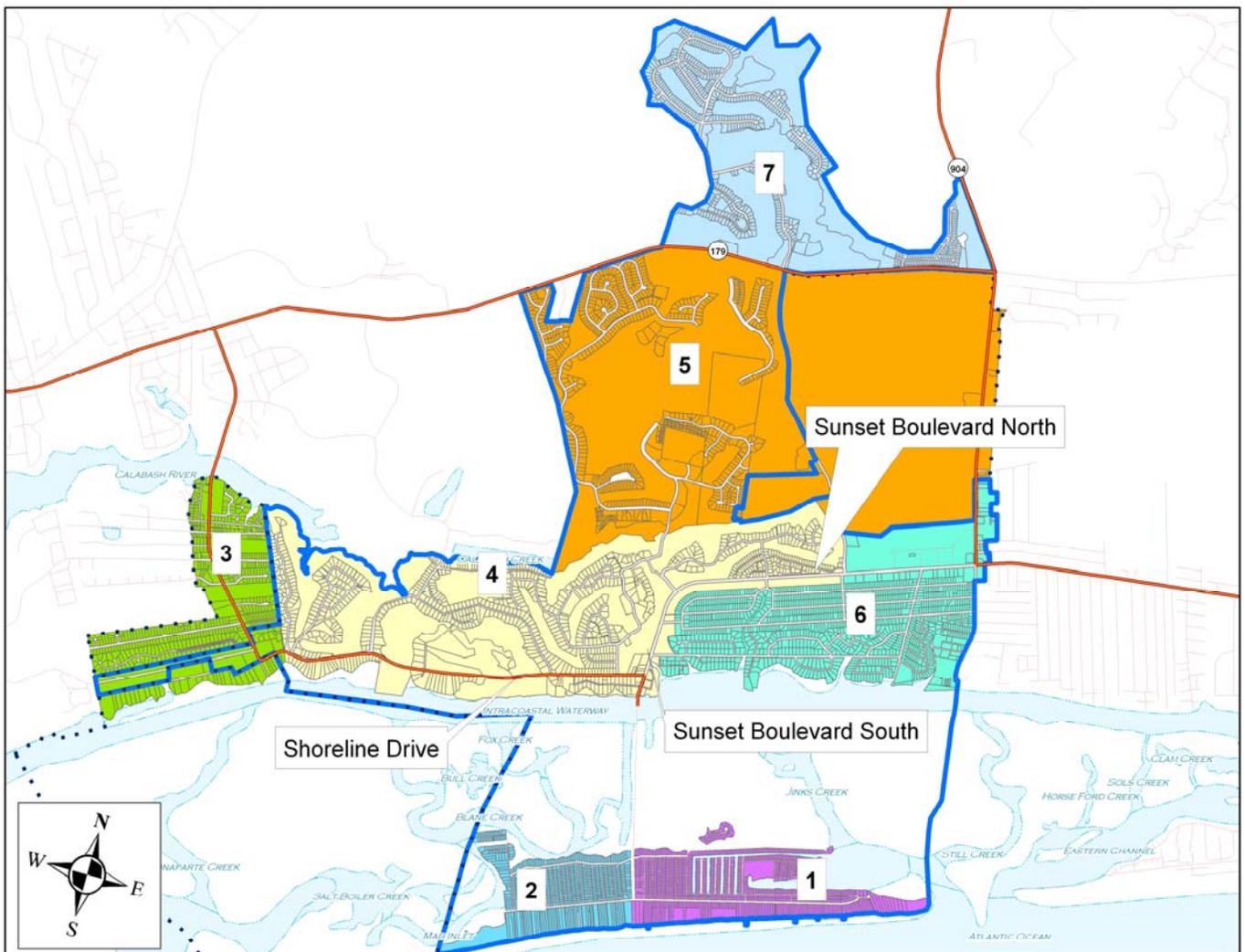
The 6 sub-areas will show existing land use as well as existing zoning. Overlaying existing zoning helps analyze what types of density and land use will occur on any vacant tracts and/or lots in each sub-area. A similar process was conducted in 2005/06 by URS Corporation, an engineering firm contracted by the Town to conduct an Environmental Impact Report (EIR) and a Wastewater User Rate Study for the planned Town sewer service. The purpose of the study was to establish a number of sewer connections that should be provided. The number of connections was based on build-out of vacant lots and redevelopment of housing and commercial units at a maximum allowable density under the existing zoning ordinance. Information on vacant land and possible build-out scenarios presented in this Section were checked with the results of the EIR to remain as consistent as possible. Any differing information in this Section is not meant to replace the recommended limitation of sewer connections presented in the EIR and Wastewater User Rate Study.

Sub-Areas

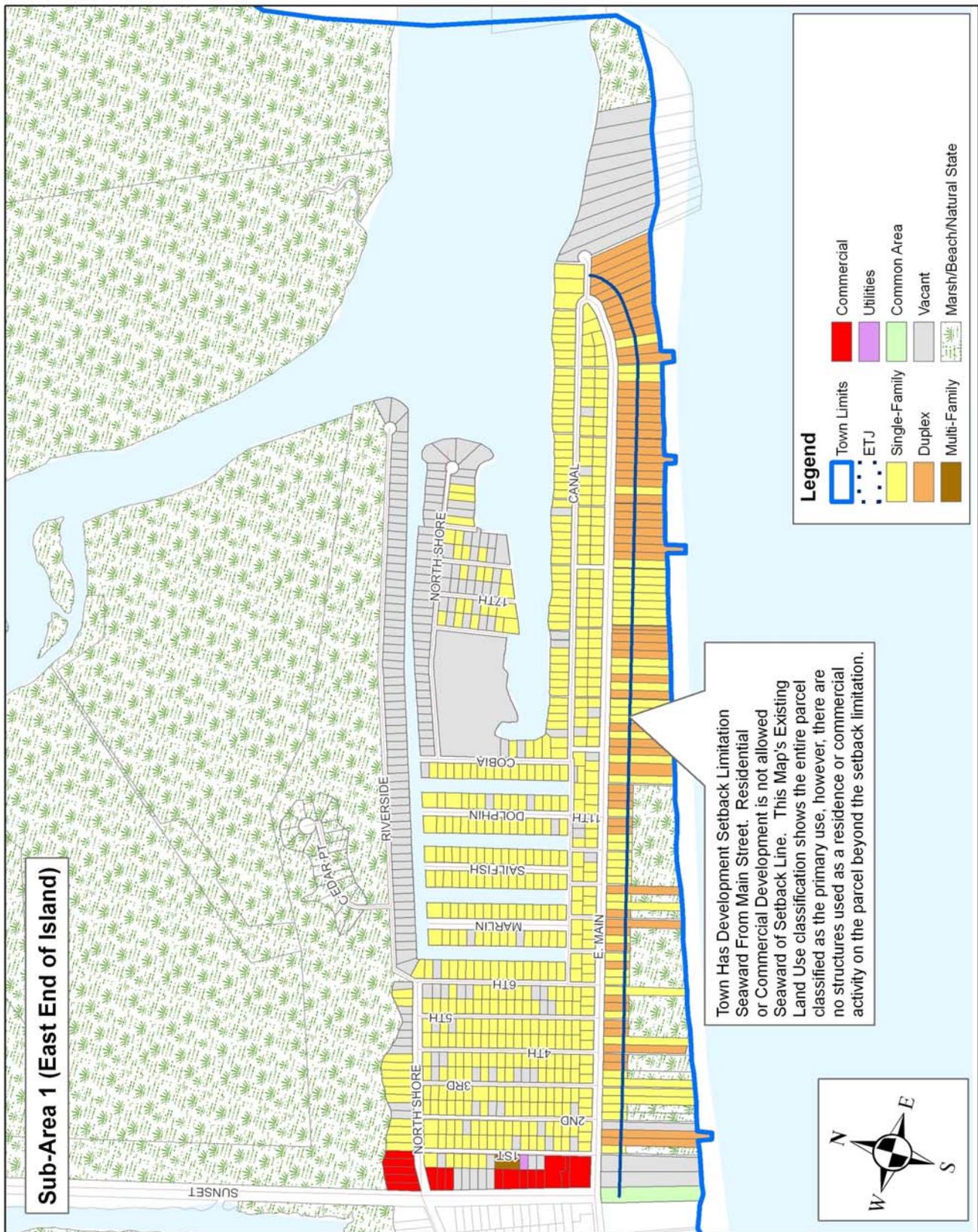
The sub-areas include:

1. the portion of the island east of Sunset Boulevard South;
2. the portion of the island west of Sunset Boulevard South;
3. the western portion of the Town Limits and the western ETJ area;
4. the portion of Sea Trail south of Calabash Creek and the area along Shoreline Drive;
5. the portion of Sea Trail north of Calabash Creek and the eastern portion of the ETJ (Angel's Trace),
6. the portion of Town east of the intersection of Shoreline Drive and Sunset Boulevard South and south of Sunset Boulevard North, and;
7. the recently annexed (June 2007) Sandpiper Bay and Wyndfall areas.

The six sub-areas can be seen in the graphic below.



Sub-Area I: The Island East of Sunset Boulevard South



The existing land use statistics for Sub-Area 1 are listed in the Table below.

Table 21: Existing Land Use in Sub-Area 1

Land Use	Parcels	Acres
Single-Family	556	76.5
Duplex*	64	23
Multi-Family**	1	.3
Commercial	17	5
Res. Common Area	1	1.3
Vacant	220	45.3
Utilities	1	.1
TOTAL	847	148.5
Marsh/Beach/Spoil	35	20.5

* Only counts the number of parcels with a duplex use. The number would have to be multiplied by 2 to get a total number of units.

**Only counts the number of parcels with a multi-family use, not the number of units in the multi-family structure.

As shown in the table above, the predominant use in the eastern end of the island is single-family residential. Duplex structures are limited to oceanfront properties zoned Beach Residential 1 (BR-1). Multi-family is only allowed between the west side of 1st and the east side 27th Streets. The BR-2A tract may be developed with multi-family quadruplex if approved by the Town as a “planned residential development”. Commercial activity is centered between 1st Street and 27th Street, with the parking lot of the Gazebo at the terminus of Sunset Boulevard South, which passes between 1st and 27th Streets.

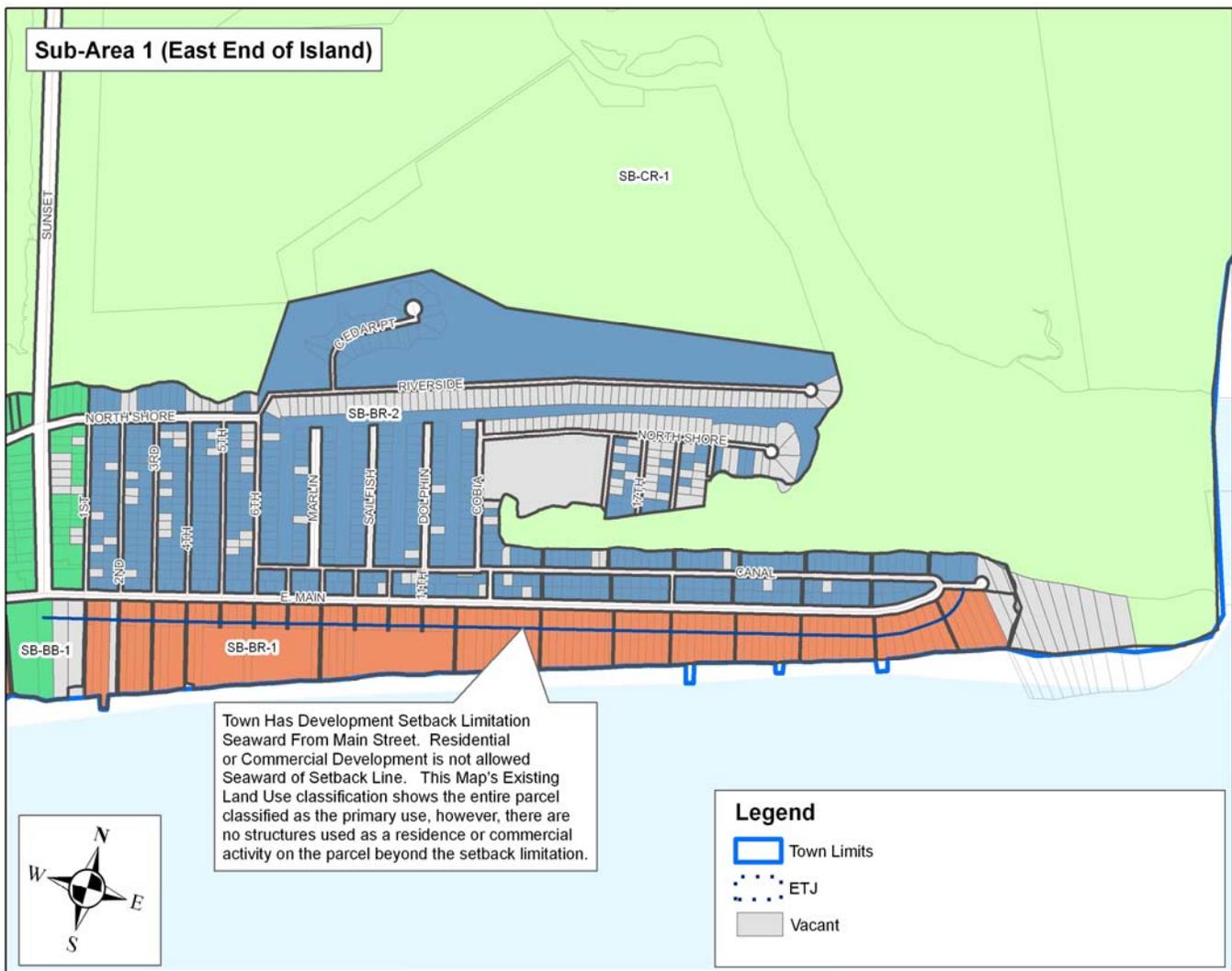
All structures in this sub-area are elevated due to flooding risk, and there is a 35 foot building height limit island-wide. There are a number of parcels classified as vacant, nearly all of these vacant lots are buildable under CAMA and local setback rules. Current limitations on developing these vacant parcels includes septic suitability. The vacant parcels that have septic suitability problems, but can meet CAMA and local setbacks, will likely be developed when the Town implements a central sewer system. Redevelopment of older structures and development of vacant lots in the commercial BB-1 District will likely be developed to their highest allowable use when sewer service is established. Prior to completing the planning for the sewer system, The Town should evaluate whether the current highest allowable use in the BB-1 District is consistent with the Town’s desired level of growth for that area of the jurisdiction.

There is no conflict in this area among residential uses and densities, although increased multi-family development use is not desired outside its existing zoned area. Residential uses are on relatively similar sized lots ranging from 4,500 ft² on the interior of the island to lots 7,500 ft² on the oceanfront. 678 out of the 847 lots in this sub-area are between 4,500 ft² and 7,500 ft². 160 of the lots are over 7,500 ft². All buildings have a 35-foot height limitation. Some multi-family units are present, but are relatively isolated along the entranceway of the island (Sunset Boulevard South, and between 1st and 27th Streets) which is zone Beach Business 1 (BB-1). Commercial uses and residential uses are not in conflict as the commercial uses are limited to smaller-scale tourist and island residential related (i.e. gift stores, rental agencies, small food service, motel and recreation retail). Heavy commercial and industrial uses are not allowed in the BB-1 district. There have been some user conflicts among seasonal visitors, day visitors and permanent residents resulting from lack of available parking spaces during the peak summer days.

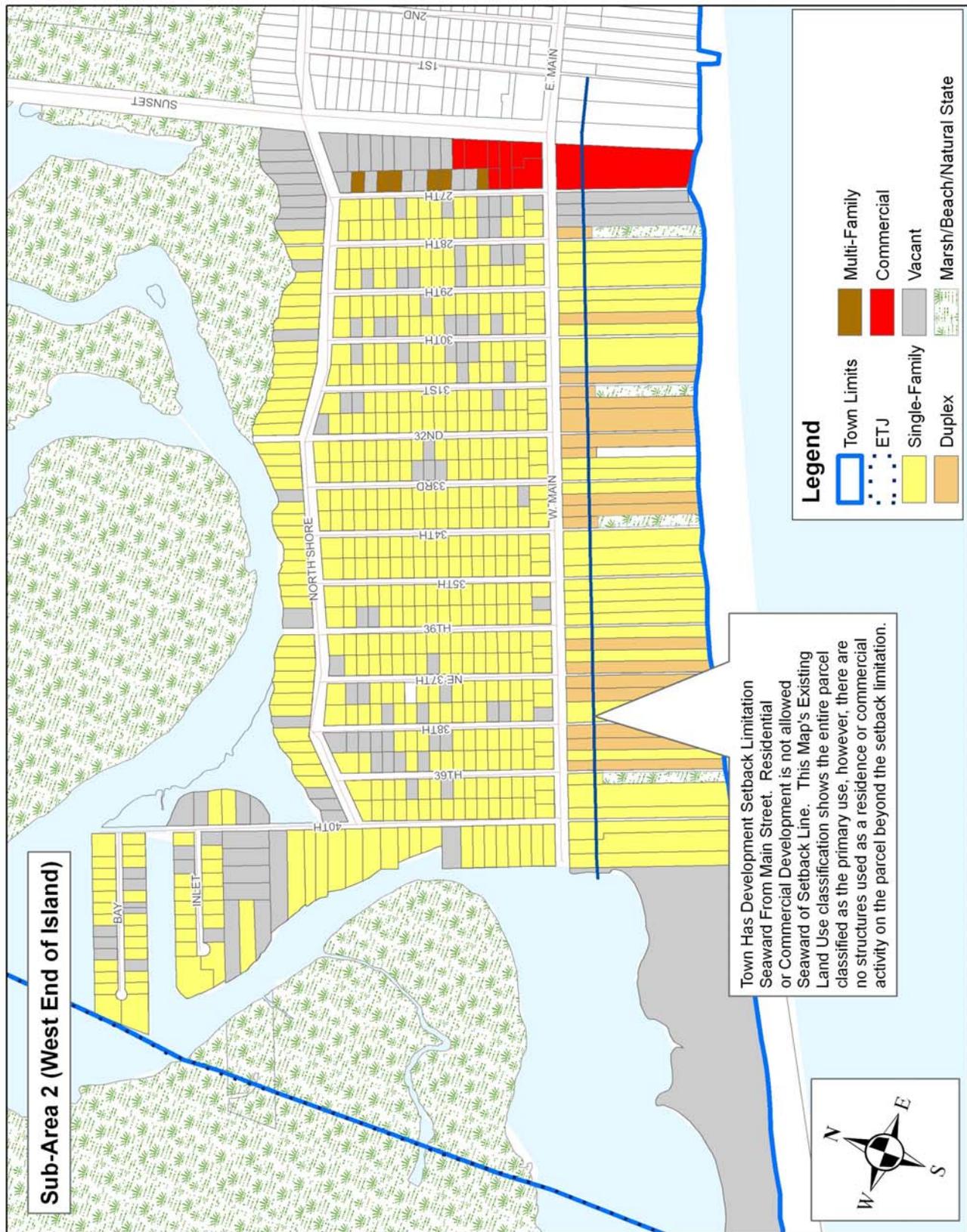
Table 22: Vacant Lots by Zoning District in Sub-Area I

Zoning District	Vacant Parcels	Vacant Acres
BR-1	3	2.5
BR-2	199	33.3
BB-1	10	2.5
CR-1	8	7
TOTAL	207	42.3

The following map graphic shows the vacant lots in each zoning district in this sub-area. The zoning district is shown on the labels in the map starting with the prefix “SB”, which stands for Sunset Beach.



Sub-Area 2: The Island West of Sunset Boulevard South



The existing land use statistics for Sub-Area 2 are listed in the Table below.

Table 23: Existing Land Use in Sub-Area 2

Land Use	Parcels	Acres
Single-Family	531	85.5
Duplex*	18	11.5
Multi-Family**	6	.6
Commercial	8	4
Vacant	126	36
TOTAL	688	122.6
Marsh/Beach/Spoil	4	2

* Only counts the number of parcels with a duplex use. The number would have to multiplied by 2 to get a total number of units.

**Only counts the number of parcels with a multi-family use, not the number of units in the multi-family structure.

As shown in the table above, the predominant use in the western end of the island is single-family residential. Duplex structures are limited to oceanfront properties zoned Beach Residential 1 (BR-1). Multi-family is only allowed between the west side of 1st and the east side of 27th Streets. Commercial activity is centered between 1st Street and 27th Street, with the parking lot of the Gazebo at the terminus of Sunset Boulevard South, which passes between 1st and 27th Streets. Bird Island (not shown on Map of Sub-area) is a state owned estuarine reserve and starts at the southwestern end of this sub-area in the Town ETJ.

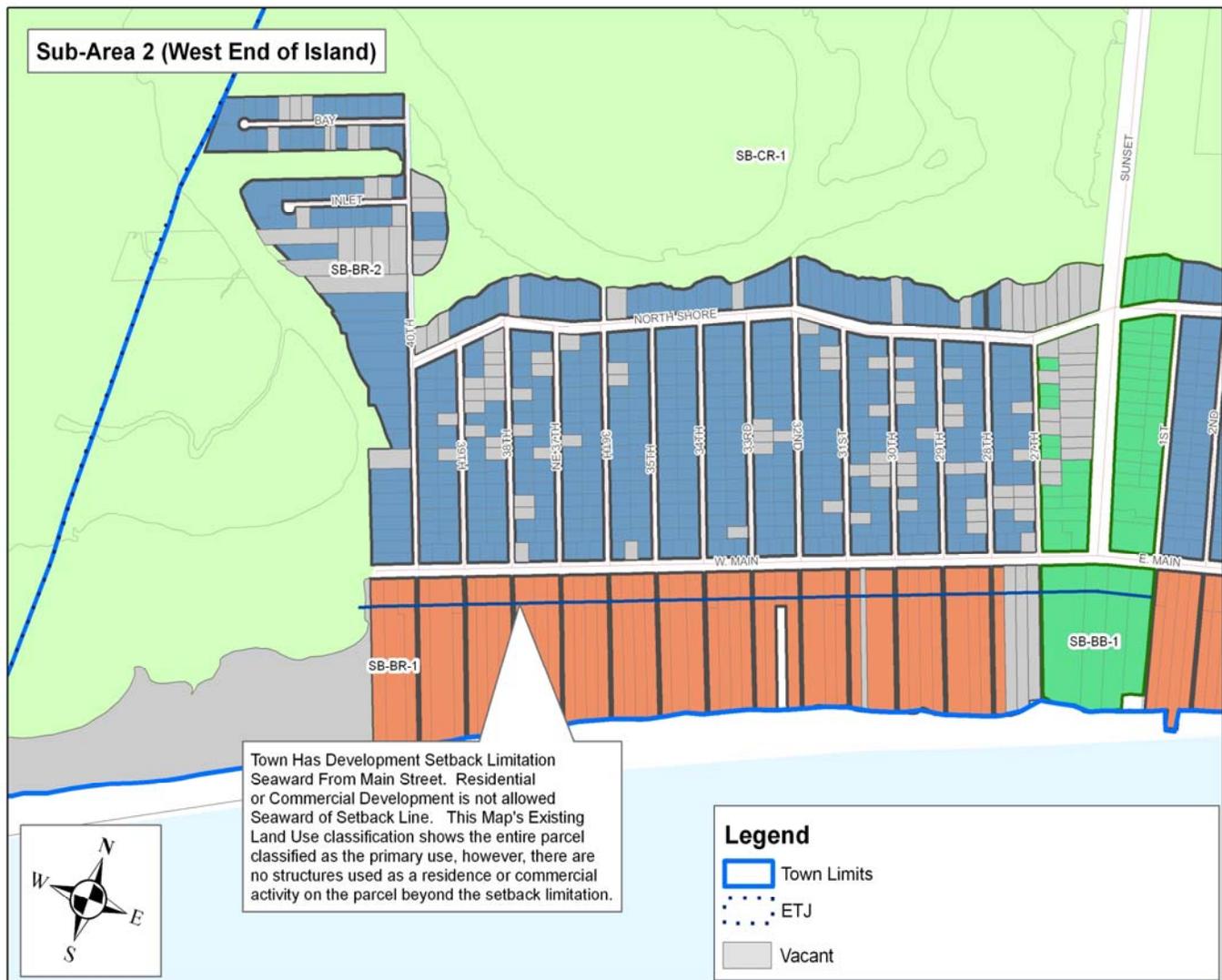
Similar to sub-area 1, all structures in this sub-area are subject to flooding risk. However, the west side of the island is higher in elevation than the east side and not all structures have been elevated. Again, there is a 35 foot building height limit island-wide. There are a number of parcels classified as vacant, nearly all of these vacant lots are buildable under CAMA and local setback rules. Current limitations on developing these vacant parcels include septic suitability. The vacant parcels that have septic suitability problems, but can meet CAMA and local setbacks, will likely be developed when the Town implements a central sewer system. Redevelopment of older structures and development of vacant lots in the BB-1 District will likely be developed to the highest allowable use as sewer is established. Prior to completing the planning for the sewer system, The Town should evaluate whether the current highest allowable use in the BB-1 District is consistent with the Town’s desired level of growth for that area of the jurisdiction.

Similar to sub-area 1, the residential uses and densities do not seem to be in conflict in this area as all are on relatively uniform sized lots. It is generally not desired that multi-family use increase outside of where it is currently zoned. There are only essentially two residential zoning districts in this area of the island, and lot size ranges from 4,500 ft² on the interior of the island to lots 7,500 ft² on the oceanfront. 523 out of the 688 lots in this sub-area are between 4,500 ft² and 7,500 ft². There are 139 lots over 7,500 ft². All buildings have a 35 foot height limitation. Some multi-family units are present, but are isolated along the entranceway of the island (Sunset Boulevard South, and between 1st and 27th Streets) which is zone Beach Business 1 (BB-1). Commercial uses and residential uses island-wide are not in conflict as the commercial uses are limited to smaller-scale tourist and island residential related (i.e. gift stores, rental agencies, small food service, motel and recreation retail). Heavy commercial and industrial uses are not allowed in the BB-1 district. Some user conflicts among seasonal visitors, day visitors and permanent residents resulting from lack of available parking spaces during the peak summer days.

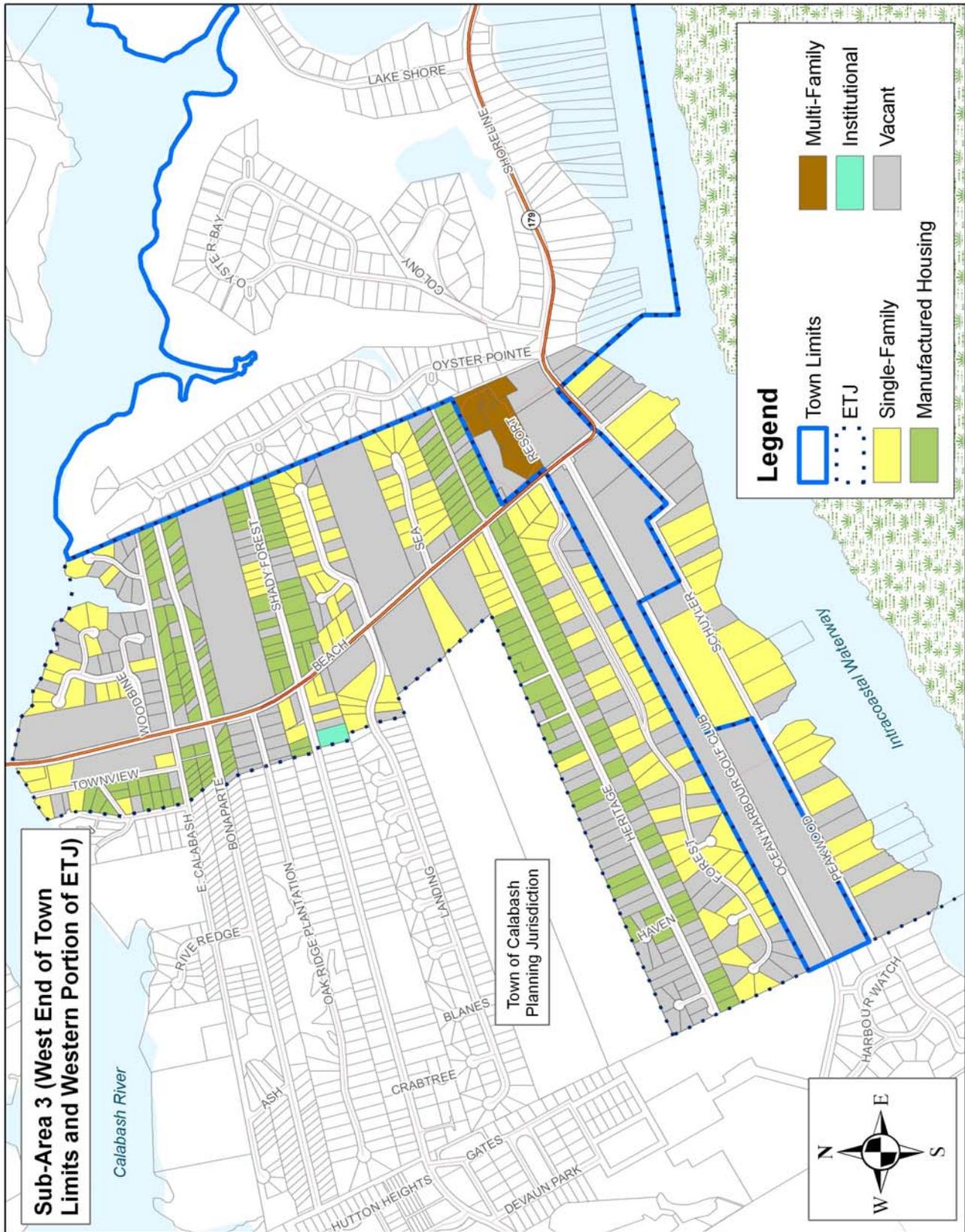
Table 24: Vacant Lots by Zoning District in Sub-Area 2

Zoning District	Vacant Parcels	Vacant Acres
BR-1	4	2
BR-2	101	14.5
BB-1	20	4.5
CR-1	1	15
TOTAL	125	21

The following map graphic shows the vacant lots in each zoning district in this sub-area. The zoning district is shown on the labels in the map starting with the prefix “SB”, which stands for Sunset Beach.



Sub-Area 3: The Western End of the Town Limits and ETJ



The existing land use statistics for Sub-Area 3 are listed in the Table below.

Table 25 : Existing Land Use in Sub-Area 3

Land Use	Parcels	Acres
Single-Family	151	75
Multi-Family*	7	5
Manufactured Housing	168	41
Institutional	1	.5
Vacant	195	150
TOTAL	522	271.5

* Only counts the number of parcels with a multi-family use, not the number of units in the multi-family structure.

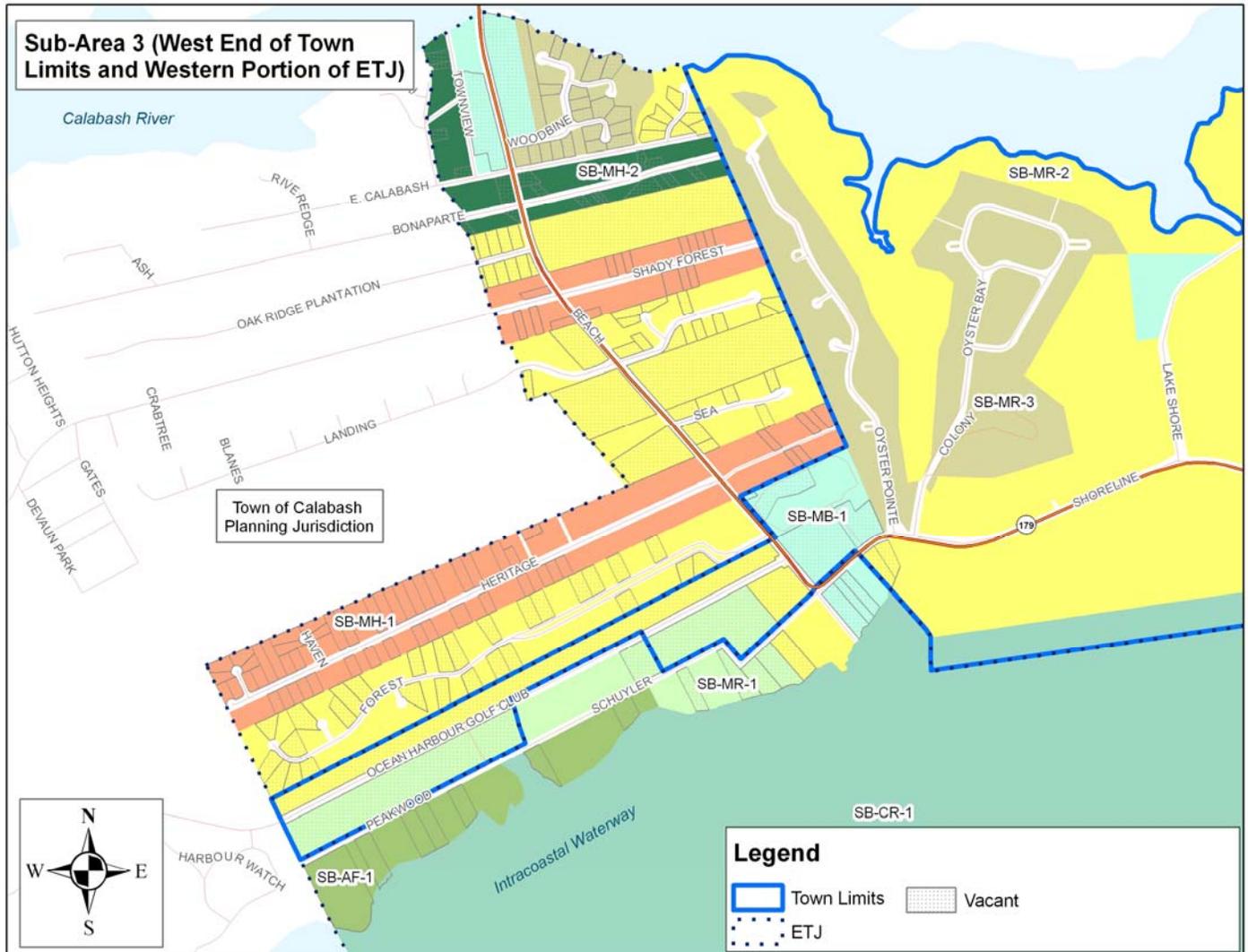
This sub-area consists mostly of vacant land which will primarily be developed as single-family residential on 10,000 ft² lots in the Mainland Residential 2 (MR-2) zoning district. Other vacant tracts and lots in this sub-area will be single-family on 15,000 ft² lots in the Mainland Residential 1 (MR-1) zoning district. Manufactured housing is also allowed in this sub-area in the Manufactured Housing 1 (MH-1) and MH-2 zoning districts. As shown in the table above, there are some multi-family units on Resort Circle off Beach Drive SW (Hwy. 179). The majority of existing single-family and manufactured housing uses are one-story structures. Single-family uses along the Intracoastal Waterway are usually elevated and two-stories in height. The building height limit is 35 feet, with some exceptions for additional height for additional setbacks from lot lines. Multi-family structures have a 50-foot height limit.

The residential uses and densities are not in conflict in this area as all are on relatively large lots. 405 out of the 522 parcels in this sub-area are at least 10,000 ft². All structures in this area must follow a 35-foot height limitation. Some multi-family units are present, but are relatively isolated. There are no commercial uses in this sub-area but there is land zoned Mainland Business 1 (MB-1), which would allow uses such as professional offices, retail, multi-family and hotel/motel. Heavy commercial and industrial uses are prohibited in this zoning district.

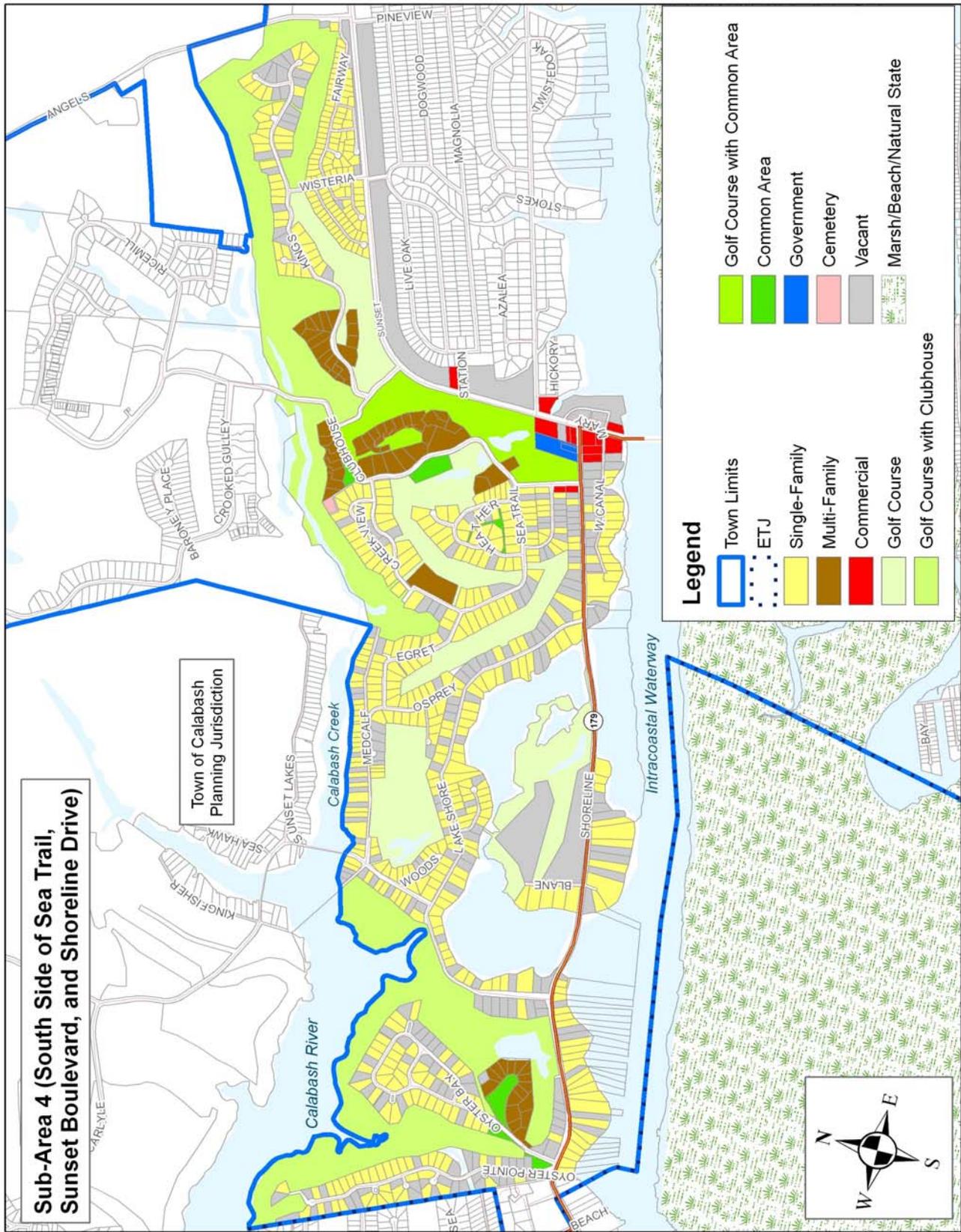
Table 26: Vacant Lots by Zoning District in Sub-Area 3

Zoning District	Vacant Parcels	Vacant Acres
AF-1	7	8.5
MR-1	5	5
MR-2	74	90
MR-3	18	6
MH-1	64	19
MH-2	18	3.5
MB-1	9	18
TOTAL	195	150

The following map graphic shows the vacant lots in each zoning district in this sub-area. The zoning district is shown on the labels in the map starting with the prefix “SB”, which stands for Sunset Beach. The map for this sub-area is slightly different than for the previous two sub-areas. Vacant lots are shown with just a gray outline, and zoning districts are shown in color instead of just a black outline.



Sub-Area 4: Sea Trail South of Calabash Creek, Shoreline Drive and Sunset Boulevard



The existing land use statistics for Sub-Area 4 are listed in the Table below.

Table 27: Existing Land Use in Sub-Area 4

Land Use	Parcels	Acres
Single-Family	545	209
Multi-Family*	62	39
Res. Common Area	6	7.5
Golf Course	9	321.5
Commercial	13	7
Government	2	2.5
Institutional	1	.5
Vacant	244	145
TOTAL	882	732

* Only counts the number of parcels with a multi-family use, not the number of units in the multi-family structure.

The main use in this area is single-family residential. These areas are found in the Sea Trail development and along the Intracoastal Waterway. The multi-family use is found within Sea Trail plantation. The building height is limited to 35 feet, with an exception for additional height for additional setback from lot lines. Multi-family structures have a 50-foot height limit. The majority of single-family homes are one-story structures. Single-family along the Intracoastal Waterway is typically elevated and one to two-stories.

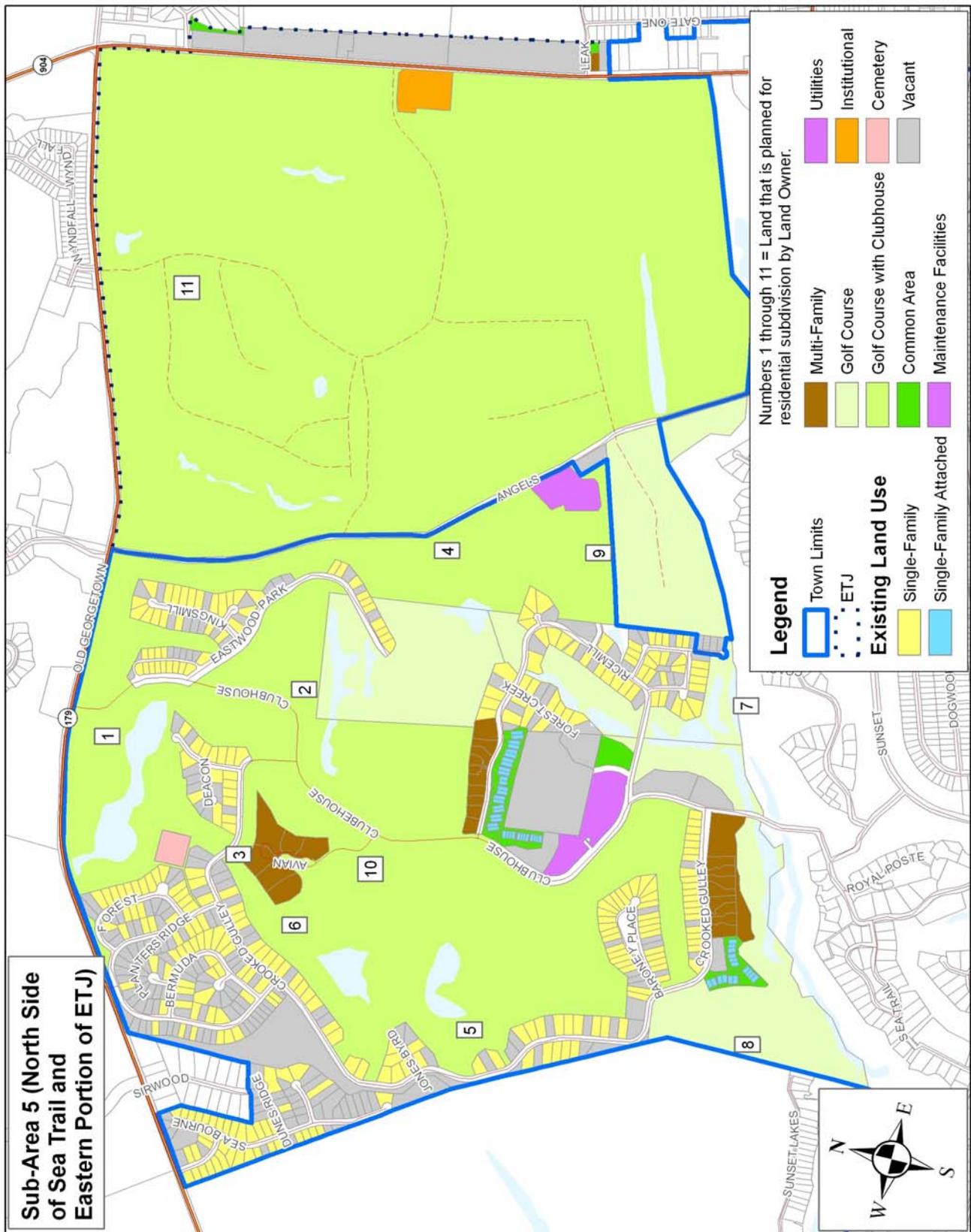
Zoning in this area is primarily MR-2 which only allows single-family and has a minimum lot size of 10,000 ft², and Mainland Residential 3 (MR-3) which allows multi-family and single-family and has a minimum lot size of 7,500 ft² for single-family and 40,000 ft² for multi-family developments.

A large portion of the vacant land in this sub-area is along Sunset Boulevard and is zoned Mainland Mixed Use (MB-2). This area is expected to develop as mixed-use and commercial uses on 20,000 ft² lots.

Land use conflicts resulting from residential densities in this sub-area have been associated with the availability of use of community centers and common areas. As much of this sub-area is in the private Sea Trail golf and residential development, the area has shared facilities among owners and guests which become full and unavailable during peak season. Sea Trail Corporation has development plans to continue to increase both residential units and community facilities and common areas. Sea Trail Corporation plans to develop approximately 220 acres of land in 19 separate tracts which are currently unsubdivided. Sea Trail Corporation estimates, based on current zoning and other land use regulations, that an additional 1,500 to 2,300 units could be developed over the next ten years in Sea Trail. Sea Trail Corporation also estimates that there are 235 platted but vacant lots in the Sea Trail development. Nearly all of these will be developed with single-family homes.

There have also been some commercial and residential land use conflicts resulting from the development of chain stores along the bridge entranceway to the island. Much of the conflict is associated with traffic and signage, and the appearance of chain commercial structures remaining compatible with the general community appearance.

Sub-Area 5: Sea Trail North of Calabash Creek and the Eastern ETJ Area



The existing land use statistics for Sub-Area 5 are listed in the Table below.

Table 29: Existing Land Use in Sub-Area 5

Land Use	Parcels	Acres
Single-Family	313	106
Single-Family Attached	50	4.5
Multi-Family*	26	25
Res. Common Area	24	10
Golf Course	10	1,230
Institutional	2	7.5
Utilities	2	13
Vacant	233	146
TOTAL	660	1,542

*Only counts the number of parcels with a multi-family use, not the number of units in the multi-family structure.

Nearly the entire sub-area is designated as residential use associated with golf course recreation. There is a mix of single-family, single-family attached and multi-family. As shown in the table above, the predominant use is single-family, but more multi-family is likely to be developed as a more affordable and convenient housing alternative, and because the land is zoned to allow multi-family. This sub-area is zoned as Mainland Residential (MR-3), which is intended primarily for multi-family and single-family. Minimum lot size for single-family is 7,500 ft² and 40,000 ft² for multi-family structures. The building height limit is 35 feet, with additional height allowable for additional setback from lot lines. Multi-family structures have a 50-foot height limit. As mentioned previously, the Sea Trail Corporation plans to develop an additional 220 acres of single-family and multi-family units. The landowners of the former Angel's Trace in the ETJ, now Ocean Ridge Plantation, have a two-year vested right to develop 1,130 single-family and 180 multi-family units.

On the map graphic showing sub-area 5, the labels with numbers 1-11 show the generalized locations of future residential subdivisions. Site 11 is the Ocean Ridge Plantation development. The vested site development plan shows that the entire gross site acreage of +/- 678 acres will be subdivided into individual lots or multi-family sites in seven phases. The 18-hole golf course will remain intact and is included in the vested site development plan. Sea Trail has a total of 19 "tracts" planned for subdivision, but only the tracts over 5 acres (sites 1-10) were shown on the map graphic and listed below. For sites 1-10, Sea Trail Corporation has provided the expected size of the "tracts" for each respective future subdivision in their development. The "tract" sizes for each site are as follows (the information in parenthesis is the ID number by Sea Trail):

- Site 1 (Sea Trail ID Tract 1) = 17.24 ac.
- Site 2 (Sea Trail ID Tract 4) = 16.96 ac.
- Site 3 (Sea Trail ID Tract 5) = 7.62 ac.
- Site 4 (Sea Trail ID Tract 6) = 57.98 ac.
- Site 5 (Sea Trail ID Tract 7a) = 9.00 ac.
- Site 6 (Sea Trail ID Tract 9) = 14.02 ac.
- Site 7 (Sea Trail ID Tract 13) = 17.00 ac.
- Site 8 (Sea Trail ID Tract 15) = 26.39 ac.
- Site 9 (Sea Trail ID Tract 16) = 17.61 ac.
- Site 10 (Sea Trail ID Tract 20) = 16.31 ac.

The total acreage of sites 1-10 equals 200 acres. The remaining 9 tract sites throughout Sea Trail make up 20 acres. The average size of the 9 remaining sites is about 2.2 acres per site.

Existing land use conflicts resulting from residential densities in this sub-area have been associated with the availability of use of community centers and common areas. As much of this sub-area is in the private Sea Trail golf and residential development, the area has shared facilities among owners and guests, which become full and unavailable during peak season. Sea Trail Corporation has development plans to continue to increase both residential units, and community facilities and common areas. Sea Trail Corporation estimates based on current zoning and other land use regulations that an additional 1,500 to 2,300 units could be developed over the next ten years. Sea Trail Corporation also estimates that there are 235 platted but vacant lots in the Sea Trail development. Nearly all of these will be developed with single-family homes.

Table 30: Vacant Lots by Zoning District in Sub-Area 5

Zoning District	Vacant Parcels	Vacant Acres
MR-3	233	146
TOTAL	233	146

While there are only 146 acres identified as “vacant” according to existing parcels in this survey, Sea Trail Corporation and Ocean Ridge Plantation intend to utilize land that is counted in the “golf course” use total in Table 29. This does not necessarily mean the golf course is in-filled with residential lots, it means the “golf course” use parcels contain both actual courses and vacant land adjacent to the course. The parcel was classified as “golf course” because that is the parcel’s current principal use.

There is no map graphic showing vacant lots per zoning district as this entire sub-area is zoned MR-3.

The existing land use statistics for Sub-Area 6 are listed in the Table below.

Table 31: Existing Land Use in Sub-Area 6

Land Use	Parcels	Acres
Single-Family	251	99
Single-Family Attached	4	.5
Manufactured Housing	628	145
Multi-Family*	5	7
Res. Common Area	1	1
Commercial	24	97
Government	1	1.5
Utilities	1	2
Vacant	190	73
TOTAL	1,105	426

*Only counts the number of parcels with a multi-family use, not the number of units in the multi-family structure.

The predominant land use in sub-area 6 is for manufactured housing residential. 57% of the parcels and 34% of the land acreage is currently used for manufactured housing. The other major uses in this sub-area are for single-family residential and commercial, accounting for 23% and 22% of the land acreage, respectively. Vacant land accounts for 17% of the land acreage. The majority of residential structures in this sub-area are one-story, with the multi-family structure and single-family homes along the Intracoastal Waterway generally being two-stories. The building height limit is 35 feet, with additional height allowable for additional setback from lot lines.

The land in sub-area 6 allowing manufactured housing is zoned Mobile Home-Conventional Home Residential District (MH-1). The minimum lot size for this district is 9,000 ft², but the actual average existing lot size is around 10,000 ft². The other residential zoning districts in this sub-area are Mainland Residential 2 (MR-2), Mainland Residential (MR-3) and Mainland Residential 2A (MR-2A). These districts do not allow manufactured housing. The minimum lot size for MR-3 is 7,500 ft² for single-family and 40,000 ft² for multi-family structures. The minimum lot size for MR-2 and MR-2A is 10,000 ft².

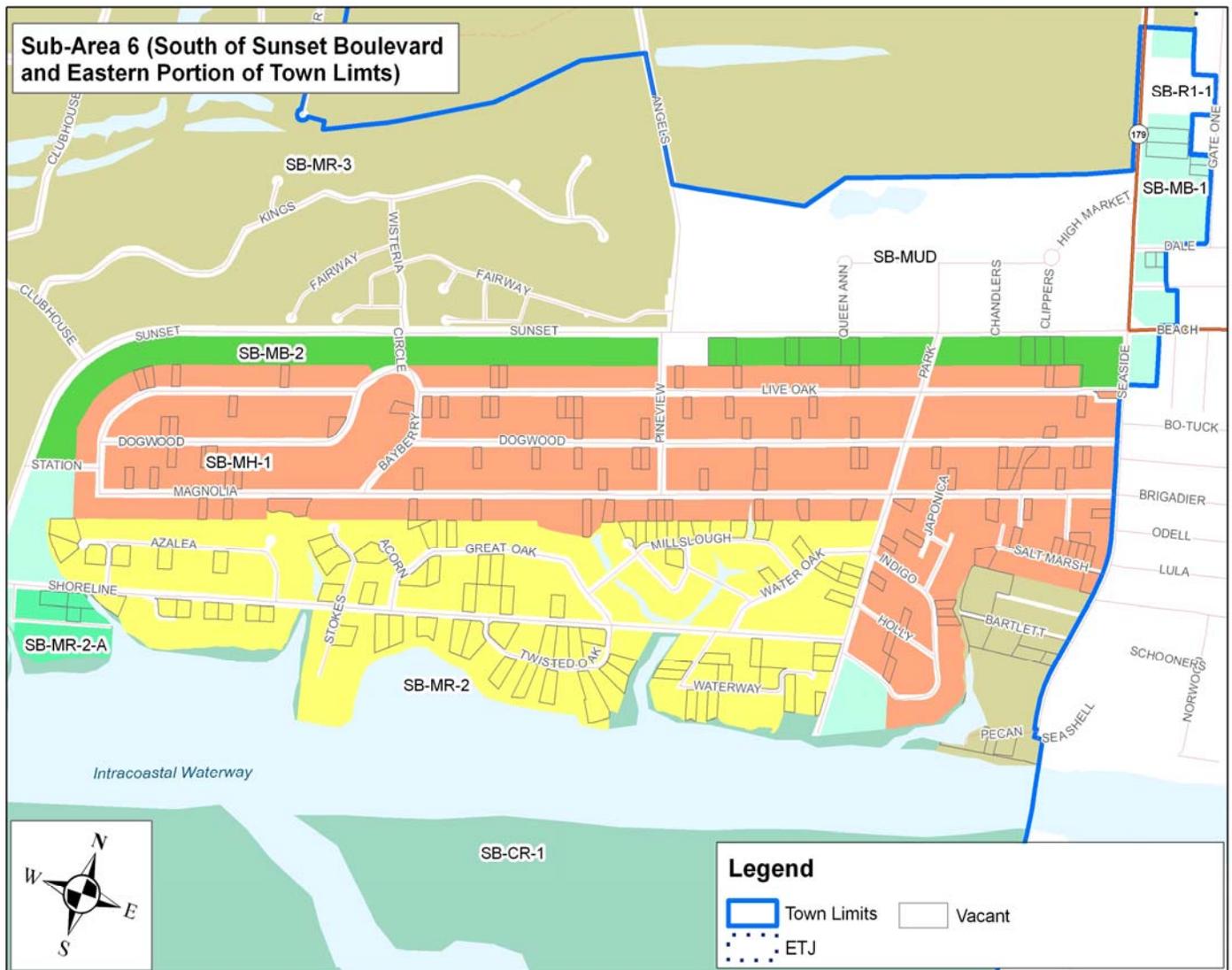
The vacant land along Sunset Boulevard is zoned Mainland Mixed Use Business 2 (MB-2). These tracts are intended to be developed with residential and nonresidential complimentary uses located in the same complex or building (Zoning Ordinance Section 151.215). The building height limit is 35 feet, with additional height allowable for additional setback from lot lines. Multi-family structures have a 50-foot building height limit.

While the housing types in this sub-area are varied, the lot sizes and building heights are uniform and the multi-family structures and its zoning are relatively isolated from the larger residential areas as a whole. No significant residential land use conflicts were noted. Commercial uses in this area are of the type to generate more traffic and noise (i.e. shopping centers, gas stations, and chain convenience stores), but these uses and their allowable zoning are limited to the road frontage along the thoroughfares of Highway 904 and Sunset Boulevard North. Conflicts with adjacent residential areas can be addressed by buffering and lighting regulations.

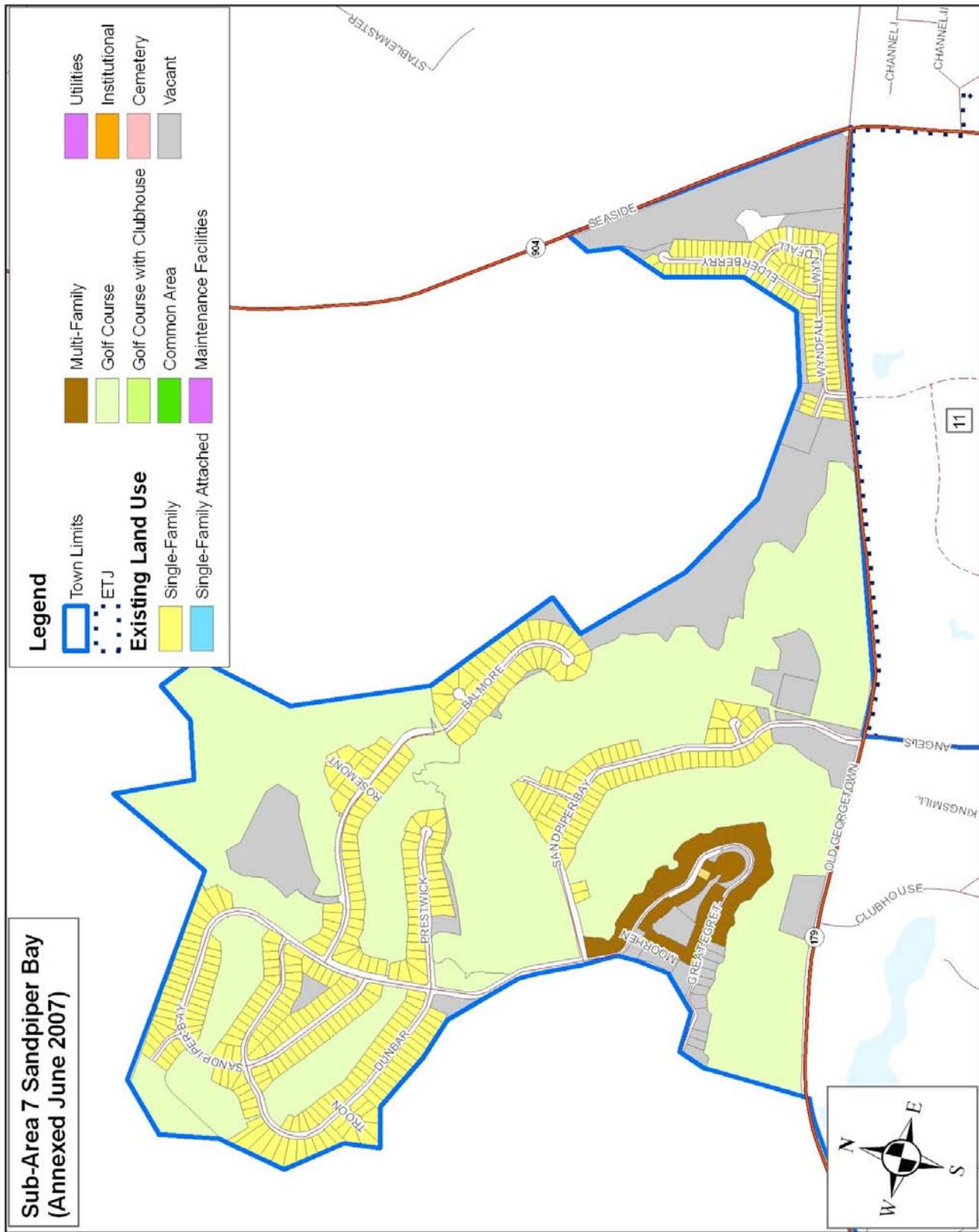
Table 32: Vacant Lots by Zoning District in Sub-Area 6

Zoning District	Vacant Parcels	Vacant Acres
MR-2	72	29
MR-2A	3	1
MR-3	6	13
MH-1	96	23
MB-2	7	5
MB-1	6	2
TOTAL	190	73

The following map graphic shows the vacant lots in each zoning district in this sub-area. The zoning district is shown color-coded and on the labels in the map starting with the prefix “SB”, which stands for Sunset Beach.



Sub-Area 7: Sandpiper Bay and Wyndfall Annex (June 2007)



The existing land use statistics for Sub-Area 7 are listed in the Table below.

Table 32 (A): Existing Land Use in Sub-Area 7

Land Use	Parcels	Acres
Single-Family	479	112
Multi-Family*	58	16
Golf Course	8	283
Vacant	42	94
TOTAL	587	505

*Only counts the number of parcels with a multi-family use, not the number of units in the multi-family structure.

The predominant land use in sub-area 7 is for single-family residential. 82% of the parcels and 22% of the land acreage is currently used for single-family housing. The other major uses in this sub-area are for multi-family residential and golf course use, accounting for 3% and 56% of the land acreage, respectively. Vacant land accounts for 19% of the land acreage. The majority of residential structures in this sub-area are one-story.

As the sub-area was recently annexed by the Town, the area has not been rezoned to a Town Zoning District. The existing zoning of the annexed area was County R-7,500, which is a mix of residential with minimum 7,500ft² lots. It should be noted that many of the lots were nonconforming to the County zoning as it was enacted after much of the development in the sub-area. The Land Use Plan is recommending the sub-area be zoned to MR-3 to include the associated updates to the MR-3 zone regarding multi-family, open space and density.

Existing Land Use in the County Jurisdiction Adjacent to Sunset Beach

Identifying existing land use and zoning in the County jurisdiction surrounding the Town is useful for seeing what types of development patterns are occurring outside the Town, and evaluating whether these patterns will be compatible or in conflict with existing or future development in Town. Town policy on annexation will also be impacted by the development patterns that are happening in the areas surrounding the Town.

Sunset Beach is prohibited in expansion to the west and sections to the northwest of Town due to other municipal jurisdictions (Calabash). The Town may only expand westward by annexing the area currently in its western ETJ. Approximately one mile to the east of the Town is the ETJ of Ocean Isle Beach. It is possible for the Town to expand eastward to the Ocean Isle Beach ETJ. The area south of Beach Drive towards Ocean Isle Beach is the most densely populated area surrounding the Town. This area includes a mix of manufactured housing and single-family with some commercial activity along Beach Drive. The most likely expansion of Sunset Beach is northward along Highway 904 towards Highway 17. This area is being developed with planned residential communities and commercial shopping centers. This area is shown on the map graphic following.

5.3 Identification of Significant Land Use Effects on Surface Water Quality

Almost all land uses, which are in close proximity and drain to surface water bodies, can have an effect on water quality. There are no land uses in Town which contribute significant point-source pollution to surface water, such as wastewater treatment plants or industrial type sources. The wastewater treatment plant in Sea Trail is permitted to use its treated wastewater byproduct for irrigation and spray field purposes on its golf courses. However, the town-wide system of streets, parking lots, curbs, gutters, ditches and swales all convey non-point source pollution to local surface waters from 25 piped outfalls. These outfalls were constructed prior to Phase I point-source regulations and Phase II non-point source regulations, and were constructed to drain storm water from properties and streets throughout the Town's jurisdiction (See Map 13: Town Maintained Stormwater System Outfalls Map). Some of the conveyances of non-point source pollution and some of the actual sources of the pollution will be managed and regulated under new NPDES Phase II stormwater rules that will go into effect on July 1, 2007. However, the existing system with its piped outfalls will largely continue to convey "untreated" stormwater from existing impervious surfaces to area waters. Infill development of individual residential lots not regulated by the stormwater ordinance will also contribute to the untreated volume of stormwater runoff conveyed through the Town's stormwater system. While retrofitting the existing stormwater system by engineered solutions can be expensive and difficult to apply equitably among existing development (i.e. having to evaluate what type of pollutant load in the stormwater comes off different properties and at what volume), there are steps the Town can take as part of its Phase II Permit Public Education and Outreach Program to inform citizens of already developed properties how to better contain stormwater runoff on a site by site basis. Such homeowner practices could include simple steps such as having "rain barrels" at the ends of roof gutters to collect rain water, or diverting gutter spouts to drain over grass or other vegetated areas rather than onto driveways or other impervious surfaces. Homeowner landscaping practices, if applied at a sufficient scale, could have a beneficial impact on the volume and pollutant load of stormwater runoff entering the Town maintained stormwater system.

The Town currently manages stormwater from new developments and major redevelopments with a stormwater ordinance (See Section 4), but the new Phase II rules will require stronger controls for new development in environmentally sensitive areas (land within one-half mile of shellfish waters) and increases in programs to identify and eliminate existing sources of pollution transported in stormwater. Fertilizers and pesticides used on the local golf courses may also reach local surface waters if not properly managed and applied. Also, land uses along waterfronts which do not have engineered stormwater retention or vegetated buffers of at least 30 feet (50-100 feet recommended by engineers) can also contribute to surface water pollution by allowing stormwater runoff to reach surface waters untreated. See Section 4 for information on the water quality in the Town's jurisdiction and possible sources of surface water pollution.

5.4 Identification of Land Use Conflicts with Class III Areas on the Environmental Composite Map and Areas Described in the Natural Systems Analysis Section

This subsection identifies current and future land uses that may conflict with environmentally sensitive areas. Identifying potential conflict with sensitive areas is done by comparing the existing land uses identified in this Section with the natural features discussed in Section 4. Most of the comparison is done by utilizing the Environmental Composite Map [Map 8], The Areas of Environmental Concern (AEC) Map [Map I], and the North Carolina Coastal Resource

Evaluation of Wetland Systems Map [Map 6], which were discussed in Section 4. The Environmental Composite Map shows areas classified as Class III, which imply that those areas contain natural features that should be protected from intense development. The main Class III natural features found in the Sunset Beach Planning Jurisdiction that may conflict with development are non-coastal wetlands, coastal wetlands and estuarine waters.

As stated in Section 4, wetlands serve important and useful functions. Wetlands maintain water quality by filtering pollutants and sediments, prevent erosion and flooding from plant root systems that hold soils in place, and provide wildlife habitat and scenic areas that increase property values and quality of life. The majority of the mainland areas identified as Class III on the Environmental Composite Map [Map 8] are due to their classification as non-coastal wetlands by the North Carolina Coastal Resource Evaluation of Wetland Systems [shown on Map 6]. On the mainland, these Class III areas are mostly found in Sub-area 5 (Sea Trail North of Calabash Creek and the Eastern ETJ) and Sub-area 7 (Sandpiper Bay and Wyndfall Annex). These wetland areas are not automatically designated 404 wetlands and regulated by the Army Corps of Engineers, but are areas where certain characteristics associated with wetlands, such as soils and plant types, are present in that area. Except for the Calabash Creek Class III area, the vast majority of the other Class III areas found in the Sea Trail development, the future Ocean Ridge Plantation development, and the existing Sandpiper Bay development are classified as “managed pinelands” type wetland areas and are rated as “not a high potential risk” to the integrity of the watershed if lost. The Calabash Creek Class III area is classified as “swamp forest” and does have a “high potential risk” to watershed quality if lost by filling or draining. Calabash Creek is the headwater for the SA and shellfish classified Calabash River. The Creek runs through areas which are surrounded by existing and/or planned development. As part of this Land Use Plan update, the Town should evaluate its stormwater requirements in the Calabash Creek area to ensure that stormwater impacts from future development along Calabash Creek are minimized and do not overburden the water quality of the Creek or the Calabash River.

The Class III area identified in the commercial area just south of the Ocean Ridge Plantation site and just north of Sunset Boulevard is also classified as “managed pinelands” and is rated as “not a high potential risk” to the integrity of the watershed if lost. In fact, those pinelands are no longer present in this area, and manmade wetlands in the form of stormwater retention ponds now occupy much of this area as it has already begun to develop. Class III areas found in sub-area 6 are also classified as “managed pinelands”, but have a “high potential risk” if lost or otherwise destroyed. These pinelands in sub-area 6 are adjacent to the creek tributaries that are associated with the Intracoastal Waterway. These areas are near Stokes Drive off Shoreline Drive East, Water Oak Wynd off Shoreline Drive East, and the Millslough Lane area.

Other Class III areas can be found along the shoreline of the Intracoastal Waterway in Sub-areas 3 and 4. This classification is likely due to their close proximity to estuarine waters and coastal wetlands. The one-acre resolution of the Class III areas on the Environmental Composite Map is not accurate enough to automatically designate any of these properties as highly unsuited for development. However, due to their proximity to estuarine water and coastal wetlands, it is highly likely that any development on these properties would require a CAMA permit. Maintaining vegetative buffers at a minimum of 30 feet (50-100 feet recommended) would assist in filtering pollutants and sediments in runoff from the property and adjacent roads. State law currently requires a 30-foot buffer. Municipalities may increase this requirement if desired.

These properties are zoned for single-family residential with a minimum lot size of 10,000ft² for most areas, up to one acre lot minimum for the lots on the western most end of the jurisdiction.

Class III areas on the island are also associated with close proximity to estuarine waters and coastal wetlands. The majority of vacant lots that correspond with a Class III rating on the Environmental Composite Map are those lots found east of 19th Street and north of the canal channel inlet. These lots were discussed earlier in this section. As mentioned above, the one-acre resolution of the Class III areas on the Environmental Composite Map is not accurate enough to automatically designate these properties as unsuited for any type of development. However, due to their proximity to estuarine water and coastal wetlands, any development allowed under the Town Zoning Ordinance on these properties would also at minimum require a CAMA permit and flood zone certification permit.

5.5 Projection of Future Land Needs

The CAMA planning guidelines [15A NCAC 07B .072 (c)(3)(D)] require an estimate of the land needed for residential development to accommodate the expected growth in population over the next twenty years. In Sunset Beach, the projected population growth is essentially dependent and contingent upon the amount of vacant land within its jurisdiction. In other words, the population will not grow substantially and the projected population growth will not be reached if there is no vacant land available, if the vacant land is not being developed, or if the Town does not annex existing population areas. Redevelopment and re-zoning of areas already currently developed to allow substantial increases in population and housing density are not desired in the Town. Furthermore, the Town will likely manage the amount of future growth that can occur by establishing a maximum number of sewer connections that will be available for the upcoming construction of the Town-wide sewer system.

The existing density within the Town Limits is .8 persons per acre. Density is derived by taking the latest North Carolina State Demographer certified population estimate for the Town of 2,095, and dividing it by the total acres of land in the Town Limits, which is 2,500 [population/land area]. NOTE: This does not include the recently annexed area of Sandpiper Bay and Wyndfall. The State Demographer has not updated the Town's population based on that annexation. The Land Use Plan estimates the permanent population of Sandpiper Bay and Wyndfall to be approximately 960 (based on the County permanent resident occupation ratio of 59% and 2.3 persons per household). When including the Sandpiper Bay and Wyndfall annex population and land area, the current population density is 1 person per acre [i.e. 3,055 pop/3000 acs].

When including the Sandpiper Bay and Wyndfall annex, the Town's population is expected to reach 4,613 by 2020 and/or build-out. With no further annexations, the density would be 1.5 persons per acre. The Town would need approximately 1,500-1,600 additional acres of vacant land to meet expected population growth and retain its existing population density of 1 person per acre. As shown in Table 20, there are currently 691 acres of vacant land in the planning jurisdiction. Therefore, it is projected that the Town will have a deficit of approximately 700 acres of vacant land, and the Town's population density will rise to 1.25 persons per acre.

Section 6. Analysis of Community Facilities

The CAMA planning guidelines state that the “purpose of the analysis of community facilities is to evaluate existing and planned infrastructure capacity, location and adequacy of key community facilities that serves the community’s existing and planned population and economic base; that protect important environmental factors such as water quality; and that guide land development in the coastal area” [15A NCAC 07B .0702 (c) (4)]. The key community facilities typically found in coastal communities include:

1. water supply systems;
2. wastewater systems;
3. transportation systems;
4. stormwater systems; and
5. public access facilities.

These community facilities are considered key in land use planning because they can have a significant impact on a local government’s ability to allow for growth, while making sure it is done in a managed and orderly way that protects property values, quality of life and the environment.

The Town of Sunset Beach is in significant transition on several of its key community facilities. The Town is finalizing an interlocal agreement with Brunswick County to transfer ownership and operation of the Town’s existing water distribution system to the County. The Town, also in conjunction with Brunswick County, is in the planning process for providing a centralized sewer system to replace the Town’s current wastewater systems, which are individual septic systems. The Town is working with the North Carolina Department of Transportation in upgrading its transportation systems by replacing the one-lane swing bridge accessing the island with an elevated two-lane bridge. The new bridge will allow a more constant free-flow of vehicular traffic on and off the island and boat traffic up and down the Intracoastal Waterway. The Town is also transitioning its existing stormwater management systems to meet the requirements of the 2006 Stormwater Management Act (Senate Bill 1566), which enacts the federal NPDES Phase II Stormwater Rules.

6.1 Water Supply System Status and Trends

As of 2006, Sunset Beach is a wholesale water customer of the Brunswick County Water Supply System. The Town currently purchases water from the County and distributes it to Town customers within the Sunset Beach corporate limits. As stated above, the Town is planning to transfer its water distribution system (i.e. water lines, meters and .2 MGD water tank) to the County. The current transfer plans will become effective on July 1, 2007. Water users in the Town will become retail (or direct) customers of the County water system. The water system infrastructure in place is available to all areas in the Town Limits. There are no water wells in use by the Town, all water is conveyed in from the Brunswick County water system. Brunswick County obtains its water from the Cape Fear River at the Northwest Water Treatment Plant (Northwest WTP) and groundwater wells at the 211 Water Treatment Plant (211 WTP). Water supplied to the Northwest WTP is purchased from the Lower Cape Fear Water Authority, which pumps surface water from the King’s Bluff Reservoir,

located above Lock and Dam No. 1 on the Northeast Cape Fear River. The 211 WTP obtains raw groundwater from 15 wells that are tapped into the Castle Hayne Aquifer.

The Town has estimated that all existing structures (residential, commercial and institutional) are connected to the water supply system. There are approximately 3,750 water connections as of 2005/2006. Any new developments in the Town Limits are required to connect to the water supply system, and any new developments in the ETJ are to connect directly to the County's water system.

As a Water Supply System operator, the Town re-evaluates its water supply needs approximately every 5 years by producing a Water Supply Plan. The last Water Supply Plan for the Town was updated in 2002. This will likely be the last Water Supply Plan the Town produces, as it will transfer ownership of the system to the County in 2007. The Water Supply Plan is reviewed by the North Carolina Division of Water Resources to ensure adequate supplies are being maintained to avoid shortages and to be available during emergencies (i.e. fires). The Town does have a Water Shortage Response Ordinance found in Section 51.35 of the Town Code of Ordinances. The purpose of the ordinance is to allow the Town to implement voluntary and/or mandatory water conservation measures throughout the Town during a declared water shortage. The ordinance states that whenever the governing body of the Town finds that a potential shortage of water supply is imminent, it can adopt an ordinance that Voluntary Conservation conditions exist. In this event, the Town can request all water customers to employ voluntary water conservation measures, such as ceasing irrigation. The ordinance also states that whenever the governing body of the Town finds raw water supplies (i.e., County supply systems and its sources) to be consistently below averages, in decline and not adequate to meet normal needs, the Town can adopt an ordinance that Mandatory Conservation conditions exist. In this event, The Town will continue to encourage voluntary water conservation measures and impose water use bans on certain Classes of water users and uses as defined in the Water Shortage Response Ordinance.

Since the Town currently purchases water from the County on a monthly basis, the amount of actual supply available to Town customers can vary based on the amount the Town actually purchases and/or the amount the County has available to sell. According to the Town's 2002 Water Supply Plan and a 2006 Brunswick County Water Systems Master Plan, the Town will likely have an annual average day demand of .86 to .93 Million Gallons per Day (MGD) between the periods of 2010 and 2020. The Brunswick County Water Master Plan actually has an expected average day demand of around 1.4 MGD for the Town after 2015, but this is a 300% increase from current levels and is not likely unless the Town annexes surrounding populations, which would increase its population to a level that could support a 300% water demand increase. In addition, seasonal populations are also not expected to rise as dramatically as to support a 300% increase in water demand given the Town's development regulations limiting large multi-family or motel/hotel development on the island.

The month of July 2006 saw an average day demand of 1.06 MGD in water consumption, but when considering use over the entire year, high-season peaks are offset by the low-season which brings the annual average day demand back to a lower number. However, having adequate water supply is typically tied to the amount associated to a peak day demand as opposed to a lower annual average demand. According to the water consumption data received from the Town's Finance Department, the Town's typical annual average day demand between 2002 and 2005

ranges between .5 to .57 MGD, 2006 year to date is .59 MGD. To reach the 2010 and beyond estimated demand found in the 2002 Water Supply Plan and County Water Supply Master Plan, the annual average day water use of the Town would have to increase by around 57% from current levels $[(.93 - .59)/.59 = 57\%]$.

Tying future water demand to future population growth, (refer to Chart 2 in Section 3 of this Plan) the permanent population is expected to increase by 45% from 2,219 people in 2005 to approximately 3,200 by 2020. This permanent population increase is short of the 57% increase in water use expected. However, the 45% increase in permanent population does not include any increases in seasonal populations over the next 15 years, which would be a factor in future water demand. Therefore, an additional 10% in seasonal population over current levels could be realized as the island is built-out and with some redevelopment of homes to slightly larger homes that may have more capacity for seasonal visitors than previously existed. The 45% increase in permanent population and the 10% increase in seasonal population equals a possible 55% increase in population that would match the 57% increase in expected demand. The match is based on per person water use averages remaining constant to today's levels (e.g. given someone in 2020 would use roughly the same amount of water as someone uses today).

NOTE: The purpose of this Land Use Plan is not necessarily to identify and secure an exact future water supply amount based on estimates, but rather to demonstrate the need to plan ahead to locate and secure future additional water capacity as it will more than likely be needed. As the main water supply distributor in the area, Brunswick County is the primary source for securing future water capacity to meet expected demand. Assisting the County in increasing its water supply capacity and infrastructure should be a policy of the Town to ensure that its own future water supply demands can also be met.

Tables 33 and 34 following show the Town's monthly water demand since June of 2000. The tables also show how much water was purchased from the County for each month to compare with how much was actually used. Table 33 shows water use over six months of each year, which includes the high-season. Table 34 shows water use over a six-month period, which includes the low-season. An average Million Gallons per Day (MGD) amount is shown for each month, and was found by dividing the total water use in the month by the number of days in the month.

Table 33: Water Consumption in the “High-Season”

(Source: Town of Sunset Beach Finance Department)

	Apr.	May	June	July	Aug.	Sep.	
YEAR							TOTAL For Six Months
2000							
Gallons Purchased from County	N/A	N/A	28,399,600	22,503,300	20,890,200	14,099,400	
Gallons Actually Used			22,131,650 .73 MGD	28,143,196 .91 MGD	18,928,756 .6 MGD	11,627,011 .38 MGD	
2001							
Gallons Purchased from County	14,866,600	22,009,700	24,398,700	25,764,100	24,002,300	15,907,700	
Gallons Actually Used	12,935,160 .43 MGD	21,659,810 .69 MGD	20,169,610 .67 MGD	27,741,570 .89 MGD	21,723,882 .72 MGD	13,713,870 .45 MGD	117,943,902
2002							
Gallons Purchased from County	16,698,300	18,666,000	27,574,200	29,050,060	24,095,440	17,505,470	
Gallons Actually Used	17,530,610 .58 MGD	17,396,470 .56 MGD	24,430,812 .81 MGD	29,062,779 .93 MGD	23,279,192 .75 MGD	16,108,638 .53 MGD	127,808,501
2003							
Gallons Purchased from County	14,674,620	15,298,400	21,833,610	30,192,490	22,048,220	17,589,460	
Gallons Actually Used	15,186,624 .5 MGD	15,364,501 .49 MGD	18,944,360 .63 MGD	29,267,090 .94 MGD	21,576,396 .69 MGD	17,358,274 .57 MGD	117,697,245
2004							
Gallons Purchased from County	16,124,510	18,628,720	29,545,060	28,927,650	22,825,380	14,302,730	
Gallons Actually Used	14,871,659 .49 MGD	17,833,271 .57 MGD	28,165,130 .93 MGD	26,038,250 .83 MGD	22,900,789 .73 MGD	12,416,640 .41 MGD	122,225,739
2005							
Gallons Purchased from County	13,249,690	19,794,070	25,270,100	31,848,820	28,628,650	19,125,350	
Gallons Actually Used	11,246,199 .37 MGD	17,612,595 .56 MGD	23,032,602 .76 MGD	29,196,923 .94 MGD	26,055,399 .84 MGD	17,241,747 .57 MGD	124,385,465
2006							
Gallons Purchased from County	9,887,330	16,059,200	25,556,620	40,308,020	35,596,800		116,821,902*
Gallons Actually Used	16,218,610 .54 MGD	19,531,262 .63 MGD	22,045,350 .73 MGD	33,159,730 1.06 MGD	25,866,950 .83 MGD	N/A	*without September 06 Total

As shown in Table 33, July has been the month with the highest demand due to the influence of seasonal populations. Since 2000, the average day water use amount for July has been .93 MGD. The highest average day amount for July over the last seven years was in 2006 with 1.06 MGD. The July 2006 average day amount was a 14% increase from the regular July average of .93 over the last 7 years.

Table 34: Water Consumption in the “Low-Season”

(Source: Town of Sunset Beach Finance Department)

	Oct.	Nov.	Dec.	Jan.	Feb.	March	TOTAL For Six Month Period
2000/2001							
Gallons Purchased from County	12,762,600	11,492,400	8,318,000	8,990,800	6,081,800	10,011,000	
Gallons Actually Used	11,468,240 .36 MGD	14,447,190 .48 MGD	7,525,003 .24 MGD	7,818,030 .24 MGD	6,662,202 .23 MGD	8,626,850 .27 MGD	56,547,515
2001/2002							
Gallons Purchased from County	16,733,700	15,301,500	9,378,600	8,608,100	8,151,600	12,097,400	
Gallons Actually Used	17,603,735 .56 MGD	13,577,353 .45 MGD	8,024,440 .26 MGD	8,014,170 .26 MGD	8,447,288 .48 MGD	8,564,132 .27 MGD	64,231,118
2002/2003							
Gallons Purchased from County	14,445,660	11,512,500	8,254,450	9,064,250	7,714,310	10,375,840	
Gallons Actually Used	12,290,784 .39 MGD	8,369,924 .27 MGD	9,912,272 .31 MGD	6,906,950 .22 MGD	6,905,070 .24 MGD	8,908,502 .28 MGD	53,293,502
2003/2004							
Gallons Purchased from County	14,031,880	9,856,820	10,638,030	9,096,220	7,947,260	11,272,320	
Gallons Actually Used	11,850,660 .38 MGD	12,257,630 .4 MGD	6,388,990 .2 MGD	7,471,170 .24 MGD	7,711,840 .27 MGD	10,113,360 .32 MGD	55,793,650
2004/2005							
Gallons Purchased from County	13,236,080	12,636,080	9,005,430	10,290,800	8,395,840	11,066,030	
Gallons Actually Used	11,789,029 .38 MGD	10,971,299 .36 MGD	7,292,628 .23 MGD	8,065,709 .26 MGD	7,613,380 .27 MGD	9,767,360 .31 MGD	55,490,405
2005/2006							
Gallons Purchased from County	17,411,130	13,367,840	9,952,240	10,602,300	8,803,000	11,041,390	
Gallons Actually Used	15,029,887 .48 MGD	11,006,803 .36 MGD	7,681,820 .24 MGD	8,810,100 .28 MGD	7,690,290 .27 MGD	10,113,160 .32 MGD	60,332,060

Table 34 shows that December through February have been the months with the lowest water use over the last seven years. The lowest use was .2 MGD in December 2003. The average day use is around .26 MGD for these three months.

As a comparison of water use among Brunswick County municipalities, the table below shows the 2005 annual average day demand for each municipality that is a wholesale purchaser of water from the County. NOTE: Sunset Beach is 100% supplied by Brunswick County with water, it is not known if the other municipalities in the table below have municipal wells as part of their water supply systems, such as Oak Island, which is 300% more populous than Sunset Beach but only uses less than 50% more County water than Sunset Beach.

Table 35: Annual Average Day Water Use Comparison Among Brunswick County Wholesale Water Customer Municipalities

(Source: 2006 Brunswick County Water System Master Plan)

Municipality	2005 Annual Average Day Water Use	2004 Certified Population
Bald Head Island	.190	246
Boiling Spring Lakes	.144	3,580
Caswell Beach	.148	457
Holden Beach	.117	835
Oak Island	.990	7,281
Ocean Isle Beach	.567	483
Shalotte	.269	1,533
Southport	.443	2,612
Sunset Beach	.565	2,095

According to the table, Sunset Beach is the third largest wholesale user (not including the North Brunswick Sanitary District) of the County water supply system. This corresponds with Sunset Beach’s population among the wholesale municipalities as fourth largest. Other factors to consider include Sunset Beach’s seasonal population influence on boosting consumption rates as compared to municipalities such as Boiling Spring Lakes and Shalotte, which likely have a comparably smaller seasonal population influence.

Water Supply System Expansion

To prepare for future water supply demand, Brunswick County contracted the engineering firm Hazen & Sawyer, P.C. in 2005 to prepare a Water System Master Plan. The Master Plan contains a list of prioritized improvements to the water supply system to prepare for demand expected by 2015. More specifically, the Master Plan estimated current and future demands for the service area, examined the existing infrastructure’s ability to meet growing demands, and identified and ranked required system improvements needed through 2015. The existing Brunswick County water system includes two water treatment plants, transmission mains and distribution pipelines, booster pumping stations and elevated storage tanks.

According to the Master Plan, the treatment plants currently have a combined rated capacity of 30 million gallons per day (MGD), with about 8 MGD of excess capacity for the current Maximum Day demand. The “Maximum Day” means the highest daily demand in a year. The Maximum Day rate is the critical requirement for pumping and production capacity. As the County grows, the Maximum Day rate will grow. The Master Plan’s demand projections show that the existing excess capacity available for the current “Maximum Day” rate will quickly diminish in the immediate future. The Master Plan states that the County’s water system plants

are expected to reach 80 percent capacity in 2007, and will be at 100 percent capacity by 2011. By 2015, the projected Maximum Day demand could have a production supply shortfall of 8 MGD.

The Master Plan established a “Program of Construction” Table (See Appendix III) to address the immediate and near future needs of the County water system. The County Commissioners adopted the Program of Construction (as well as the entire Master Plan) in July 2006. The recommended improvements are divided into three phases. Phase I consists of immediate needs, such as ensuring adequate flow to fight fires, and are recommended be constructed in the next two years. Phase II improvements are to be completed before 2015 to meet projected water demands. Phase II projects are divided into Phase IIA, which addresses pipeline needs, and Phase IIB, which addresses pumping station needs. Finally, Phase III improvements address the requirement to increase the overall treatment capacity and supply of the Northwest WTP and upgrade the 211 WTP facilities to meet the projected needs for the year 2015.

Other than increasing the overall treatment and supply capacity of the system, the improvements that will affect the Town of Sunset Beach are items I-2, I-6 and IIB-5 on the Program of Construction Table. The Phase I items are prioritized to be implemented in 2007. The County Public Utilities Director estimates that funding will be available to begin the implementation of item IIB-5 in 2008.

Item I-2 (Phase I Improvement)

The Master Plan identified inadequate fire flows and low pressures in the water system in the Calabash area, which also includes portions of the Sunset Beach ETJ along Beach Drive. The Master Plan attributed the low pressure to the distance the water has to travel to reach this region and the undersized lines along Beach Drive. To increase pressure in this area, the Master Plan recommends that the existing 8-inch pipeline along Beach Road be paralleled with a 12-inch line from the Clariday Road/Old Georgetown Road intersection to the Sunset Beach meter vault on Shoreline Road. The Master Plan states that piping across the waterway would not be necessary and the total project amounts to approximately 8,300 LF of 12-inch pipeline.

Item I-6 (Phase I Improvement)

Item I-6 is not in the planning jurisdiction of Sunset Beach but is located immediately adjacent to it in the Sandpiper Bay Development just across Old Georgetown Road (Hwy. 179) from Sea Trail and Angel’s Trace. According to the Master Plan, Sandpiper Bay is a residential development supplied from a single 8-inch pipe causing poor fire flows. The recommended improvement is approximately 1,300 LF of 12-inch pipeline to complete a loop of the system in the area.

IIB-5 (Phase II Improvement)

The Master Plan recommends additional elevated storage in the southwest region of Brunswick County. A One Million Gallon elevated storage tank is recommended to be constructed on the southside of Highway 904 off Highway 17, just north of the KOA campground and across from Ocean Ridge Plantation. A lack of storage in this area is identified in the Master Plan as placing greater dependency on the Bell Swamp Pump Station to supply the demand required during Peak Hours and the addition of this new tank will help ensure Brunswick County’s ability to

supply future Maximum Day and Peak Hour demand. The tank will also help buffer Brunswick County's system against any lack of adequate storage found in the individual wholesale user systems in the area. The County Public Utilities Director estimates that funding for the new 1 MG capacity elevated storage tank will be designated in 2008.

6.2 Wastewater System

The Town of Sunset Beach, in agreement with Brunswick County, is in the planning stages to construct a wastewater collection system. The County will construct, own and operate the system, and charge one-time assessments to properties and users of the system within the Town to pay for the construction. Monthly utility charges to use the system will also apply. The purpose of the wastewater system is to provide sewer service to currently un-sewered areas within the Town limits. The un-sewered areas include locations both on the mainland and island. Most areas within the Town Limits are currently serviced by individual on-site septic systems. Sewer service is currently available to portions of the Sea Trail development north of Calabash Creek, in the commercial area along Sunset Boulevard North, and in the multi-family units along Shoreline Drive West. These areas are serviced by a wastewater treatment plant located in Sea Trail, which is operated by Brunswick County. The Plant is permitted to treat .5 MGD of wastewater a day but as of 2005 treated only around .1 MGD per day. The County Plant in Sea Trail is planned to become a regional pumping station when the planned sewer system comes on-line. Wastewater will be pumped through this station to the West Brunswick Water Reclamation Facility near Bolivia, currently under-construction (See Map 10: 20 Year Regional Sewer Collection System Infrastructure Map).

According to the Brunswick County Comprehensive Wastewater Master Plan conducted by the engineering firm HDR, Inc., the capacity of the West Brunswick Facility under construction will be 3.0 MGD. The current design of the facility allows for future expansion to replicate the 3.0 MGD facility and make it a 6.0-mgd facility. The Master Plan also states that the 275-acre West Brunswick site has adequate land to support up to a 7.0 MGD facility to meet that facility's expected service area needs in 2020.

As part of the Town's local sewer system planning process, the Town contracted with the engineering firm URS Corporation to conduct a Wastewater Feasibility Study (2004), an Environmental Impact Report (2006), and a Wastewater User Rate Study (2006) to plan for the construction of a sewer collection system within the Town Limits. As stated before, this system would be connected to the County system for treatment at the West Brunswick Facility. The Wastewater Feasibility Study conducted by URS was to evaluate and recommend alternatives for wastewater collection systems for both the island and mainland portions of the Town. More specifically, the Feasibility Study evaluated the existing wastewater facilities, wastewater flows, collection system alternatives for the island and mainland, and construction financing alternatives. At the time of the URS studies, the Town had around 3,750 water customers, of which 675 were connected to the Brunswick County wastewater treatment plant in the Sea Trail development. Based on these figures, the studies estimated that there were at least 3,075 existing customers which would be connected to the wastewater collection system when constructed. Numbers on total future wastewater customers is discussed later in this Section under the "Concerns With Wastewater System Construction" subsection.

Concerns With Wastewater System Construction

The Environmental Impact Report by URS included community concerns that would need to be addressed as part of the construction of the wastewater collection system. The concerns that will need to be addressed include:

- induced development;
- wetland impacts;
- stormwater and water quality issues; and
- cost allocation.

Induced development is made possible when infrastructure such as sewer is implemented and now allows for development that was unable to occur prior to its implementation. As mentioned in the Environmental Impact Report and in Sections 4 and 5 of this Plan, the development potential in certain areas of Town is limited to an extent by the septic suitability of the soils and low water table. This occurs mostly on the island where lots are relatively small, and individual septic drainfield size cannot easily be adjusted to make up for the poor soils. The concern is that when the sewer system is available, there will be development pressure to allow more dense and intense uses on these smaller lots, which among other things could overburden the environmentally fragile areas surrounding the island by increasing stormwater runoff. The Town has shown that there is a consensus to manage development and maintain its relatively small-town residential and low height profile characteristic. In order to maintain the desired characteristic, Sunset Beach enforces and plans to maintain the regulatory strength of its zoning, building, and other development-related ordinances. Those ordinances include a 35-foot height restriction for all buildings on the island. This law can only be changed by public referendum or by the Town Council submitting a request to the NC General Assembly that the law be deleted. On the island, multi-family development is included in this height restriction and is limited to a three block wide corridor at the main entrance to the island. The majority of the rest of the island is zoned to allow only single-family, with some duplex allowed along the oceanfront lots. There is a community desire to maintain this type of development pattern after the sewer system is in place.

Sewer Hook-up Limitation

Another way to manage the level of potential induced development recommended by URS in their Environmental Impact Report (EIR) is to set a limit on the total number of sewer connections to provide for the existing corporate limits. As mentioned before, there is a community concern that existing residential properties with septic capacities for only one single-family unit would have the potential for constructing multi-family units on these properties. URS recommended that this issue be addressed through the identification of a maximum number of hookups that will be designed in the wastewater system as a condition of the permit for the installation of the wastewater system.

URS Corporation in the Environmental Impact Report recommended that the wastewater collection system have a design limitation of around 4,500* hook-ups (*NUMBER SUBJECT TO CHANGE AS THE SYSTEM IS STILL CURRENTLY BEING PLANNED AND DESIGNED). This number was based on estimating maximum build-out of vacant lots and redevelopment of older structures to maximum density currently allowed in the zoning ordinance. This number

includes a maximum of around 1,950* hookups for the island, and a maximum of around 2,550* hookups on the mainland. The approximately 4,500* total hook-ups include the around 3,050 existing Town water customers not connected to the Brunswick County Wastewater Treatment Plant in Sea Trail, plus around 1,450* additional future units built on vacant lots and as redevelopments.

NOTE: This total number of hook-ups applies to the planned wastewater collection system service area only. The area of Town north of Calabash Creek is not included in the total number of hook-ups to be allowed, as it is in the service area of the County treatment plant in the Sea Trail development. Additional units will likely be developed north of Calabash Creek in Sea Trail but will not be serviced by the new wastewater collection system.

Water Quality Issues During Septic System Removal

Associated with the construction of the wastewater collection system, the existing on-site septic systems will be required to be emptied and removed all while avoiding spills and contamination of adjacent water resources. This is particularly applicable on the island. The Environmental Impact Report recommends that the septic system removal process be in accordance with the guidelines in the 'Recommended On-Site Wastewater System Abandonment Procedures' (NCDENR 2006), which is produced by the On-Site Wastewater Section of the North Carolina Department of Environment and Natural Resources' (NCDENR).

The guidelines suggest:

- 1) Pumping of tank by an approved hauler, removal or crushing of tanks, and backfilling in place with clean fill material.
- 2) Disconnection of all power sources to the system.
- 3) Removal of all parts of the drainfield (valves, risers, etc).
- 4) Coating of surface areas exposed to effluent with hydrated lime and reestablishment of vegetative cover.
- 5) No use of the former septic system area for at least 18 months.

URS stated that although no laws are in place to require the above guidelines, these guidelines should be included as a condition of the permit.

Cost Allocation

The planned wastewater collection system is expected to come on-line approximately 2 years after permits have been obtained and cost roughly \$8,000 per individual user as a one-time assessment (THIS FIGURE IS SUBJECT TO CHANGE AS THE SYSTEM IS STILL BEING PLANNED AND DESIGNED).

6.3 Transportation Systems

To evaluate transportation and roadway deficiencies, the North Carolina Department of Transportation (DOT) compares Annual Average Daily Traffic Counts (AADT) to a road's design capacity. Traffic on key segments of various roadways is counted and calculated annually and compared to a standard road design capacity based on that roadway's individual type. For example, a two-lane roadway has a different design capacity than a roadway that has two-lanes with a center turn lane.

The annual traffic count used for the comparison is called the AADT. The AADT is the number of vehicles passing in both directions over a single point on a roadway over the course of a year divided by the 365 days in a year. For example, if 50,000 vehicles pass a single point on the road in a year, the AADT is 137 vehicles per day ($50,000 / 365 = 137$). It must be noted that these annual traffic counts are averages, and certain peak season days may produce traffic counts well in excess of the AADT count (as is shown in Table 38).

Table 36 following shows DOT's general road design capacities for various types of roads with a "Level of Service D". The "Level of Service D" capacity counts are the standard used by DOT to evaluate whether road segments are near, or have the potential for nearing, their design capacity. Typically, road segments are not prioritized for improvements (i.e. placed on DOT's Transportation Improvement Plan) unless they are exceeding their "Level of Service D" design capacities. DOT evaluates whether design capacity has been exceeded by comparing the AADT counts on a given road segment with that road segment's design capacity (as shown in the table below). The table also shows design capacities based on an area's level of development, such as whether the road segment is in a rural, suburban or urban setting. Roads in Sunset Beach fall under the design capacities listed in the "suburban" column in the table. The suburban classification is due to the density of population and number of driveway cuts and intersections.

NOTE: When reviewing the capacity thresholds in the table below, DOT states that a given road segment's 'true' capacity threshold may be affected by the following factors: turn lanes at intersections, separate left turn lanes at intersections, the degree of access-control along the facility, parking, signals per mile, speed (both posted and observed), pedestrian crossings, and roadside development. Generally, the numbers in the table below represent total vehicles per day and traffic going in both directions along a generic road type, and the capacities given are for **planning** purposes only. DOT states that to derive the most reliable capacity threshold along a section of roadway requires the collection of detailed information to be used in coordination with Highway Capacity modeling software. Generally, DOT must contract with local governments to conduct such modeling.

The road design capacity thresholds in the table below may be used in combination with current and estimated (future) AADT's for forecasting the traffic volume to road capacity ratio along road segments in Town. This information can be applied to land use planning applications by allowing prioritization of transportation improvement projects and/or for managing development to more closely control traffic generating land uses in certain congestion areas. The design capacity counts shaded in gray in the table below represent the road types in Sunset Beach that have corresponding annual traffic counts (AADTs). There are a total of 5 road segments in Town that have 2005 AADTs.

Table 36: DOT's Road Design Capacity Under a Level of Service D

(Source: DOT Transportation Planning Branch)

	Rural	Suburban	Urban
Divided (w/ median)			
4-lane	50,000	37,000-41,500	18,000-22,000
Undivided			
3-lane	23,000	20,500-21,500	12,000-16,000
4-lane	48,000	33,500-39,500	18,000-22,000
5-lane	49,000	35,500-39,500	24,000-28,000
Two-Lanes			
9' -lane	9,000	8,500	8,000
10' -lane	11,000	10,500	9,500
11' -lane	12,000	11,500	11,000
12'+ -lane	13,000	12,500	12,000

Table 37 below compares the 2005 AADT counts with the design capacities of the road segments found in Sunset Beach.

Table 37: 2005 Annual Average Daily Traffic (AADT) Counts Compared with Road Design Capacity

(Source: DOT Transportation Planning Branch and DOT Traffic Survey Unit)

Count Location	2005 AADT Count	Design Capacity of Road at Count Location
Sunset Boulevard North at Seaside Station	9,100	12,500
Shoreline Drive near intersection with Sunset Boulevard	4,800	12,500
Sunset Boulevard North at Bridge	3,000	8,500
Main Street east of intersection with Sunset Boulevard South	1,000	8,500
Highway 904 south of intersection with Highway 179	<u>13,000</u>	12,500

The segment of Highway 904, south of its intersection with Highway 179, had an AADT count of 13,000 in 2005, which exceeded the design capacity of 12,500 for that segment of road. This segment and adjacent segments of Highway 904 north of the 179 intersection are priority areas for the County's Comprehensive Transportation Plan (CTP) which was initiated in conjunction with DOT in 2006. The CTP will be a year to two-year process in which major road systems in the county will be evaluated for current and projected design deficiencies, and will be subsequently identified for inclusion on DOT's Transportation Improvement Plan.

The area south of the 179/904 intersection is in the Town's ETJ, and the area north is in the County's jurisdiction. The Town of Sunset Beach supports road improvements to make applicable segments of Highway 904 four-lane. The Town also supports the development and interconnection of parallel access roads to serve the traffic accessing the commercial areas along Highway 904. The Town also supports limitations on driveway cuts, as well as the sharing of driveway cuts. The Town does not support road improvements which would only add a center turn lane for Highway 904.

As stated above, the 2005 Annual Average Daily Traffic (AADT) count for Highway 904 south of the 179 intersection was 13,000. The table below shows the DOT's most recent 2006 seasonal daily traffic counts, which will be included in the calculation of the 2006 AADT. The table below shows that there was only one average daily count in July of 2006 for this segment of Highway 904 that exceeded the road's design capacity of 12,500 vehicles. The traffic counts in the table below which are bolded and underlined represent counts exceeding the daily design capacity for that road segment. NOTE: The counts at Sunset Boulevard were taken at a road segment which will no longer be used for through traffic after construction of the new Sunset Beach Bridge.

Table 38: 2006 Brunswick County Seasonal Traffic Counts Report

(Source: North Carolina DOT, Traffic Statistics Division)

Count Location	Month	Sun. Count	Mon. Count	Tues. Count	Wed. Count	Thurs. Count	Fri. Count	Sat. Count
South of NC 179 and 904	Feb.	6,451	9,031	9,151	N/A	8,759	9,388	6,738
South of NC 179 and 904	May	11,450	N/A	N/A	11,475	11,596	10,988	12,105
South of NC 179 and 904	July	9,805	12,054	12,000	N/A	N/A	<u>14,507</u> (12,500 Capacity)	12,358
Sunset Blvd. At Bridge	Feb.	1,741	1,875	2,007	N/A	1,909	2,121	1,634
Sunset Blvd. At Bridge	May	5,529	N/A	N/A	5,040	5,294	8,439	6,288
Sunset Blvd. At Bridge	July	7,547	<u>10,641</u> (8,500 Capacity)	<u>11,817</u> (8,500 Capacity)	N/A	N/A	<u>10,096</u> (8,500 Capacity)	<u>9,036</u> (8,500 Capacity)

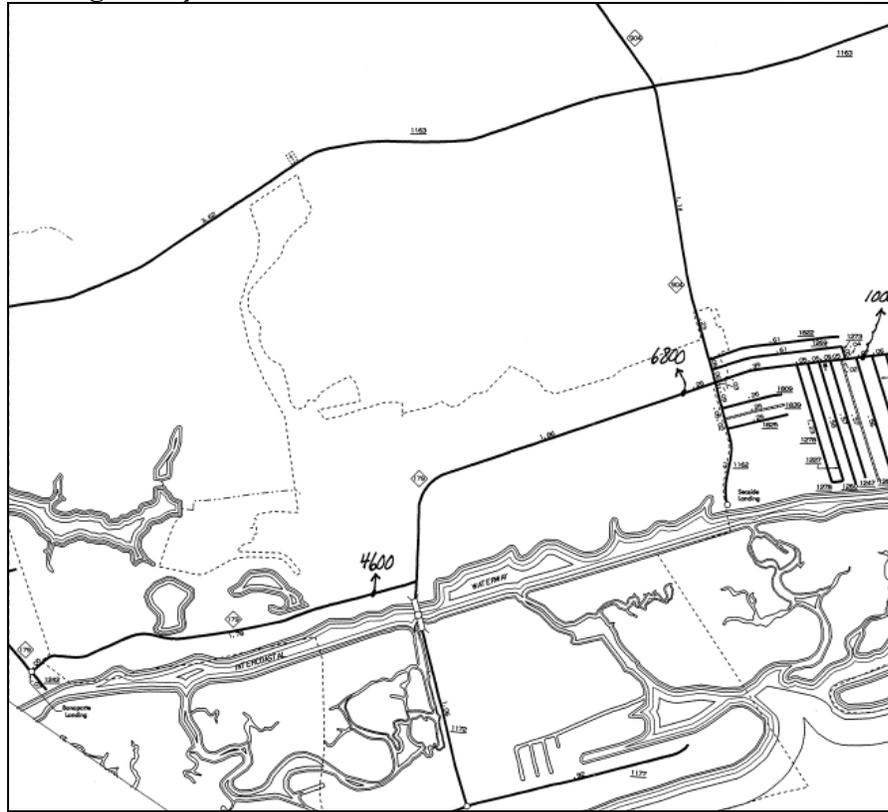
Annual Average Daily Traffic (AADT) Counts Between 1999 and 2005

For comparison with the most recent traffic counts, and to show traffic trends over the last seven years, the following graphics show the AADTs for Sunset Beach from 1999 to 2005. As shown in the following graphics, traffic counts in key areas have shown both increases and decreases since 1999, with the exception of Highway 904 south of the intersection with Highway 179 which has continuously increased since 1999. This section of Highway 904 had a traffic count of 7,400 in 2001, which increased to a count of 13,000 in 2005. Sunset Boulevard near Seaside Station has fluctuated between a low of 6,800 in 2000 to a high of 9,100 in 2005. The available counts for Main Street on the island east of Sunset Boulevard South actually shows a decrease in counts from 4,000 in 1999 to 1,000 in 2005. The Bridge area on the mainland also showed a decrease with a high of 7,100 in 2001 to a low of 3,000 in 2005. The road segment on Shoreline Drive west of the intersection with Sunset Boulevard fluctuated between 4,600 and 6,000. The source of the following graphics is the DOT Traffic Survey Unit. NOTE: The traffic count locations may vary at certain locations each year.

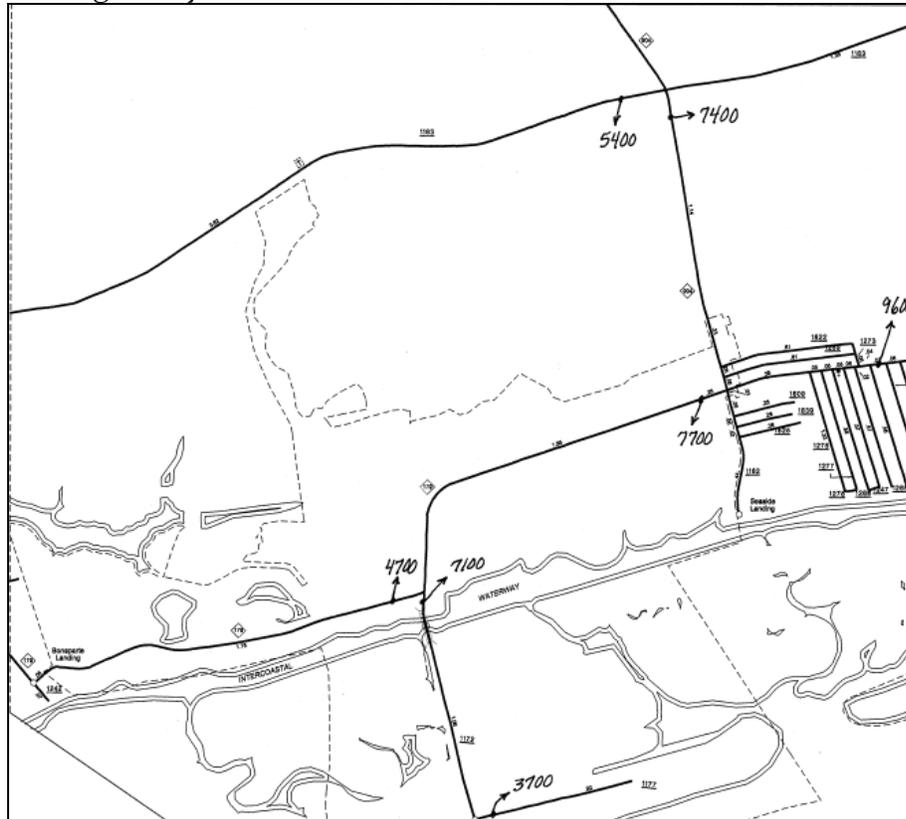
1999 Annual Average Daily Traffic Counts



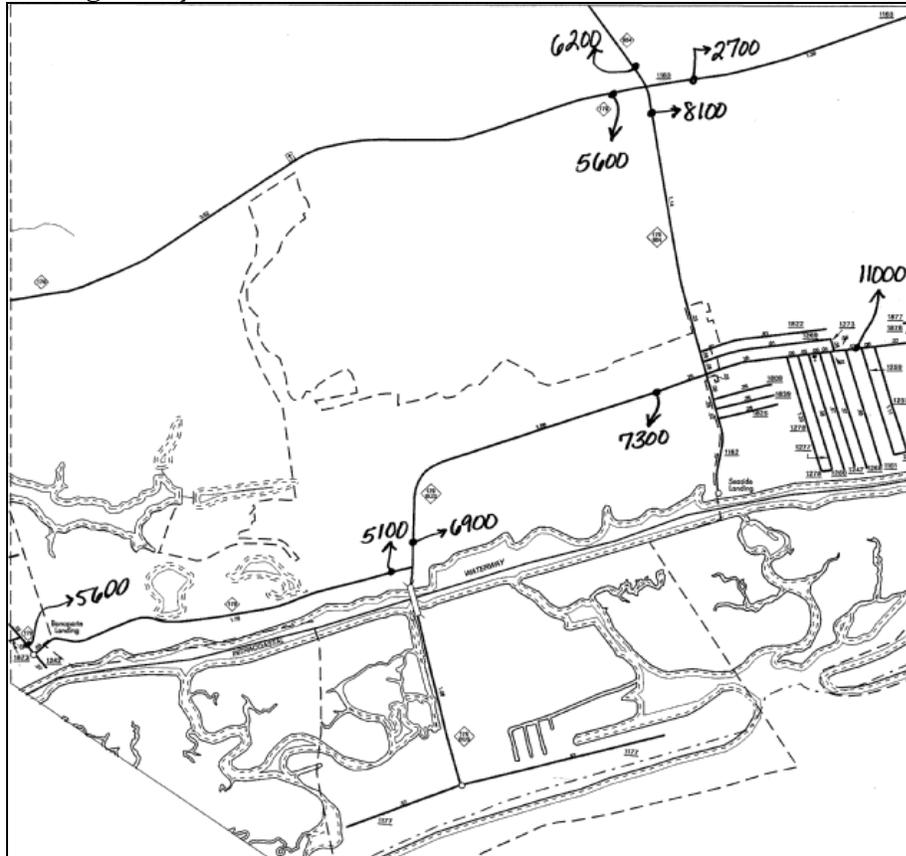
2000 Annual Average Daily Traffic Counts



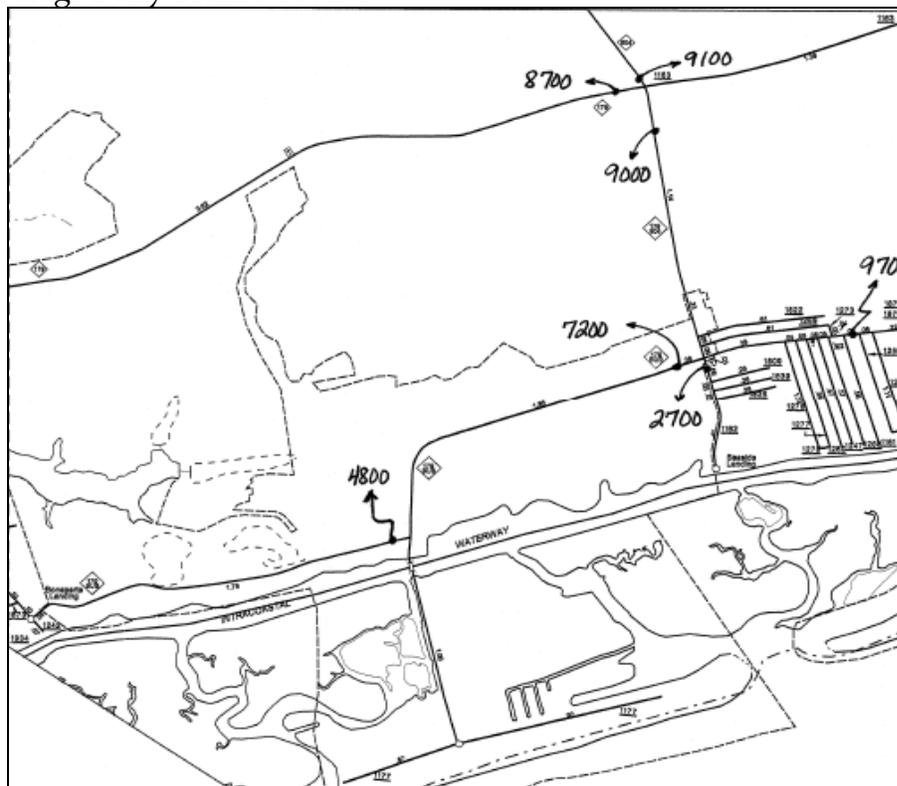
2001 Annual Average Daily Traffic Counts



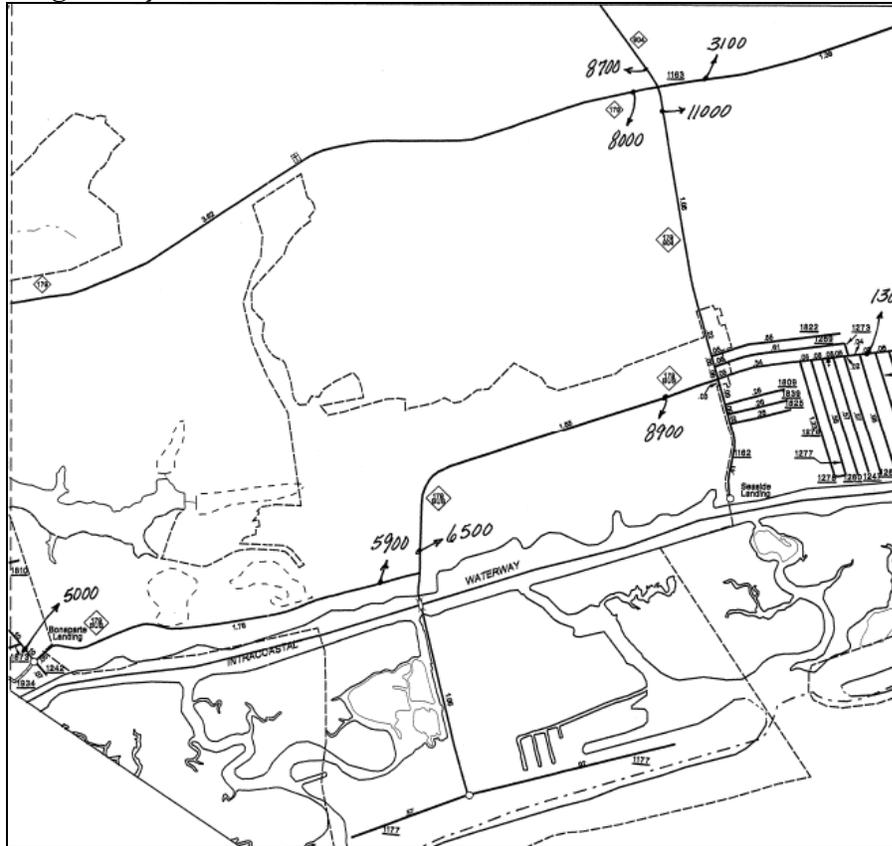
2002 Annual Average Daily Traffic Counts



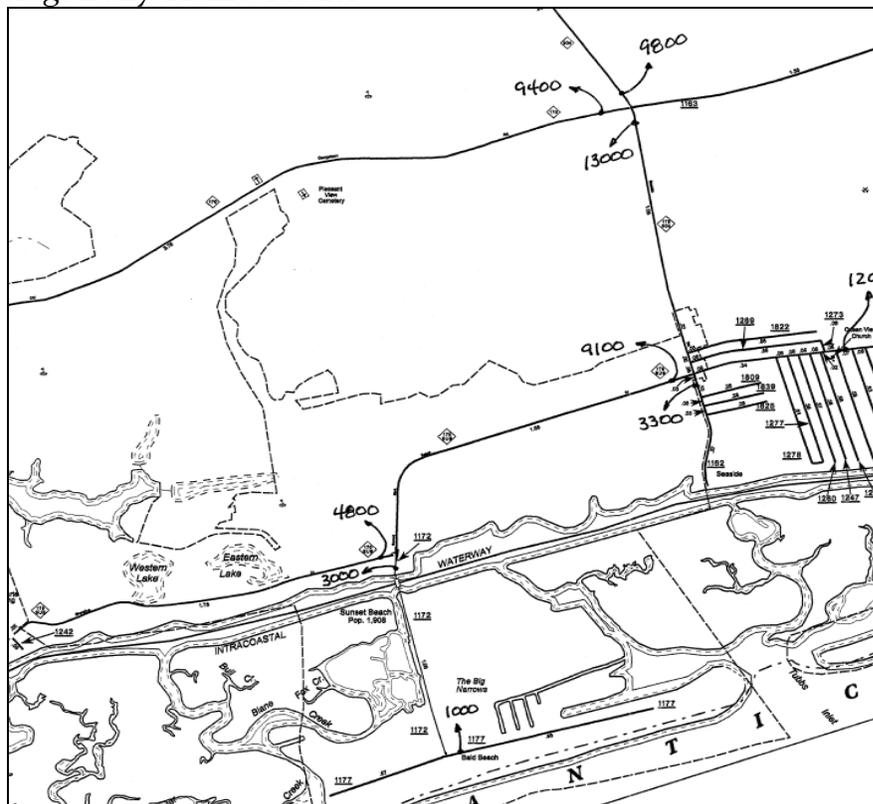
2003 Annual Average Daily Traffic Counts



2004 Annual Average Daily Traffic Counts



2005 Annual Average Daily Traffic Counts



6.3.1 Town Management of the Transportation System

Zoning Ordinance

The Town Zoning Ordinance requires properties zoned either Mainland Business 1 (MB-1), Mainland Business 2 (MB-2) or Mixed Use District (MUD) that run along a “major collector” route to adhere to a “Major Collector Plan”. The Town’s ordinance in Section 151.214 (H) defines a major collector as a heavily used radial route that carries a large amount of beach traffic in the southern region of Brunswick County. This designation primarily refers to the properties along the portion of Sunset Boulevard North that lies between its intersection with Highway 904 and runs west towards the bridge and Intracoastal Waterway.

Generally, the intent of the Major Collector Plan is to ensure that the properties running along thoroughfares in Town are developed in a manner that promote the public’s health, safety and welfare. More specifically, the Major Collector Plan seeks to coordinate development along thoroughfares so traffic movement is more efficient and safe. The primary tool used to maintain safe and efficient movement is by limiting the number of driveway cuts along the thoroughfare.

The Major Collector Plan requires:

1. Driveways connecting to a Major Collector, on the same side of the road, shall be no closer than 200 feet from each other. Joint use driveways must be provided. The driveway centerline may be the common property line. Approval of driveway access between a lot and the Major Collector at an interval less than those specified herein may be granted only by review and approval of the Sunset Beach Planning Board.
2. When a joint access driveway is developed, the owners/developers of the affected properties shall provide for mutually coordinated parking, access and circulation systems, and shall provide design features as necessary to make it visually obvious that abutting properties shall be tied together to create a unified system. If a site is developed adjacent to an undeveloped piece of property, it shall be designed so that its parking, access and circulation are easily tied together to create a unified system at a later date. If the building site abuts an existing developed property it shall tie into the abutting parking, access and circulation to create a unified system. Copies of the recorded access easements and maintenance agreements must be provided to the Town.
3. Joint access driveways shall be in accordance with design, construction, and maintenance standards set forth in the North Carolina Department of Transportation's Policy on Street and Driveway Access to North Carolina Highways or as amended.

Notwithstanding any other provisions of this section, the driveway access provisions shall not be applicable to any lot where:

- (a) The effect of such application would be to substantially diminish the value of the tract or to deprive the lot of reasonable access; or
- (b) Where the size of the tract being subdivided, or developed or lack of frontage on the Major Collector, makes alternatives 1, 2, and 3 above infeasible.

Subdivision Ordinance

Section 150.110 (B) of the Subdivision Ordinance contains standards for providing marginal access streets to limit driveway cuts along major thoroughfares. This section of the ordinance states:

Where a tract of land to be subdivided adjoins an existing major thoroughfare, the subdivider will be required to provide a marginal access street parallel to the major thoroughfare, or reverse frontage on a subdivision street to be developed adjacent to the major thoroughfare. Where reverse frontage is established, private driveways shall be prevented from having direct access to the major thoroughfare. If it is demonstrated that a marginal access or reverse frontage is not feasible, lots fronting on a major thoroughfare must be a minimum of 100 feet wide with a turning circle or a driveway with a three-point turn.

Street Maintenance

The Town has a Public Works Department that conducts minor maintenance and repair (i.e. pot-holes) of Town Streets. The Town receives around \$100,000 annually in Powell Bill funds which are intended for Street Maintenance. The amount of Powell Bill funds the Town receives from the state are based on population and mileage of Town maintained roads in the Town Limits. Both the Town population and the length of Town maintained road are expected to increase in the future.

More substantial road maintenance projects such as surfacing and resurfacing roadways are contracted-out by the Town. However, there is currently a Town moratorium on surfacing and resurfacing streets as construction of a centralized sewer system is being planned. The Town currently plans to keep the moratorium in place until the construction of the sewer system has been completed to avoid damaging and duplicating resurfacing projects. Although paving unpaved Town roads is not a priority issue identified in this Land Use Plan Update, a list of the unpaved Town maintained streets is included for future consideration (Also See Map 12: Transportation and Public Access Facilities):

- Blane Court (Mainland)
- Hickory Street (Mainland)
- Bartlett Lane (Mainland)
- 31st Street (Island)
- 28th Street (Island)
- 1st, 2nd, 3rd, 4th, and 5th Streets (Island)
- Marlin, Sailfish, Dolphin and Cobia Streets (Island)
- North Shore Drive (Island)
- 16th, 17th, 18th, and 19th Streets (Island)

Riverside Drive and Cedar Point Drive on the island have platted rights of way for roads, but no improvements (i.e. grading or paving) have been done at this time. Since these streets have not been improved, they have not yet been dedicated to the Town.

6.3.2 Projects in DOT's Transportation Improvement Plan Affecting Transportation in Town

There is one project listed in the 2007-2013 Transportation Improvement Plan (TIP) in the planning jurisdiction of Sunset Beach. The TIP project is the removal of the existing bridge and construction of a new high-rise bridge. The bridge project required the acquisition of rights-of-way/easements on eight separate properties in Sunset Beach. As of October 2006, DOT had three remaining right-of-way/easement acquisitions. Public bids for construction of the bridge are set for April 2007, and the DOT Division Engineer for this region estimates it will take two full construction seasons to complete the bridge.

The bridge design will include lighting and bike and pedestrian access. Road shoulder improvements will likely need to be done on the Sunset Boulevard South causeway entering the island to accommodate the bike and pedestrian traffic. A portion of the old bridge entryway extending into the Intracoastal Waterway will be left intact to be used as a public pier. However, the "informal" boat launch currently used on the island causeway side of the bridge will be permanently closed due to construction of the new bridge. DOT does not plan to provide an alternate site for a boat launch in Sunset Beach, as a formal boating access area is being constructed in Ocean Isle Beach. DOT will own lots and easements adjacent the future public pier (See Map 12: Transportation and Public Access Facilities Map) and the Town has shown interest in discussing with DOT, the Division of Coastal Management and the Wildlife Resources Commission the possibility of utilizing these properties to create additional public access sites and facilities (incl. boat launches and walkways) along the Intracoastal Waterway.

Other potential public access sites identified in Town are listed in Section 6.5: Public Access Facilities.

6.4 Stormwater Management Systems

The Town's existing Stormwater Ordinance was discussed in Section 4 and will be applicable until the Town receives its state approved NPDES Phase II Stormwater Permit. A Phase II permit is required by the Town under the 2006 Stormwater Management Act. The Town must obtain the permit because it is a regulated entity, which is determined by its operation of a Municipal Separate Storm Sewer System (MS4) and from the County's designation as urbanized due to its rapid population growth. An MS4 designation can come from as simple as having a system of streets which empty stormwater into ditches which eventually drain to surface waters. The Town does in fact have a system of streets, ditches and piping which eventually empty stormwater runoff into surface waterbodies, therefore it is a regulated entity.

What is Phase II and What is Required?

Starting in the 1990's, the United States Environmental Protection Agency (EPA) adopted regulations to require large municipalities to obtain a National Pollutant Discharge Elimination System (NPDES) stormwater management permit for stormwater discharges from municipal separate storm sewer systems. In 1999, under "Phase II" of these regulations, EPA extended the NPDES stormwater management permit requirements to small and medium sized communities.

Using federal census data, EPA identified 123 cities and 33 counties in North Carolina (including all areas in Brunswick County) that would be required to obtain permits for stormwater management. In order to be permitted, the EPA regulations require a local government to develop a stormwater management program that includes certain minimum stormwater management measures and that is sufficient to control stormwater pollution to the maximum extent practicable and to protect water quality standards.

In 1999, the implementation of “Phase II” was delegated by EPA to the states. In 2002, the state Environmental Management Commission (EMC) adopted temporary stormwater rules and had adopted permanent rules by 2003 that were to become effective August 1, 2004. In 2004, the state Rules Review Commission (RRC) objected to the rules for failure to comply with the Administrative Procedures Act and lack of statutory authority. The EMC challenged the decision of the RRC in court. A Wake County Superior Court ruled in favor of the EMC and the RRC subsequently approved the EMC’s rules. While the case was pending, the state legislature enacted a separate set of requirements in 2004 that were designed to replace the EMC rules. The inconsistency between the legislative requirements and the EMC rules necessitated consideration and eventual adoption of Senate Bill 1566 (the 2006 Stormwater Management Act).

The 2006 Stormwater Management Act is effective July 1, 2007 and requires development projects in “Phase II” municipalities and counties that cumulatively disturb one acre or more of land to comply with the post-construction stormwater standards set out in the Act. Unincorporated areas of counties are also be subject to “Phase II” requirements, this includes Sunset Beach’s ETJ.

The Act sets out stormwater controls that are based on a development’s level of density and its proximity to Shellfish Resource Waters. Development is defined in the Act as any land disturbing activity that increases the built-upon area or that otherwise decreases the infiltration of precipitation into the soil. Shellfish Resource Waters are waters classified by the EMC as Class SA waters (shellfish growing waters) that contain an average concentration of 500 parts per million of natural chloride ion (saltwater).

Low-Density Projects

Development projects that cumulatively disturb one acre or more and are located within one-half mile of and draining to Shellfish Resource Waters are considered low-density if they contain no more than 12% built-upon area. A project that is not located within one-half mile of Shellfish Resource Waters is a low-density project if it contains no more than 24% built-upon area or no more than two dwelling units per acre. Low-density projects must use vegetated conveyances (i.e. grass swales) to the maximum extent practicable to transport stormwater runoff from the project.

High-Density Projects

Development projects that cumulatively disturb one acre or more and are located within one-half mile of and draining to Shellfish Resource Waters are considered high-density if they contain more than 12% built-upon area. A project that is not located within one-half mile of

Shellfish Resource Waters is a high-density project if it contains more than 24% built-upon area or more than two dwelling units per acre. **High-density projects must use structural stormwater management systems that will control and treat runoff from the first one and one-half inches of rain.** In addition, projects that are located within one-half mile and draining to Shellfish Resource Waters must control and treat the difference in the stormwater runoff from the pre-development and post-development conditions for the one-year twenty-four hour storm as well as meet certain design standards.

Additional Requirements under Phase II

Section 9 (e) of the Act requires the Town to have a fecal coliform reduction program implemented in its jurisdiction that controls, to the maximum extent practicable, the sources of fecal coliform (e.g. Wilmington provided pet waste disposal around certain surface water bodies. Other programs could include monitoring areas with septic systems to detect common signs of malfunction). Section 9 (g) of the Act requires the Town to require an operation and maintenance plan for a regulated development that ensures the long-term operation of the structural management system (BMP). An inspection report is required of the owner/operator of the BMP to be submitted to the County (on behalf of the Town) annually.

The Town will also need to have education and outreach programs conducted in its jurisdiction to inform the public on how to minimize pollution that is conveyed by stormwater runoff and detect unauthorized discharges of pollution into the Town's stormwater drainage system.

Possible Exceptions to the Phase II Post-construction Stormwater Management Rules

1) The Act allows developments, which receive Town granted vested rights for a Town approved site-specific development plan prior to July 1, 2007, to follow the existing stormwater ordinance requirements and not the requirements of the 2006 Stormwater Management Act. A site-specific development plan is defined in the Act as:

a plan which has been submitted to a Town by a landowner describing with reasonable certainty the type and intensity of use for a specific parcel or parcels of property. Such plan may be in the form of, but not be limited to, any of the following plans or approvals: A planned unit development plan, a subdivision plat, a preliminary or general development plan, a conditional or special use permit, a conditional or special use district zoning plan, or any other land-use approval designation as may be utilized by a city. Unless otherwise expressly provided by the city, such a plan shall include the approximate boundaries of the site; significant topographical and other natural features effecting development of the site; the approximate location on the site of the proposed buildings, structures, and other improvements; the approximate dimensions, including height, of the proposed buildings and other structures; and the approximate location of all existing and proposed infrastructure on the site, including water, sewer, roads, and pedestrian walkways. A variance shall not constitute a site specific development plan. Neither a sketch plan nor any other document which fails to describe with reasonable certainty the type and intensity of use for a specified parcel or parcels of property may constitute a site specific development plan.

The Town's vested rights procedure can be found in Section 151.018 of the Town Code of Ordinances. The ordinance states that vested rights can be granted for two years, but allowance of up to five years is available under certain conditions.

2) Developers and/or property owners may also request that certain waters classified as shellfish waters be tested for adequate salinity levels (chloride ion) to determine the tested water's ability to be a shellfish growing area. These waters are generally those waters classified SA but are far enough inland that there is little tidal influence making the water inadequate for shellfishing. Even if the water is determined to be not supporting of shellfish, the developer/land owner must still follow the Act's requirements for the low or high-density developments outside one-half mile of shellfish waters.

Implementation of Phase II Stormwater Rules

The Town of Sunset Beach has an interlocal agreement with Brunswick County for the creation and implementation of a stormwater management program. This agreement holds that the Town will adopt the County's stormwater ordinance and allow County staff to issue and inspect stormwater permits in the Town's jurisdiction. The Town does retain the authority to enforce and assess fines for stormwater permit violations in the Town's jurisdiction.

In accordance with the interlocal agreement, the Town of Sunset Beach will adopt the County's stormwater ordinance and management program developed to meet the Phase II requirements.

As of the fall 2006, Brunswick County is in the process of updating their current stormwater program to comply with the Phase II rules (also known as 2006 Stormwater Management Act and Senate Bill 1566). More specifically, the County will update:

- The existing stormwater ordinance's impervious surface thresholds triggering stormwater management requirements. This includes requiring engineered stormwater systems for developments that have more than 12% impervious coverage and are within ½ mile of SA classified shellfishing waters.
- Stormwater Management Education and Outreach programs in accordance with the Phase II minimum measures.

The County's Stormwater Coordinator stated that components of the County's current stormwater ordinance that exceed state requirements will be retained and used in addition to the minimum requirements of the Phase II rules. Those components include:

- Requiring all commercial development, regardless of lot size, to have an engineered solution to handle stormwater runoff from that property.
- Requiring that any development, regardless of lot size, that increases the grade of the property by more than 4 inches to have an engineered solution to handle stormwater runoff from that property.
- The authority for County stormwater staff to enforce state stormwater laws on developments permitted prior to the County's current stormwater ordinance. NOTE: This does not require the prior developments to meet current County stormwater

standards, but it allows County Staff to enforce the state rules that apply to those prior developments. This is intended to assist a “short-staffed” state by allowing ‘local’ County staff to monitor and enforce state stormwater laws.

Stormwater Management Staff

The County currently has a staff of four to manage its stormwater program (which includes the areas within the Town of Sunset Beach). The County’s Stormwater Coordinator is the principle contact for the Town. Any stormwater permitting or inspection issues identified by Town staff (e.g. building inspectors) or citizens are reported to the County’s Stormwater Coordinator for investigation. Also included in the County’s staff of four is a recently hired (*November 2006*) stormwater engineer. The stormwater engineer’s immediate responsibility is ensuring that the update of the County’s stormwater management program meets the requirements of Phase II. The County plans to have their Phase II program’s post construction requirements approved and permitted prior to the Phase II law’s July 1, 2007 effective date.

6.5 Public Access Facilities

The Coastal Area Management Act (CAMA) considers public access facilities to be one of the key components of a coastal community’s infrastructure. The CAMA land use plan guidelines require that a goal of the Town’s Land Use Plan be to seek to maximize and maintain public access to the beaches and public trust waters within the Town’s jurisdiction. This Section of the Land Use Plan will inventory existing public access facilities and identify potential public access sights, so that the Town may discuss and establish policies and objectives to further the goal of maximizing and maintaining public access.

Existing Public Access Sites

There are 33 existing public access sites along the approximately 2.3 miles of oceanfront beach in the Town Limits (See Map 12: Transportation and Public Access Facilities Map). That averages out to a public access site every 368 feet. There is one Regional Beach Access Site in Sunset Beach located near the Pier. Regional sites are designated by having 25+ parking spaces, and having additional facilities like restrooms, picnic tables and showers. The Regional Access Site in Sunset Beach is handicapped accessible and has 75 Town parking spaces with additional pay-parking available at the pier. There is a restroom at this Regional Site, but no showers or picnic tables. The remaining 32 public access sites on the island are considered “local” sites used primarily as dune crossovers and have limited, if any, on-site parking or other facilities. In Sunset Beach, on-street parking is allowed on Main Street (main road parallel to beachstrand) and portions of Sunset Boulevard in the commercial area. Public on-street parking is also allowed on the shoulder rights-of-way of all side streets perpendicular to the beachstrand, provided driveways are not blocked. The Town has evaluated parking needs on the island and determined that except for a few peak days of the season, parking on side street shoulders and in other allowable areas has more than adequately handled parking needs. Any additional public parking facilities would likely be best located near the commercial and pier areas of the island, as this is closest to the Regional Access Site.

As mentioned in Section 4, the state owns the estuarine and nature reserve of Bird Island in the southwest corner of the Town's ETJ. Bird Island is currently accessible by boat from the public trust waters adjacent to it, or by the public beachstrand connecting Bird Island to the primary beachstrand in the Town Limits.

There are no 'formally' designated public access sites on the marsh side of the island, nor on the waterway adjacent portion of the mainland. There is an 'informal and undesigned' boat launch site along the causeway leading to the bridge, but this site will subsequently be removed from use when the new bridge is constructed. As mentioned earlier, there are no plans to replace the informal boat launch site with an alternative site in the Town planning jurisdiction. However, the Town has identified several sites on the mainland, which could be utilized as a formal boat launch and public access facility (See Map 12: Transportation and Public Access Facilities Map). Included in these sites is a portion of the entryway to the old bridge, which is already being planned by DOT and the Town to be left intact and used as a public pier. DOT will also own properties and easements adjacent the old bridge area for the new bridge, and the Town is interested in discussing with DOT, DCM and the Wildlife Resources Commission, the possibility for further utilizing these areas as formal public access sites. Other potential public access sites, which have been periodically used as informal boat access, include the street ends of Park Road (eastern portion of Town Limits) and Beach Drive (western portion of Town Limits). See Map 12: Transportation and Public Access Facilities Map. Property, right-of-way and/or easement acquisition would likely need to be obtained to improve the access sites on Park Road and Beach Drive, as they land is currently privately owned.

Section 7: Review of the Current (1997) CAMA Land Use Plan

Introduction: Assessment of the 1997 Land Use Plan Policy Effectiveness and Implementation

An assessment to determine whether the policy intent, and the associated objectives and goals, adopted in the 1997 Land Use Plan have been reached is a useful exercise to identify any strengths and/or weaknesses in the Town's existing "development management program". The "development management program" is basically the Town's land-use related ordinances and capital/infrastructure improvement programs. The purpose in assessing the outcomes of the 1997 CAMA Land Use Plan is for the Town to evaluate how effectively it has been able to implement the policies and programs adopted in that Plan. A good place to look to see if the desired future growth pattern adopted in the 1997 Plan was achieved, are the 1997 "Vision Statement", polices, and "Future Land Classification" system. These items can be found in Sections 6.0 and 7.0 of the 1997 Land Use Plan, and are briefly summarized below. This assessment should help identify where any adjustments to existing policies are needed, or where the creation of new policy may be needed. Concurrently, the policies adopted in this Plan Update will provide guidance for identifying and implementing changes to Town ordinances and programs to further the desired growth pattern established in this Land Use Plan Update. The assessment of the policies in the current Town Land Use Plan (1997) shall consider the following factors:

- (A) Consistency of current land use and development ordinances with the existing CAMA Land Use Plan (1997) policies;
- (B) Implementation of the land use plan's polices by the Town; and
- (C) Effectiveness of the policies in creating desired land use patterns and protecting natural systems (i.e. water quality).

1997 Vision Statement

Before assessing the individual policies, the Vision Statement should be reviewed as it is intended to set the general direction by which the policies should remain consistent. The Vision Statement adopted in 1997, which was intended to state the desired character for the present day (2007), is as follows:

"The residents, property and business owners of the Sunset Beach Planning Area shall endeavor to preserve the small-town character of our community with orderly growth which enhances its appeal as a family resort and retirement community. Our goal is to preserve and improve the quality of the natural and manmade environment which has become the basis for our quality of life at Sunset Beach."

1997 Future Land Classification System

The Future Land Classification System and Map in the 1997 Plan are also useful in evaluating whether desired land-use patterns were maintained and are today consistent with what was intended. The Land Classification System identified three general

categories of future land-use in Town: 1) Conservation, 2) Developed, and 3) Urban Transition. While the Land Classification System did not set criteria for density or scale of development in various areas of the Town, it did outline the boundary between areas that will develop along an urban-type pattern and areas that are to be protected from intense development. The Town has implemented the desired growth pattern outlined in the 1997 Land Classification System for the areas classified as “Conservation” by protecting them from intense development under the Town’s Conservation Reserve Zoning District (e.g. single-family on larger lots only). The areas classified as “Developed” and “Urban Transition” in the 1997 Land Classification System are currently zoned to allow a mix of residential scales and types, with some corridor-type areas allowing commercial uses. These zoning and development characteristics are consistent with the intent of the 1997 Land Classification System.

Key Policy Statements in the 1997 Land Use Plan

The *Summary of Policy Statements For Major Issues* section in the 1997 Plan (Section 1.3) showed that the major planning issues identified during that planning process that would need to be addressed in the future included:

- Growth Management (Policies 6.5.1, 6.5.3, 6.5.4, 6.5.5, 6.5.6, and 6.5.7)
- Prevent High-Rise Development on the Island (Policy 6.5.4)
- Density of Residential Development (Policies 6.5.1, 6.5.4, and 6.5.6)
- Commercial Development (Policies 6.5.1, 6.5.2, 6.5.4, and 6.5.6)
- Environmental Protection (Policies 6.3.1 – 6.3.13, and 6.4.1 – 6.4.4)
- Conservation of Bird Island (Policy 6.3.2.2)
- Coastal Infrastructure (Policies 6.3.1.1 (2), 6.3.1.2, 6.3.2.7, 6.3.3, 6.3.5, and 6.5.8)
- Stormwater Management (Policies 6.3.1.1 (4), 6.3.6, and 6.3.7)
- One-Lane Pontoon Bridge (Policy 6.5.8)

The subsequent implementation and consistency of government action since 1997 with these policies are the primary benchmarks for assessing the 1997 Plan’s effectiveness. However, it is important to realize that with any plan, evolving conditions always emerge that may delay, prohibit, or require the altering of intended goals or actions.

While the Plan is intended to anticipate and prepare for ever-changing conditions, it is difficult to gauge the extent to which those conditions will occur. Some important conditions and factors that emerged and should be considered while evaluating the policies adopted in the 1997 Plan include:

1. The 1997 permanent population was 862 (pop. is 2,211 as of 2005).
2. The future population for 2007 estimated in the 1997 Plan was 1,369. The actual population for the Town was 1,824 in the year 2000 and 2,211 in the year 2005.
3. There were 11 annexations since 1997 adding 790 acres to the Town planning area (See Table 1.2).
4. Growth in surrounding Brunswick County has continued to increase; between 1997 and 2005 the county grew by 43%. $[90,000 (2005) - 63,000 (1997) / 63,000 = .43]$ Source: North Carolina State Demographer.

5. As population has increased, land values have increased, causing development trends to favor higher-density developments (i.e. development pressure has sharply increased for increased building heights and multiple unit structures).
6. The South Brunswick Water and Sewer Authority (SBWSA) had been the lead entity coordinating the planned provision of sewer and stormwater services to the Town at the time of the 1997 Plan. SBWSA has since been dissolved as an organization (2002 – 2006).
7. While the new bridge and centralized sewer system were planned and discussed in the 1997 Plan, planning and funding issues have led to delays in implementation.

The Table below lists all the existing Town policies as adopted in the 1997 CAMA Land Use Plan. The policies are evaluated on: 1) whether the Town development ordinances/programs have remained consistent with the policy; 2) whether the policy has been implemented by the Town (if it calls for action to be taken); and 3) whether the policy has been effective in reaching its intended goal. The policies are not listed in the order they are found in the 1997 Plan, but have instead been categorized under the six Management Topics which are required under the new CAMA planning guidelines governing the creation of this Land Use Plan Update (See Section 2.2.3 in this Plan). Categorizing the existing policies under the Management Topics will help in creating and organizing the policy section of this Plan Update. Existing policies that are adequate can be retained, policies that need adjustments can be updated, and areas where new policy is needed can be inserted under its applicable Management Topic category.

Table 39: Consistency, Implementation and Effectiveness of the 1997 CAMA Land Use Plan Policies

1997/Existing Policies (Organized Under Management Topics)	Have Town Development Ordinances/Programs remained consistent with policy?	Has the policy been implemented by the Town?	Has the policy been effective in reaching a Town goal?
1) "Public Access" Management Topic			
6.3.1.1. – (2) Estuarine Waters <i>Key issue policy in 1997 Plan</i>	Yes. Town follows CAMA rules. Allowed uses are consistent with CAMA standards. Uses (such as bridges or docks) may not prohibit public access.	Yes.	Yes. No major issues identified blocking public access.
6.3.1.1. – (3) Public Trust Areas	Yes. Allowed uses are consistent with CAMA standards. Uses (such as bridges or docks) may not prohibit public access.	Yes. Town must coordinate with CAMA on any bridges built in the CR-1 zone to ensure public access across water is maintained.	Yes. No major issues identified blocking public access.
6.5.9 Coastal and Estuarine Beach Access and Parking	Yes. Public Parking or access has not been removed.	On-going. No public restroom on island, but additional boat launch and other public facilities are being sought on the mainland.	Neutral, but on-going.
6.5.11 Commitment to Federal and State Programs	Yes. Town adheres to state and federal standards, while some ords. exceed standards (i.e. stormwater)	Yes. Town administers minor CAMA permitting and supports other state and federal permitting. Town is pursuing state funding for public access.	Yes. On-going.

1997/Existing Policies (Organized Under Management Topics)	Have Town Development Ordinances/Programs remained consistent with policy?	Has the policy been implemented by the Town?	Has the policy been effective in reaching a Town goal?
2) "Land Use Compatibility" Management Topic			
<u>6.3.1 Areas of Environmental Concern (AECs)</u> <i>Key issue policy in 1997 Plan</i>	Yes. Required by state law.	Yes. Required by state law.	Generally Yes. However, estuarine water quality has declined due to urbanization and pollutants in stormwater.
<u>6.3.1.1 (1) Coastal Wetlands</u> <i>Key issue policy in 1997 Plan</i>	Yes. Required by state law.	Yes. Required by state law. Cstl. wetlands disturbed as part of the bridge const. will be mitigated and/or replaced.	Yes. Non-water dependent structures are not allowed in coastal wetlands.
<u>6.3.1.1 (2) Estuarine Waters</u> <i>Key issue policy in 1997 Plan</i>	Yes. Required by state law.	Yes. Required by state law.	Generally Yes. However, estuarine water quality has declined due to urbanization and pollutants in stormwater.
<u>6.3.1.1 (4) Estuarine Shorelines</u> <i>Key issue policy in 1997 Plan</i>	Yes. Required by state law.	Yes. Required by state law.	Generally Yes. However, estuarine water quality has declined due to urbanization and pollutants in stormwater. Minimal vegetative buffers not required until after the year 2001.
<u>6.3.1.2 Ocean Hazard Areas</u> <i>Key issue policy in 1997 Plan</i>	Yes. Required by state law. Town zoning limits most dvlpmnt. to single-family in these areas.	Yes. Required by state law.	Yes. No identified structures at threat due to erosion. However, most of the threatened land closest to Hazard Areas has not yet been developed (i.e. tip of east end, and closed Madd inlet)
<u>6.3.2.2 Areas that Contain Remnant Species</u> <i>Key issue policy in 1997 Plan</i>	Yes.	Yes.	Yes. Primary area of Bird Island has been acquired and protected.
<u>6.3.2.3 Prime Wildlife Habitats</u> <i>Key issue policy in 1997 Plan</i>	Yes. AECS are protected by state law.	Yes. AECS are protected by state law.	Yes. Primary area of Bird Island has been acquired and protected.
<u>6.3.2.4 Protection of Wetlands</u> <i>Key issue policy in 1997 Plan</i>	Yes. Required by federal and state law.	Yes. Required by federal and state law.	Generally Yes. However, some limited filling or altering of wetlands may be allowed under 404 rules.
<u>6.3.2.5 Maritime Forests and Tree Cover</u> <i>Key issue policy in 1997 Plan</i>	Yes. Implementation of Landscape and Tree Preservation Ordinance.	Yes. Implementation of Landscape and Tree Preservation Ordinance.	Generally Yes. Other Ords. may inhibit preservation of trees (i.e. parking provisions).
<u>6.3.3 Constraints to Development</u> <i>Key issue policy in 1997 Plan</i>	Yes. Flood Ordinance and Septic Siting Requirements.	Yes.	Yes. Most areas in high flood areas are elevated and limited to lower density development. Provision of sewer will negate septic soil constraints.
<u>6.3.3 Industrial Impacts on Fragile Areas</u> <i>Key issue policy in 1997 Plan</i>	Yes.	Yes.	Yes. No industrial sites, and none are permitted in existing zoning.
<u>6.3.9 Development of Sound and Estuarine System Islands</u> <i>Key issue policy in 1997 Plan</i>	Yes. These areas are zoned "Conservation Reserve" and development activity is strictly limited.	Yes. However, due to technicalities, the Conservation Reserve Zoning District is undergoing review and formal adoption.	Yes. Development on sound or estuarine islands has been non-existent and Bird Island has been acquired and protected. However, It is likely that one privately-owned sound island will be developed as single- family.

1997/Existing Policies (Organized Under Management Topics)	Have Town Development Ordinances/Programs remained consistent with policy?	Has the policy been implemented by the Town?	Has the policy been effective in reaching a Town goal?
<u>"Land Use Compatibility" Management Topic Cont'd</u>			
<u>6.3.11 Upland Excavation for Marinas</u> <i>Key issue policy in 1997 Plan</i>	Yes.	Yes.	Yes. Not allowed.
<u>6.3.12 Installation of Bulkhead, Groins and Seawalls</u> <i>Key issue policy in 1997 Plan</i>	Yes. Required by state law.	Yes. Required by state law.	Yes.
6.4.1 Productive Agriculture Lands, Commercial Forest Lands, Existing and Potential Mineral Production Areas	Yes.	Yes.	Yes. Not allowed.
<u>6.4.4 Residential and Commercial Land Development on Any Natural Resource</u> <i>Key issue policy in 1997 Plan</i>	Yes. Development Ords. primarily discourage higher densities. Stormwater Ord. exceeds state standards. Island development primarily limited to single-family. AEC regulation required by state law. Vegetated dune setbacks that exceed state standards.	Yes. Stormwater Ords. continually strengthened, will be strengthened again for Phase II NPDES. However, some re-zonings to allow slightly higher densities (i.e. one acre min. lots to 10,000 sq. ft.)	Generally Yes. Extensive and unique vegetated dune system has been protected. Bird Island has been acquired and protected. Conservation Reserve Zone will strictly limit development activity in that district. However, estuarine water quality has declined due to urbanization and pollutants in stormwater.
<u>6.5.1 Types of Development to Be Encouraged</u> <i>Key issue policy in 1997 Plan</i>	Yes. Zoning on the island has generally remained intact to limit dense housing types and buildings in excess of 35'. Zoning town-wide has been kept intact with a 35' building height limit for single-family and 50' for multi-family on the mainland.	Yes.	Generally Yes. Small-town character has been retained by not allowing high-rise development. Building permit data also shows that the ratio of single-family and multi-family construction has remained consistent with the desired growth pattern. However, stormwater and transportation infrastructure has been stressed from increased growth.
<u>6.5.3 Types of Urban Growth Patterns Desired</u> <i>Key issue policy in 1997 Plan</i>	Yes. Same Description as above.	Yes.	Yes. Same Description as above. Large intense big-box commercial development has not occurred.
<u>6.5.4 Types, Density and Location of Anticipated Residential Development</u> <i>Key issue policy in 1997 Plan</i>	Yes. Same Description as above.	Yes.	Generally Yes. Same Description as above. Policy called for studying feasibility of establishing density per acre limitations, but only min. lot size and setback requirements currently exist.
<u>6.5.5 Types of Commercial and Institutional Development Desired</u> <i>Key issue policy in 1997 Plan</i>	Yes. Zoning has limited cmmrcl. to specific corridors. Mixed-use is encouraged in some zones and thoroughfare access mngmnt is required to limit driveway cuts on roads. Consistent with 97 Plan, some of Hwy 904 entering Town has remained in res. use and does not allow commercial activity. The island business district has not expanded in area.	Yes.	Yes. Adequate land is zoned to allow commercial uses to ensure the needs of citizens and seasonal visitors are met. Zoning also allows and encourages mixed-use and professional service-type commerce, as opposed to big-box chain stores.

1997/Existing Policies (Organized Under Management Topics)	Have Town Development Ordinances/Programs remained consistent with policy?	Has the policy been implemented by the Town?	Has the policy been effective in reaching a Town goal?
“Land Use Compatibility” Management Topic Cont’d			
<u>6.5.6 Redevelopment of Developed Areas</u> <i>Key issue policy in 1997 Plan</i>	Yes. It is encouraged to an extent and zoning allows the practice. Redevelopment is most common on the island, and zoning regulates the density of replacement structures by allowing only a duplex replacement of a single-family structure along the oceanfront row of properties. The rest of the island is zoned only to allow single-family (with the exception of the limited two block business district which could allow quadraplexes). The number of bedrooms is also regulated for new developments and redevelopments.	Yes.	Yes. Some redevelopment from single-family to duplex has occurred along the oceanfront row of properties consistent with the 1997 Plan, and the Town has been successful in limiting the area where this is allowed to occur.
<u>6.5.7 Types and Location of Industry Desired</u> <i>Key issue policy in 1997 Plan</i>	Yes. Zoning does not permit the use.	Yes.	Yes. None exists.
6.5.13 Energy Facility Siting and Development	Yes. Zoning does not permit the use.	Yes.	Yes. None exists.
3) “Infrastructure Carrying Capacity” Management Topic			
6.3.4 Protection of Potable Water Supply	N/A. Town has no local water wells in use.	N/A. Town has no local water wells in use.	N/A. Town has no local water wells in use.
6.3.5 Use of Package Treatment Plants	Yes. Zoning allows package treatment, consistent with 1997 Plan. Town will require discontinuation of Package Treatment and require hook-up to sewer system when it becomes operational. County Health Department rules are enforced.	Yes.	Yes.
<u>6.3.6 Stormwater Runoff</u> <i>Key issue policy in 1997 Plan</i>	Yes. County Stormwater Ordinance was adopted. Exceeds current state coastal stormwater standards. Additional Phase II NPDES rules will be adopted by Town by July 1, 2007.	Generally Yes. However, the central sewer system believed to help remove pollutants that may be carried to surface waters by stormwater has not been implemented.	Indeterminate. While the Town Stormwater Ordinance exceeds the minimum state requirements for new development, monitoring of shellfish waters has shown a continued decrease in water quality leading to closure of shellfishing waters. As the waterfront and island areas are essentially built-out, pollutants from existing development are a likely major cause in water quality problems.
<u>6.5.8 Local Commitment to Providing Services</u> <i>Key issue policy in 1997 Plan</i>	Yes. Services mentioned in policy are either provided by Town or are provided through an interlocal agreement with Brunswick County (water, stormwater and future sewer).	Yes. SBWSA was dissolved, but Town transferred the ownership and operation of its water system and stormwater permitting and inspections to Brunswick County.	Generally Yes. Strmwter. Ord. adopted, County will upgrade water system and will construct and own future Town-wide sewer system. Imprvmnts. to sewer system are also scheduled by County. DOT will begin cnstrction of bridge in Summer 2007.

1997/Existing Policies (Organized Under Management Topics)	Have Town Development Ordinances/Programs remained consistent with policy?	Has the policy been implemented by the Town?	Has the policy been effective in reaching a Town goal?
4) "Natural Hazards" Management Topic			
6.3.10 Restriction of Development in Areas Susceptible to Sea Level Rise	Yes. New floodplain studies have updated base flood elevations, Town is NFIP member and has adopted new Flood Prevention Ordinance to include the new BFEs. Town requires 1-foot freeboard.	Yes. Town has implemented new Flood Prevention Ordinance.	Indeterminate as of yet. Town does have a comparatively low loss and claim statistic within the NFIP program.
6.7.1 Storm Hazard Mitigation	Yes. Same Description as above. Town has also recently adopted a Hazard Mitigation Plan, policies and recommendations of that Plan will be included in the Land Use Plan update. Zoning allows limited density and scale in hazard areas.	Yes.	Yes. Same description as above.
6.7.2 Evacuation	Yes. Zoning has limited density and scale of development on the island, which has mitigated potential evacuation problems.	Generally Yes. However, the new bridge has not been constructed but is expected to be complete by the summer 2009.	Generally Yes. However, the one-lane pontoon bridge connecting the island to the mainland is a bottleneck.
6.7.3 Post Disaster Recovery and Reconstruction Policies	Yes. Town has established procedures in the Hazard Mitigation Plan and other emergency plans to manage recovery and reconstruction. There are zoning and building code regulations regarding the reconstruction of non-conforming structures.	Yes.	Yes.
5) "Water Quality" Management Topic			
<u>6.3.2.7 Shellfishing Waters</u> <i>Key issue policy in 1997 Plan</i>	Yes. Town has adopted a Stormwater Ordinance that exceeds state standards regarding new development. Town will adopt new Phase II NPDES post-construction rules by July 1, 2007. Town follows CAMA regs. regarding development in AECs.	Yes. On-going.	No. Shellfishing closures have increased/remained. Since water-adjacent areas are essentially built-out, pollutants in Stormwater runoff from existing development and drainage systems are contributing to water quality problem. Drainage system retrofits and implementation of sewer system could alleviate some of the problem.
<u>6.3.6 Stormwater Runoff</u> <i>Key issue policy in 1997 Plan</i>	Mentioned earlier under Infrastructure Carrying Capacity. Also, same description as above.	Mentioned earlier under Infrastructure Carrying Capacity.	Mentioned earlier under Infrastructure Carrying Capacity. Also, same description as above.
<u>6.3.7 Marina and Floating Home Development, Moorings, and Dry Stack Storage</u> <i>Key issue policy in 1997 Plan</i>	Policy allows marinas and dry stack storage in concept. Zoning only allows a "marina" in a MUD mixed-use district if it is used in a "mixed-use relationship". Dry stack storage is not a permitted use. Floating Homes are prohibited.	Generally Yes. No marinas, moorings or dry stack storage have been developed.	Yes.

1997/Existing Policies (Organized Under Management Topics)	Have Town Development Ordinances/Programs remained consistent with policy?	Has the policy been implemented by the Town?	Has the policy been effective in reaching a Town goal?
Water Quality Management Topic cont'd			
6.3.13 Surface Water Quality Problems <i>Key issue policy in 1997 Plan</i>	Yes. The Town has strengthened its Stormwater Ordinance which exceeds state minimum standards regarding new development, and will strengthen it again with the new Phase II rules.	Yes. But the planned sewer system has been delayed.	No. Pollutant indicators in the water (primarily those affecting shellfish) have continually increased since the 1980s. Ordinances/programs should address existing development and drainage systems. Sewer system will address some existing development pollutant causing problems, but retrofitting of stormwater drainage system may also be needed.
6.4.2 Commercial and Recreational Fisheries <i>Key issue policy in 1997 Plan</i>	Same description as above.	Same description as above.	Same description as above.
6) "Local Concerns" Management Topic			
6.3.2.6 Significant Archaeological Resources	Yes.	Yes.	Yes. No identified issues.
6.4.3 Off-Road Vehicles	Yes.	Yes.	Yes. They are prohibited.
6.5.2 The Local Economy and Tourism	Yes. Zoning allows for commercial uses which enhance tourism.	Yes.	Yes. Although as the permanent population increases, the local economy will likely shift away from being predominantly tourist-oriented and driven.
6.5.10 Bicycle Traffic Improvements	Yes. Zoning and Subdivision Ordinances require sidewalk provisions for appropriate areas. Sunset Blvd. North has implemented a sidewalk system which was called for in the 1997 Plan. The new bridge area (Sunset Blvd. South) will be bicycle and pedestrian accessible. Mixed-use is allowed and encouraged along key transportation corridors to lessen automobile dependence.	Yes. On-going.	Yes. On-going.
6.5.12 Assistance to Channel Maintenance and Beach Renourishment Projects	N/A.	Yes. Policy is statement of support.	Yes. No identified issues.
6.6.1 Continuing Public Participation	Yes. Town Ordinances require Town business to be open to the public. Town maintains website that posts official Town business to provide easier access to citizens.	Yes.	Yes.

Summary of Town Implementation and Consistency With 1997 Land Use Plan Policies

In general, the Town has implemented and remained consistent with the main policies regarding the desired future growth patterns and overall character of the Town. The main policies that were implemented and followed include:

1. Maintaining building heights at 35' for the entire island and single-family on the mainland, and 50' for multi-family on the mainland (i.e. small-town or small scale character).
2. Maintaining the extent of the Beach Business Zoning District so as not to allow multi-family to encroach on the predominant single-family character of the island.
3. Maintaining the Town-wide ratio of single-family to multi-family structures.
4. Allowing for commercial and mixed-use, but discouraging big-box and intense commercial or industrial uses.
5. Limiting the redevelopment of single-family with duplex structures to only the oceanfront row of properties.
6. Preservation of Bird Island through acquisition.
7. Strengthening stormwater regulations for new development.
8. Continuation of plans for a centralized sewer system.
9. Continuation of plans for a new bridge.

While a Town goal of the 1997 Plan was to preserve and/or improve surface water quality, water testing by the North Carolina Shellfish Sanitation Branch, North Carolina Division of Water Quality and University of North Carolina at Wilmington indicate that the water quality has been declining in the jurisdiction (primarily due to the types of pollutants causing shellfish closures). The Town has been proactive in regulating stormwater by adopting Brunswick County's ordinance, which exceeds the state required standards regarding new development. However, the existing drainage system and existing development have not yet been fully addressed. Implementation of a sewer system may address some of the pollution sources found in existing development (i.e. failing or improperly managed septic systems), but retrofitting the existing Town-wide stormwater drainage system may be needed. One available option to address stormwater from existing development would be to utilize the septic systems on individual properties as "underground rain barrels". These rain barrels would catch stormwater from rooftops via a simple gutter system and prevent the stormwater from carrying pollutants through the Town-wide drainage system and into area waters. This may be an option to consider in Sunset Beach due to the fact that a sewer system will eventually be built, and the existing septic systems will be taken off-line. If the septic systems could be used as rain barrels, the cost of removing them after the sewer system is constructed could be avoided in addition to their functioning to remove stormwater loading into the Town drainage system. The North Carolina State Biological and Agricultural Engineering extension service could advise on the rain barrel option and other options for retrofitting the existing drainage system.

Many of the issues and associated policies in the 1997 Land Use Plan continue to be applicable to the Town today. It is likely that many of the policy statements which reaffirm the Town desired growth pattern will be retained or updated. New policy areas for this Land Use Plan update may focus on addressing water quality problems caused not just from new development but also from stormwater coming from existing development and the existing stormwater drainage system. Other new policy areas may be needed on the issues of transportation systems and public access facilities, as they will be stressed from increasing populations.

Phase II of the CAMA Land Use Plan:

Section 8: Plan For The Future- Goals and Policy Statements for the Town of Sunset Beach

8.1 Land Use and Development related Goals of the Town

Throughout the planning process, the Town identified several existing and emerging issues facing Sunset Beach. From the needs and issues expressed by the community, staff, and Town officials, the Town developed a core set of goals to seek to achieve within the planning period of this Plan (i.e. next ten years). Some of the Town's key goals are outlined below (additional Town and CAMA goals are listed at the beginning of each of the policy "Management Topic" categories found later in this Section). The key Town goals include:

- Preserve the traditional character, intensity and density of the residential areas, particularly the existing single-family neighborhoods and areas.
- Minimize the stress on Town and County infrastructure capacities (i.e. water, sewer, transportation, stormwater, etc.) by encouraging lower densities in future development.
- Ensure that redevelopment of currently developed areas are compatible with its surrounding areas, as well as other Town goals.
- Retain the existing low profile (i.e. building height) of the community, particularly the limit of 35 feet in height for buildings on the island.
- Implement a sewer system designed with a primary purpose of protecting environmental and human health, while minimizing the potential for "induced development" (i.e. increased building densities and intensities).
- Create and implement development standards for the beach entryway that will focus on clear, compatible, consistent, and comprehensive guidance for potential development/redevelopment. This goal should be implemented in a prioritized timeframe that will allow the Town to have plans and management programs in place concurrent with the completion of the high-rise bridge.
- Reduce the negative effects of stormwater runoff and flooding.
- Ensure that adequate open space and/or recreational areas, including public trust areas, are provided for and enhanced to serve the growing population
- Enhance and increase public parking and public access facilities.
- Preserve the current use of lands with existing golf course facilities (i.e. those areas encompassing and needed for the traditional playing of professional and/or championship level golf), and discourage future residential infill development of those areas.

In addition to the Town's set of core goals, the Coastal Resource Commission (CRC) and the Division of Coastal Management (DCM) have included a set of goals to assist the Town in meeting the requirements of the Coastal Area Management Act (CAMA). These goals are related to five development-related "Management Topics" established by the CRC (discussed in Section 2.2.3 of this Plan). Consistency with the Management Topics was determined to be essential for

the proper use, development, and protection of natural and manmade resources in coastal areas. The Town's goals under the Management Topics are as follows:

- Ensure that development and use of resources or preservation of land minimizes direct and secondary environmental impacts, avoids risks to public health, safety and welfare and is consistent with the capability of the land based on considerations of interactions of natural and manmade features.
- Ensure that public infrastructure systems are appropriately sized, located and managed so the quality and productivity of areas of environmental concern and other fragile areas are protected or restored.
- Maximize public access to the beaches and the public trust waters of the jurisdiction.
- Maintain, protect and where possible enhance water quality in all coastal wetlands, rivers, streams and estuaries.
- Conserve and maintain barrier dunes, beaches, flood plains, and other coastal features for their natural storm protection functions and their natural resources giving recognition to public health, safety, and welfare issues.

8.2 Definitions of Action and Descriptive Words Used in Policies

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

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

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

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

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

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 regulation, staff recommendation and decisions.

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

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

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

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

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

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

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

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

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

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

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

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

8.3 Policy Section Introduction and the Town of Sunset Beach Policy Statements

Within this Plan, the Town has established a set of land use and development related policies to act as guidelines to be followed during any official decision making process of the Town. That official decision-making process can include but is not limited to: zoning ordinance decisions; grant application decisions; capital improvement budget decisions, and; any other Town ordinance or program decisions that impact community development. The Town policies also provide citizens, property owners and developers with a predictability of official actions. Town policies in this Plan were established based on the Town's Vision Statement, goals set from the identification of needs and issues facing the community, and the analysis of trends in local demographics, environmental conditions, existing land uses, and availability of community facilities.

For simplification in the organization and presentation of Town policies, all policies have been separated by their subject matter into five general Management Topic area categories that relate to each policy's respective subject matter. The five Management Topic area categories used in this

Plan include; 1) Land Use Compatibility; 2) Public Access; 3) Infrastructure Carrying Capacity; 4) Natural Hazards Mitigation, and; 5) Water Quality.

As stated above, each of the Town policies have been separated and categorized under one of the five Management Topics. To avoid repetition, policy statements that may be applicable to multiple Management Topics are only stated once under the Management Topic they apply to the most, but are referred to under any subsequent Management Topics they may also apply.

The format used for listing policies consists of first identifying the **Management Topic**, and then stating the **Management Topic's Goal** as established under CAMA. Also included in the format may be a description of specific **Town Goals** that relate to the Management Topic, as well as a brief **Objectives and Background Discussion** that provides a general introduction and context for the policy statements. Sub-headings, or **Policy Titles**, (e.g. Areas of Environmental Concern) are numbered and underlined, and were used under each respective Management Topic (e.g. Land Use Compatibility) to further separate policy statements into more distinct subject topic areas. Policy statements under the sub-headings directly relate to the sub-heading, and then more generally to the Management Topic. In addition, **Policy Notes** may follow certain policy statements. The Policy Notes are intended to provide the context and intent for which the policy statement was created, or to help clarify terms used in the statement itself.

IMPORTANT NOTE: Any official land use or development related decisions made by the Town after the adoption of this Land Use Plan are expected to be consistent with both the policy statements in Section 8 and the *Future Land Use Classification Map* and *Future Land Use Classification Area Development Standards Table* (Table 40) in Section 9. Any official Town decisions that are inconsistent with the policy statements, *Future Land Use Classification Map* and *Future Land Use Classification Area Development Standards Table* must follow Policy # 30, and if substantially inconsistent, may require a Land Use Plan amendment process with a public hearing, as well as a certification review by the Coastal Resources Commission.

Policy 30 States:

30. Land Use and Development Decisions Consistent with the Land Use Plan

Any official Town land use and development related actions (e.g. re-zonings, text amendments, stormwater rules, etc.) shall remain consistent with the policies adopted in the Land Use Plan and any other applicable plan. Any Town actions that are inconsistent with such plans shall require a statement from the Town body approving such decisions, as to why those decisions are necessary and in the community's interest, and how any negative impacts will be mitigated.

For further guidance on how to use the document see sections 10.1 – 10.2 under the Tools for Managing Development section (section 10).

I. Management Topic: Land Use Compatibility

CAMA Land Use Compatibility Goal:

“Ensure that development and use of resources or preservation of land minimizes direct and secondary environmental impacts, avoids risks to public health, safety and welfare and is consistent with the capability of the land based on considerations of interactions of natural and manmade features”.

Town Land Use Compatibility Goals:

- Maintain and enhance quality of life (i.e. Town’s environmental health, aesthetics, amenities, and property values).
- Preserve the traditional character, intensity and density of the residential areas, particularly the existing single-family neighborhoods and areas.
- Ensure that redevelopment of currently developed areas are compatible with its surrounding areas, as well as other Town goals.
- Maintain and enhance proactive management of all new development and redevelopment regarding intensity (i.e. building height, lot coverage and bulk) and density (i.e. units per acre).
- Retain the existing low profile (i.e. building height) of the community, particularly the limit of 35 feet in height for buildings on the island.
- Create and implement development standards for the beach entryway that will focus on clear, compatible, consistent, and comprehensive guidance for potential development/redevelopment. This goal should be implemented in a prioritized timeframe that will allow the Town to have plans and management programs in place concurrent with the completion of the high-rise bridge.
- Ensure that adequate open space and/or recreational areas, including public trust areas, are provided for and enhanced to serve the growing population
- Preserve the current use on those lands with existing golf course facilities, and discourage future residential infill development of those areas. “Existing golf course facilities” means those areas encompassing and needed for the traditional playing of professional and/or championship level golf).
- Develop (and redevelop) as a primarily residential community, with limitations on the location and scale of commercial growth.
- Encourage mixed-use development in appropriate areas as a way to increase efficiency of land use and lessen the need for using automobiles for travel within Town.
- Seek to increase the preservation and enhancement of environmentally sensitive areas such as wetlands and Areas of Environmental Concern (AECs).
- Increase bicycle and pedestrian interconnectivity and accessibility.

Objectives and Background Discussion

The policies listed below represent the Town’s strategy for managing growth and development. The policies provide guidance on setting criteria for development density, types of appropriate land uses and structures, and the management of the CAMA Areas of Environmental Concern (AECs). The Town of Sunset Beach has stated in its Vision Statement, goals and other sections of

this Land Use Plan that its intent is to be proactive in managing growth and development in order to maintain its high quality of life and Town character as a comparatively small-scale residential and resort community. For the purposes of this Plan, small-scale means maintaining a uniform height for structures (i.e. a maximum of 35 to 50 feet depending on the type and location of the structure), and limiting the density and intensity of multi-family and commercial developments.

Cross-Reference Note to Land Use Compatibility Policy Statements: Section 9, following, will detail the Town's standards for future development and redevelopment in the various distinct areas of the planning jurisdiction. Those standards include density, intensity, and appropriate land use types. Section 9 is to be used in conjunction with the Land Use Compatibility Policy Statements following below.

Land Use Compatibility Policy Statements

1. Areas of Environmental Concern

- A) The Town will support and enforce through its CAMA minor permitting capacity the state policies and permitted uses in Areas of Environmental Concern (AECs). Such uses shall be in accord with the general use standards for coastal wetlands, estuarine waters, estuarine shorelines, ocean hazard areas and public trust areas as stated in 15A NCAC Subchapter 7H.
- B) The Town supports the major and general permitting process as implemented by the North Carolina Division of Coastal Management.

2. Coastal Wetlands

- A) The Town strongly supports the designation and preservation of all remaining coastal wetlands and freshwater marshes.
- B) It shall be the policy of Sunset Beach to restrict land uses in coastal wetlands and freshwater marshes to those that ensure wetland conservation and which do not affect their delicate balance.
- C) Sunset Beach shall permit water dependent uses in coastal wetlands such as docks, boat ramps, piers, utility easements, and culverts, consistent with the definition and use standards of 15 NCAC 7H. Each proposed use will be evaluated for water dependency. Unacceptable land uses in coastal wetlands may include, but would not be limited to, restaurants, businesses, residences, apartments, motels, hotels, floating structures, private roads, and parking lots. In some instances, it may be necessary and in the public interest for public roads to transverse wetland areas. Where this is absolutely necessary, state and federal regulations may allow such with certain safeguards and/or mitigation measures.

3. Estuarine Waters

- A) Sunset Beach shall promote the conservation and quality of estuarine waters. Appropriate uses may include simple access channels, structures which prevent erosion, navigational channels, boat docks, and piers which are consistent with 15 NCAC 7H.0208.
- B) The development of boat launching and docking facilities shall be supported as a means of providing public water access provided that their development shall not adversely impact estuarine resources or Public Trust Areas.
- C) Floating structures shall be banned in order to protect our estuarine and Public Trust Areas.
- D) The Town will support those projects which will increase the productivity of the estuary such as oyster reseeding or dredging projects which will increase the flushing actions of tidal movements in Jinks and Blane Creeks, and any other creeks or waterbodies which may have the potential for shellfish harvesting.

4. Estuarine Shorelines

- A) Within the Estuarine Shoreline Area, the Town of Sunset Beach believes that certain developed uses should only be permitted which are consistent with CAMA's 15 NCAC 7H and as further defined by the Town's building, development and stormwater ordinances, and which satisfy the following requirements:
 - i. Natural barriers to erosion are not weakened or eliminated;
 - ii. Development does not interfere with present public access;
 - iii. The amount of runoff is unchanged;
 - iv. No substantial or prolonged pollution is generated which would degrade surface water;
 - v. Standards of the North Carolina Sedimentation and Erosion Control Act are upheld, and;
 - vi. The construction of impervious surfaces and areas not allowing natural drainage is limited to that necessary for development, and stormwater management provisions of the Town Ordinances are upheld.
- B) The most intense development of estuarine system islands allowed shall be for single-family residential lots of one acre minimum (with a minimum of a half-acre of "upland" area) and only if proper measures are taken by the developer to provide sufficient hurricane evacuation, utilities provision, access on and off the estuarine island, pollution control, and other design considerations that will ensure compatibility of the development with the estuarine system.

5. Ocean Hazards Areas

- A) Generally, all land uses in the area classified under the Oceans Hazards category which are the ocean erodible, high hazard flood, and inlet hazard area for Sunset Beach shall be

consistent with the requirements of existing state, federal and local regulations, and the Sunset Beach Zoning Ordinance, Subdivision Regulations, Dune Maintenance and Protection Plan, the Town's requirements for the National Flood Insurance Program, and the Town's building set back line.

- B) Suitable land uses in ocean hazard areas are generally those which eliminate unreasonable danger of life and property, and which achieves a balance between the financial, safety, and social factors involved in hazard area development.
- C) Residential and recreational land uses and parking lots for beach access are also acceptable types of uses in ocean hazards areas provided that:
 - i. For all oceanfront residential structures, the allowable buildable area shall be measured from the property line abutting Main Street heading oceanward a maximum of 150 feet.
 - ii. Development does not involve the removal or relocation of frontal dune sand or vegetation thereon.
 - iii. Mobile homes are not allowed within the high hazard flood areas on the island and on the mainland must conform to federal flood insurance regulations and standards established in the North Carolina Building Code.
 - iv. Development is consistent with minimum lot sizes and setback requirements established by local regulations.
 - v. Development implements means and methods to mitigate or minimize adverse impacts of the project on the environment and protect the habitat of threatened and endangered plant and animal species.
- D) Development of growth-inducing public facilities such as sewers, water lines, public roads, bridges, and erosion control measures shall only be permitted in the cases where:
 - i. National and state interest and public benefits are clearly the overriding factor.
 - ii. Facilities would not exacerbate existing hazards or damage natural barriers.
 - iii. Facilities would be reasonably safe from flood and erosion related damage.
 - iv. Development will not create undue interference with the legal rights to public access and the use of such areas.
- E) Development of growth-inducing public facilities such as sewers, water lines, public roads, and public bridges shall not be permitted in designated CBRA areas such as Bird Island.
- F) Sunset Beach continues to support comprehensive shoreline management such as the Corps of Engineers beach renourishment projects as the preferred control measure to combat oceanfront erosion.
- G) When existing dunes are "added to" this shall be accomplished in a manner which minimizes damage to existing vegetation and which establishes one continuous dune line. Any areas filled will be replanted immediately or stabilized temporarily until planting can be successfully completed.

- H) Prior to the issuance of any permit for development in the Ocean AECs, there should be written acknowledgement from the applicant that they are aware of the risks associated in that area and whether participation in the Federal Flood Insurance Program is possible.

6. Areas that Contain Remnant Species

- A) Areas that contain remnant species will be classified as Conservation. All development plans for areas that contain remnant species will be carefully reviewed prior to the issuance of development permits in order to protect the habitat.
- B) The Town of Sunset Beach supports the efforts of the Twin Lakes Residents Conservation Association to protect and enhance the Twin Lakes area.

7. Prime Wildlife Habitat Areas

The prime wildlife habitat areas in the Sunset Beach planning area are currently classified as Areas of Environmental Concern. The Town will continue to protect its prime wildlife habitats by enforcing the CAMA major and minor permitting program.

8. Protection of Wetlands

The Town of Sunset Beach supports the preservation of wetlands through the enforcement of federal 404 regulations under the Army Corps of Engineers.

9. Maritime Forests and Tree Cover

The Town encourages efforts to preserve tree cover in new development and redevelopment.

10. Constraints to Development

- A) Until such time as a central sewerage collection and disposal system is developed, growth and development will be restricted to those which receive the appropriate septic permits issued by the Brunswick County Health Department or are serviced by a private utility or package plant.
- B) All septic tanks must be in compliance with state health regulations as permitted by the Brunswick County Health Department.
- C) Off-site septic systems have been a longstanding development practice in Sunset Beach and such systems will be permitted until such time that a sewer system is developed.
- D) Development may be constructed in areas with limitations for building foundations only if corrective measures for stabilizing foundations are incorporated into the building design, and strictly adhere to applicable flood zone regulations and stormwater regulations.

- E) All new construction and substantial improvements in the 100-year flood zones must comply strictly to the Town's Flood Damage Prevention Ordinance with 1 foot freeboard above the BFE which has been adopted in conjunction with Sunset Beach's participation in the National Flood Insurance Program.

II. Upland Excavation for Marinas

Upland excavation for marinas will not be allowed.

12. Installation of Bulkheads, Groins and Seawalls

Bulkhead installation, groins, or seawalls must be built in compliance with CAMA's 7H and other state guidelines. Maintenance and replacement of existing bulkheads will be permitted.

13. Residential and Commercial Land Development on Any Natural Resource

The land use controls of Sunset Beach are and will continue to be written and enforced to insure that proper and adequate measures are incorporated into the design, construction, and operation of residential and commercial development so that any substantial negative impact to the unique coastal ecosystem is minimized.

14. Types of Development to Be Encouraged

- A) Sunset Beach desires as much as practicable that all development be designed and placed so as to be compatible with its existing coastal town and residential character.
- B) All new development will adhere to the Town's building and development regulations and to the density requirements set forth in the Zoning Ordinance. The Zoning Ordinance shall support the existing growth patterns which limit height and density.
- C) To protect the community from adverse development and growth, the Town staff and policy makers will consider these factors when reviewing development plans:
 - i. The suitability of land to accommodate the use;
 - ii. The capacity of the environment;
 - iii. The compatibility of land use with the goals and objectives of the Town;
 - iv. The density of the development and the proposed height of the structures;
 - v. The capacity of community services in regard to the increasing demands imposed by permanent and seasonal residents;
 - vi. The impact of the development upon Areas of Environmental Concern and other special and sensitive areas, as reflected in the policies of the Resource Protection and Resource Production Management; and,
 - vii. The location of hazardous areas where there is a tendency for septic tank problems, flooding, and wash over.

15. Annexation

The Town of Sunset Beach will institute annexation proceedings and the extension of the extraterritorial limits in a timely manner in order to guide growth in the surrounding areas adjacent to Sunset Beach.

16. Types of Urban Growth Patterns Desired

The Town shall support an orderly growth pattern which reinforces the community's existing coastal residential and commercial areas and protects the environment.

17. Types, Density and Location of Anticipated Residential Development

The Town encourages both the development and preservation of a variety of housing types to meet the needs and desires of current and future citizens. To meet those needs and desires, the Town will administer the following policies:

Building Height Standards on the Island and Mainland

- A) The Town shall retain a 35-foot height limitation for residential, commercial and institutional structures on the island.
- B) As specified by the current zoning ordinance, the building height on the mainland will predominantly be 35-feet with the exception of a 50-foot building height maximum limit for multi-family units in the MR-3 Zoning District. In specified areas, single-family structures may be allowed to exceed 35 feet if 1 foot of additional setback for every 2 feet in additional height can be achieved on the lot, but in no case shall the structure exceed 50 feet in height.
- C) No structure on the mainland shall be allowed to exceed 50 feet in height. This restriction includes any and all uses and building types currently allowed in the Town.

Protection of Single-family Areas

- D) The Town shall maintain areas exclusively for conventional single-family dwellings for the growing population on the island and the mainland (as shown on the Future Land Use Map).
- E) The Town shall retain and maintain the predominantly single-family residential character of the island. Conversion of single-family homes to duplexes will be restricted to the residential lots in the existing BR-1 and BB-1 Zoning Districts (as shown on the Future Land Use Map and Town Zoning Map).

Multi-Family Areas

- F) The Town shall allow multi-family development in designated and appropriate areas within the “golf course oriented developments” (Sea Trail and Ocean Ridge Plantation) and as permitted in the MR-3, MB-1 and BB-1 commercial districts (as shown on the Future Land Use Map and Town Zoning Map).

Manufactured Housing Areas

- G) The Town shall provide areas for mobile home and manufactured housing development on the mainland (as shown on the Future Land Use Map and Town Zoning Map).
- H) Any redevelopment of existing manufactured housing areas shall only be allowed to develop as single-family detached housing. Manufactured housing shall continue to be an allowable housing type/use in these pre-existing areas.

18. Residential Density - Standards, Options and Mitigation of Environmental Impacts

- A) The Planning Board and Town Council will study the feasibility of establishing residential density limitations per acre, in addition to existing dimensional standards, for each zoning district.
- B) The Planning Board and Town Council will study the feasibility of revising the subdivision, zoning and Planned Residential Development regulations to promote greater conservation of natural areas. Cluster housing, with possible density bonus, and/or Low Impact Development standards may be studied as such conservation measures.

19. Potential For Transition of Golf Course Land to Residential Use

If any land currently utilized as a “golf course field of play” is requested to be transitioned to a residential use, the only allowable housing-type permitted by the Town for those areas shall be:

- A) Single-family detached, with a minimum lot size of one acre per unit;

Or,

- B) Planned Residential Development, as permitted in the Zoning Ordinance, if it is able to retain an amount of open space superior to and an impervious lot coverage equal to or less than that created by the development of single-family housing on one acre lots as in option (A) above.

20. Types of Commercial and Institutional Development Desired

The Town plans to enhance and promote quality commercial development through the following:

- A) Intense commercial development beyond that necessary to serve seasonal and year-round population will not be encouraged. There is currently a sufficient amount of land zoned

for commercial development in the Town planning jurisdiction and surrounding county jurisdiction to meet the projected needs of the seasonal and year-round population through 2015.

- B) The Town will continue to enforce its current development ordinances and local building permit process in order to achieve a desired balance between commercial and residential development. Adequate buffering between residential and commercial development will be required. Requests for additional mixed-use zoning will be carefully evaluated in terms of the needs of the community for such development.
- C) The Town will encourage commercial development to locate in designated commercial nodes (as shown on the Future Land Use Map) in order to avoid strip commercial development and traffic congestion. The designated commercial node on the island is the BB-1 district bordering Sunset Boulevard, and on the mainland, the major commercial node is the MUD commercial district at the North Carolina 904 and North Carolina 179 business intersection. Both areas are shown on the Future Land Use Map.
- D) The appearance of commercial development will be enhanced by the enforcement of stricter sign and landscaping regulations to maintain the existing residential, retirement and small-scale resort characteristic of the community.
- E) With the exception of places of worship, institutional use in Sunset Beach is now limited to those government and utility sites necessary to provide adequate services to the Town and its planning jurisdiction. It is desired that this land use pattern be maintained, and that the Town encourage land use compatibility between any future institutional development with neighboring residential and/or commercial development.

21. Redevelopment of Developed Areas

Provided the activities below are consistent with other Town policies regarding density, hazard mitigation and environmental protection, the Town supports the following:

- A) Redevelopment may be permitted as long as the activity complies with the spirit and intent of existing regulatory requirements, meaning proposed redevelopment activities which would require substantial changes to existing regulations shall be discouraged.
- B) Town policy is to encourage and allow redevelopment of previously developed areas, which may also include the relocation of endangered structures.
- C) Sunset Beach supports replacement of aging structures as a positive reuse of land resources which enhances the Town as a whole.
- D) It is the Town's policy that density allowances for redevelopment conform to existing Town building and zoning regulations. Requests for increases in zoning density is discouraged.

22. Civic Efforts to Maintain the Town Character

The Town of Sunset Beach will continue to support the efforts of the Sunset Beach Beautification Committee, a civic group who landscapes and beautifies public areas within the Town, and the efforts of volunteers who pick-up litter on the beach and mainland.

23. Types and Location of Industry Desired

“Industry” in the traditional manufacturing/processing/production sense will not be allowed in the Sunset Beach planning jurisdiction.

24. Productive Agricultural Lands, Commercial Forest Lands, Existing and Potential Mineral Production Areas

Mineral production and extraction activities of any kind shall not be permitted within the Sunset Beach planning jurisdiction.

25. Energy Facility Siting and Development

The Sunset Beach planning area is not a suitable location for electric generating plants. The Town of Sunset Beach discourages offshore continental drilling for gas and oil. Moreover, the location of support facilities for offshore drilling at Sunset Beach would be inappropriate and is strongly discouraged.

26. Swimming Pools on the Island

Swimming pools shall not be allowed on the south side (ocean-side) of Main Street on the island.

27. Clubhouse and Community Center Uses

Private clubhouse and community centers uses, as defined in the Zoning Ordinance, shall only be allowed on the island in the designated commercial area (BB-1). Private clubhouses and community centers on the mainland shall only be allowed if located within the development that they are intended to serve.

28. Density of Future Multi-family Developments

To assist in protecting its existing community character, scale and infrastructure capabilities, Town policy shall be to reduce the currently allowed density for multi-family structures below a gross of 21.7 units per acre.

29. Bike and Pedestrian Interconnectivity

The Town supports and shall pursue efforts to increase bike and pedestrian pathways connecting commercial areas with residential areas, as well as connecting the mainland areas with the island and beach access sites.

30. Land Use and Development Decisions Consistent with the Land Use Plan

Any official Town land use and development related actions (e.g. re-zonings, text amendments, stormwater rules, etc.) shall remain consistent with the policies adopted in the Land Use Plan and any other applicable plan. Any Town actions that are inconsistent with such plans shall require a statement from the Town body approving such decisions, as to why those decisions are necessary and in the community's interest, and how any negative impacts will be mitigated.

Policy 30 states:

30. Land Use and Development Decisions Consistent with the Land Use Plan

Any official Town land use and development related actions (e.g. re-zonings, text amendments, stormwater rules, etc.) shall remain consistent with the policies adopted in the Land Use Plan and any other applicable plan. Any Town actions that are inconsistent with such plans shall require a statement from the Town body approving such decisions, as to why those decisions are necessary and in the community's interest, and how any negative impacts will be mitigated.

II. Management Topic: Public Access

CAMA Public Access Goal:

“Maximize public access to the beaches and the public trust waters of the jurisdiction.”

Town Public Access Goals:

- Recognize and prepare for land acquisition opportunities to enhance or expand the Town’s public access facilities.
- Encourage and facilitate alternatives to traditional vehicular traffic to reach public access sites and other destinations in Town (i.e. bicycle and pedestrian interconnectivity, and public or private shuttle services).
- Be prepared to conduct on-going beach preservation planning activities to secure beach nourishment funding and to meet public access site provision requirements for funding.

Objectives and Background Discussion

The Town intends to proactively manage/regulate activities and impacts in the public trust areas (i.e. public waters, beach and marsh) within its planning jurisdiction. The policy statements below represent the Town’s guiding principles in its future management of the public trust areas within its planning jurisdiction. As detailed in Section 5 of this Plan, the Town has 33 existing public beach access sites along the approximately 2.3 miles of oceanfront beach in the Town Limits. That is an average of a public access site every 368 feet. There is one “Regional Beach Access Site” in Sunset Beach located near the Pier. “Regional” sites are designated by having 25 or more parking spaces, as well as having additional facilities like restrooms, picnic tables and showers. The “Regional Access Site” in Sunset Beach is handicapped accessible and has 75 Town parking spaces with additional pay-parking available at the adjacent pier. There is a restroom at this Regional Site, but no showers or picnic tables. The remaining 32 public access sites on the island are considered “Local” sites used primarily as dune crossovers and have limited, if any, on-site parking or other facilities. The Town plans to retain its ratio of access sites, with enhancements and expansion of access site facilities possible as funding and/or beach nourishment projects (and their associated access requirements) become available. In addition, increased public access to the Intracoastal Waterway is planned as part of the bridge replacement project (See Map 12: Transportation and Public Access Facilities Map).

In Sunset Beach, on-street parking on the island is allowed on Main Street (main road parallel to beachstrand) and portions of Sunset Boulevard in the commercial area. Public on-street parking is also allowed on the shoulder rights-of-way of all side streets perpendicular to the beachstrand, provided driveways are not blocked. The Town has evaluated parking needs on the island and determined that except for a few peak days of the season, parking on side street shoulders and other allowable areas has adequately handled current public parking needs. Future growth in Town and in the surrounding areas will more than likely increase the demand for additional public parking and/or a private/public shuttle service (e.g. the Sea Trail shuttle). Any additional parking facilities would likely be best located near the commercial and pier areas of the island, as this is in close proximity to the existing Regional Access Site and to the only commercial area on the island.

Public Access Policy Statements

31. Public Trust Areas

- A) In the absence of overriding public benefit, any use which significantly interferes with the public right of navigation or other public trust rights which apply in the area shall not be allowed.
- B) Projects which would directly block or impair navigational channels, increase shoreline erosion, deposit spoils below mean high tide causing adverse water circulation patterns, directly cause a violation in water quality standards, or cause degradation of open shellfish waters shall not be allowed.
- C) For the Town of Sunset Beach, a navigational channel will be defined as any water channel which is passable by high tide. Permanent obstruction of these navigational channels will not be allowed. Improvements such as bridges and docks must be built to allow boating access according to State regulations.
- D) Uses allowed in Public Trust Areas shall be in accordance 7H.O208 (a) and (b) and shall not be detrimental to the public trust rights and the physical functions of the estuary. Examples of such uses include the navigational channels or drainage ditches, the use of bulkheads to prevent erosion, building of piers or docks.

32. Support for Coastal and Estuarine Beach Access

The Town of Sunset Beach is committed to the public having access to the beach, shore or other public trust land and waters, provided that such means do not conflict with the rights of residents for the use and enjoyment of their property.

33. Support for State and Federal Access Programs

Sunset Beach supports the utilization of state and federal, as well as local resources, to develop additional access areas.

34. Public Boat Launch and Access Site

The Town shall pursue the construction of a public boat launch and access site to replace the boat launch removed due to the new bridge construction.

35. Preservation of Existing Public Access Sites

The Town shall not approve any development activity that would cause an existing public access site to become permanently unusable without adequate and immediate replacement with an equal and similarly located public access site.

36. Continuation of On-Street Public Parking

The Town shall continue to allow regulated public parking on public street shoulders as a means to provide parking for beach access.

37. Support for Shuttle Service to Public Access Sites

The Town supports the utilization of private (and potentially public) shuttle services to transport mainland residents and guests to public beach access sites.

38. Enhancing Public Access Facilities

The Town shall pursue increasing the availability of public facilities including restrooms, showers, parking, and bike racks on the island.

III. Management Topic: Infrastructure

CAMA Infrastructure Goal:

“Ensure that public infrastructure systems are appropriately sized, located and managed so the quality and productivity of areas of environmental concern and other fragile areas are protected or restored.”

Town Infrastructure Goals:

- Maintain and enhance quality of life (i.e. Town’s environmental health, aesthetics, amenities, and property values).
- In conjunction with Brunswick County and the Department of Transportation, alleviate traffic congestion on local streets and thoroughfares by managing the number, design standard, and location of driveway access points for commercial, subdivision or other large developments.
- In conjunction with Brunswick County, implement a sewer system for the purpose of mitigating the environmental and human health risks to the jurisdiction from outdated, failing or over capacity on-site wastewater treatment systems.
- In conjunction with Brunswick County, establish and maintain an adequate and effective stormwater management system and program.
- In conjunction with Brunswick County, ensure a safe and sufficient supply of water for both potable and firefighting uses.
- Increase Town participation and contribution in Regional Growth Management (e.g. County Transportation Systems, Potable Water System, Sewer System, Stormwater Management and Environmental Management).

Objectives and Background Discussion

Sunset Beach can be characterized as a steadily growing but relatively small-scale residential/resort community. The Town’s commercial activity primarily serves local year-round residents, as well as seasonal residents and tourists. The Town discourages large-scale or big-box commercial development which would be intended to serve regional populations. The Town’s overall growth management policy is to maintain its existing mix of residential types, densities and intensity, and to strictly limit any future residential redevelopment above existing densities (Also see Future Land Use Map and Section 9 in this Plan for more detail). In the case of future multi-family development, while many multi-family developments have been built well under the current maximum allowable density, the Town plans to reduce its maximum density allowed for multi-family to minimize the pace, scope and costs of needed infrastructure expansion. As detailed in Section 6.2, the Town in conjunction with the County is pursuing the construction of sewer lines to provide service to all applicable existing properties within the jurisdiction. The sewer lines will be owned, operated and maintained by the County. The design for the sewer line capacity within the Sunset Beach jurisdiction was conducted under the supervision of the Town and impacted parties to minimize or eliminate the potential for “induced development”. Induced development is the potential for increased density and intensity that sewer service can sometimes provide. The Town’s infrastructure-related policies listed below are consistent with their approach to overall growth management and preservation of quality of life.

Infrastructure Policy Statements

39. Development Encouraged to Use DOT's Access Management and Recommended Design Standards

The Town supports the principles of Access Management and encourages the use of the recommended street and driveway design standards found in the North Carolina Department of Transportation's "Policy on Street and Driveway Access".

40. Access Management for Commercial and Mixed-use Developments

- A) The Town shall continue to enforce its current design standards under the "Major Collector Plan" requirements, as found in the Zoning Ordinance § 151.395 (F) and § 151.214 (H), for developments abutting a major collector street (i.e. Sunset Boulevard, Highway 904) within the commercial Districts.
- B) The Town encourages abutting mixed-used developments and/or commercial developments to reduce driveway access points connecting to main roads by utilizing shared (joint-access) driveways or creating internal (marginal) accessways to service traffic moving among those types of highly trafficked developments.

41. Access Management for Residential Developments

The Town shall continue to enforce its current design standards regarding street access for residential subdivisions under Section 150.110 (B) of the Subdivision Ordinance, which include standards for the provision of marginal accessways, minimum lot sizes on frontages of major collectors, and/or the prohibition of access to major collectors by individual private driveways.

42. Improvements to Highway 904 Needed

The Town supports immediate improvements to Highway 904 by the Department of Transportation in areas where traffic volume has exceeded the design capacity of the road. The Town supports the construction of left and right turn lanes on Highway 904, and does not support the construction of a "center turn lane". Any conversion of existing center turn lanes should be converted to a vegetated median.

43. Support for Corridor Development Standards of Highway 904

The Town supports the Corridor Development Standards in the Brunswick County Unified Development Ordinance for Highway 904 from its intersection with Highway 17 to the Town's planning jurisdiction border. If the Town annexes any portion of the 904 corridor, it intends to continue to apply, at a minimum, the current Corridor Development Standards.

44. Encouraged Street Design Within Major Developments

In addition to the minimum requirements for subdivision street design (§ 98.22):

- A) The Town encourages planned residential developments, mixed-use developments and other applicable subdivision developments to implement street designs that maximize:
 - i. Bike and pedestrian accessibility and safety (i.e. sidewalks, bike lane, crosswalks, etc.);
 - ii. Incorporation of effective and aesthetically appropriate street calming devices; and
 - iii. Interconnectivity with existing local streets, bike and pedestrian pathways, as well as any abutting commercial and recreational areas.

- B) In the provision of sidewalks, bike lanes and roundabouts, and where uncontrolled stormwater runoff may be increased by such infrastructure, the Town encourages:
 - i. The use of permeable (pervious) materials as approved by the North Carolina Division of Water Quality, or, limiting sidewalks to one side of the street to minimize impervious surfaces; and,
 - ii. The design of these features should utilize BMPs similar to those outlined in the Brunswick County Low Impact Development (LID) standards to collect stormwater runoff from the street surface.

45. Bike and Pedestrian Plan Update

The Town shall update its Bike and Pedestrian Plan to identify potential funding for improvements, increase public awareness of the planned pathway, and take advantage of the interconnectivity offered by the new bridge between the mainland and island. The Town supports and will seek coordination with adjacent municipalities and the County on maximizing regional bike path interconnectivity, as well as identifying cost-sharing opportunities (i.e. East Coast Greenway project).

46. Unpaved Public Streets

- A) Town policy is not to pave or otherwise improve any unpaved street or alley unless petitioned by a majority of the property owners who represent a majority of the lineal feet of frontage on the street proposed to be improved.

- B) The Town shall review the feasibility of utilizing a “green street design”, or, permeable asphalt or other North Carolina Division of Water Quality approved pervious material when paving any of the remaining public unpaved roads in the planning jurisdiction.

47. Resurfacing Improvements

Whenever it is necessary to resurface, fill potholes or repair cracks or other defects on any public street due to normal traffic use, the Town shall undertake the resurfacing as funds are appropriated.

48. Crosswalks

The Town will consider increasing aesthetically appropriate crosswalks and signals to accommodate and facilitate additional bike and pedestrian accessibility in Town.

49. Use of Package Treatment Plants

The Town shall temporarily allow package treatment plants where they are deemed necessary for an allowable development project, and if they can be constructed with the overall intent of this plan and meet all federal, state and County environmental health regulations. When sewer system service becomes available, connection to the system and decommissioning of Package Treatment Plants will be required.

50. Implementation of Sewer System Service

The Town supports and will continue to coordinate with Brunswick County Public Utilities and all other applicable state agencies in the construction of a sewer system to serve all appropriate properties within the Sunset Beach planning jurisdiction.

51. Mandatory Sewer System Connection

The Town shall require all existing development with on- and/or off-site wastewater systems in the Sunset Beach planning jurisdiction, as well as any future developments, to connect to the Brunswick County sewer system.

52. Ownership and Operation of Sewer System

The Town will not own or operate any portion of the planned sewer system within its planning jurisdiction. Residents, business owners and other system users in the Sunset Beach Planning jurisdiction will be retail customers of the Brunswick County Public Utilities sewer system.

53. Sewer System Designed to Limit “Induced Development Impacts”

- A) The sewer system developed in the Town planning jurisdiction shall be designed to place limitations on the number of future connections to the system. This is intended to both manage density in the Town’s planning jurisdiction and manage the long-term effects on the carrying capacity of the County provided sewer system. Town policy is not to eliminate growth, but to better anticipate and manage the scale of future growth so as not to overburden the system and diminish the quality of service to existing customers.
- B) The Town encourages other municipalities and customers of County public utilities to establish design capacity thresholds for planned sewer systems in their jurisdictions, as is Sunset Beach policy, to better maintain carrying capacity and ensure quality service to existing residents, business owners and other current users.

54. Ownership and Operation of Water System

The Town will not own or operate any portion of the water system within its planning jurisdiction. Residents, business owners and other system users in the Sunset Beach Planning jurisdiction will be retail customers of the Brunswick County Public Utilities water system.

55. On-going Coordination With Brunswick County Public Utilities

The Town shall continue coordination with Brunswick County to ensure that a County public utilities capital improvement program is continually updated and adequately funded. In the absence of adequate capital improvements timing or funding, Town policy is to insist County water and sewer systems have adequate capacity to provide a quality service to existing Town customers as a first priority, before committing to new growth and development.

56. Support for Public Utilities Board

The Town supports the Brunswick County public utility management policy calling for the implementation of a countywide “public utilities board” which will include municipalities. The “board” mission should be to improve management and oversight of the water and sewer system by helping to better identify potential local system needs or problems, more accurately anticipate future local demands, and equitably share system capacity.

IV. Management Topic: Natural Hazards Mitigation

CAMA Natural Hazards Mitigation Goal:

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

Town Natural Hazards Mitigation Goals:

- Continue to pursue the replacement of the island bridge to allow for better evacuation.
- Reduce the erosion and flooding danger to property and human health by managing density and structure setbacks in high hazard areas such as inlets and oceanfront beach and dune areas.
- Reduce flooding and water quality impacts associated with uncontrolled stormwater runoff.
- Reduce property damage from wind.

Objectives and Background Discussion

The jurisdiction of Sunset Beach contains both a barrier island and “mainland” or upland areas. Given the location and elevation of barrier islands, that portion of the planning jurisdiction is at particular risk to flooding, storm surge and wind damage. Sunset Beach is a participating community in the National Flood Insurance Program (NFIP) and enforces a Flood Damage Prevention Ordinance through its Building Inspections Department. The Flood Prevention Ordinance was adopted in the Spring of 2006 after completion of the North Carolina Floodplain Mapping Program for the Lumber River Basin. According to historical NFIP claims data from 1978 to 2006, Sunset Beach has one of the lowest damage claim and damage payout levels for all North Carolina communities with a beach strand. According to the new NC Floodplain Mapping Program data, the 100-yr flood zones in the Sunset Beach planning jurisdiction are AE and VE. Ninety-nine percent of the island is within either the VE or AE zone. The VE zone accounts for a little over 60% of that total on the island. Throughout the entire Town jurisdiction, the AE zone encompasses 520 acres or 7% of the total planning jurisdiction (See Special Flood Hazards Area Map [Map 4]). The VE zone, as mentioned earlier, encompasses roughly 3,038 acres or 43% of the planning jurisdiction (See Special Flood Hazards Area Map [Map 4]).

In Sunset Beach, approximately 1,250 acres of the planning jurisdiction is considered to be outside of the possible hurricane storm surge inundation area. These areas are the most inland portions of the jurisdiction and include portions of the Sea Trail development, Ocean Ridge Plantation and the newly annexed Wyndfall and Sandpiper Bay areas. Conversely, 40% of the total area in the planning jurisdiction is likely to be inundated during a Category 1 or 2 hurricane, 47% in a Category 3 hurricane, and 63% of the total area in the corporate limits is likely to be inundated in a Category 4 or 5 hurricane (See Storm Surge Inundation Map [Map 5]).

The policy statements below represent the Town’s guiding principles in its future management and pursuit of mitigating the impacts of natural hazards.

Natural Hazards Mitigation Policy Statements

57. Hazard Mitigation Plan

The Town shall refer to its adopted Hazard Mitigation Plan for policy guidance and recommendations on any Town restructuring, reorganizing or development of any programs regarding the provision of emergency services, emergency services preparedness, emergency command procedure, public awareness, or evacuation procedure.

58. Sea-level Rise

The Town of Sunset Beach will closely monitor research on sea level rise and its effects on coastal areas. It is the policy of the Town to consider any State or Federal policies prior to issuing specific statements regarding sea level rise and restriction of development in potentially susceptible locations. Specifically, development within areas up to 5 feet above sea level may be prone to sea level rise and wetland loss. The Town will respond to this issue through implementation of Coastal Area Management regulations applicable to development within Areas of Environmental Concern.

59. Beach Erosion

In addition to implementing its policy regarding oceanfront setbacks [See Policy 5], the Town supports regular beach nourishment as the most practical means of balancing the public's interest in the beach shoreline with the protection of private property investments. In the absence of nourishment project opportunities, the Town's next policy of choice is for the relocation of threatened structures.

60. High Winds

Sunset Beach supports enforcement of the NC State Building Code. The Town will continue to enforce the State Building Code for construction on barrier islands with the minimum design standards to resist wind loads.

61. Flooding Mitigation

Sunset Beach shall remain an active participant in the National Flood Insurance Program (NFIP) and is supportive of its hazard mitigation elements. Sunset Beach shall continue to enforce a Flood Damage Prevention Ordinance in accordance with the NFIP, including a one-foot free board requirement. Sunset Beach also supports continued enforcement of the CAMA and 404 wetlands development permit processes in areas potentially susceptible to flooding.

62. Wave Action and Shoreline Erosion

Sunset Beach supports the CAMA development setbacks for estuarine shoreline areas and the required development standards which encourage both sustainable shoreline stabilization and facilitation of proper drainage.

63. Development in Hazardous Areas

The Town of Sunset Beach shall continue to discourage high-density uses, and large structures as defined in the CAMA standards, from being constructed within the 100-year floodplain, erosion-prone areas, and other locations susceptible to hurricane and flooding hazards.

64. Public Acquisition of Hazardous Areas

The Town of Sunset Beach shall consider purchasing parcels located in hazard areas or rendered unbuildable by storms or other events, for the purpose of public water access and/or conservation of open space.

65. Reduction of Yard and Construction Debris

The Town of Sunset Beach shall continue regulations requiring property owners to remove yard debris and other loose materials, as well as requiring construction contractors to secure unattached building materials to minimize the potential of damaging surrounding properties during a high-wind storm event.

V. Management Topic: Surface Water Quality

CAMA Surface Water Quality Goal:

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

Town Surface Water Quality Goals:

- Maintain and enhance quality of life (i.e. Town’s environmental health, aesthetics, amenities, and property values).
- Preserve, conserve, and/or otherwise protect valuable and beneficial natural resources (in particular surface water and wetlands).
- In conjunction with Brunswick County, implement a sewer system for the purpose of mitigating the environmental and human health risks to the jurisdiction from out dated, failing or over capacity on-site wastewater treatment systems.
- In conjunction with Brunswick County, establish and maintain an adequate and effective stormwater management system and program.
- Evaluate, and if appropriate, incorporate Low Impact Development (LID) management practices into Town ordinances and programs.

Objectives and Background Discussion

As discussed in the report and analysis sections of this Plan (Section 4 and Subsection 4.1.1), a primary goal of the Town of Sunset Beach found in the 1997 Land Use Plan and as a part of this Land Use Plan update is to preserve, conserve, and/or otherwise protect valuable and beneficial natural resources. Policy in the Town’s 1997 CAMA Land Use Plan states that the Town supports the preservation of water quality in its estuarine and public trust waters. Town policy is also to work with the North Carolina Division of Water Quality to identify and reduce or eliminate the sources of pollution to area surface waters. The Town of Sunset Beach, in conjunction with Brunswick County, has begun or will undertake certain activities that should address some of the contributing factors to the surface water quality problems in the jurisdiction. Those activities include:

- Replacing septic systems and private package treatment plants with centralized sewer.
- Requiring stormwater runoff controls and vegetative buffer and/or BMP standards for new developments and redevelopments.
- Providing education and outreach to homeowners on the effects of stormwater runoff and how to prevent/minimize discharging pollutants on their property (i.e. resource guides on the Town website, and public workshops).

Surface Water Quality Policy Statements

66. Stormwater Program

- A) The Town shall continue to participate in an interlocal agreement with Brunswick County for the implementation and administration of County stormwater regulations by County staff within the Sunset Beach planning jurisdiction. The Town shall be responsible for implementing legal proceedings for violations of the stormwater regulations within its planning jurisdiction.
- B) The Town supports the continuance of provisions in the Brunswick County stormwater regulations which exceed state minimum requirements. Those provisions include requiring stormwater management rules for all commercial development regardless of site size, and rules for any development activity which uses more than four inches of fill on the site.
- C) The Town shall continue to update its stormwater ordinances to remain consistent with changes in the County stormwater ordinance.
- D) The Town shall retain the option of adopting additional local stormwater related standards if it is deemed necessary to further protect surface water quality.

67. Erosion and Sediment Control

- A) The Town shall continue, at a minimum, to require the Erosion and Sedimentation Control standards for construction activities found in the North Carolina Sedimentation Pollution Control Act, as amended, and enforced by the North Carolina DENR, Land Quality Section.
- B) If Brunswick County implements erosion and soil standards for construction activities that exceed the minimum requirements of the North Carolina Sedimentation and Erosion Control Act the Town may adopt the County rules.

68. Exceeding Minimum Standards Related to Water Quality Rules

- A) The Town encourages development in both the construction phase (i.e. erosion and sedimentation control) and post-construction phase (i.e. stormwater control) to utilize practices in excess of what is minimally required under state, federal and/or local standards in order to maximize protection of local surface water quality.
- B) To offer tangible encouragement of such development practices mentioned above, the Town in coordination with any interlocal agreement partner (Brunswick County) should study the feasibility of implementing an incentive program (such as a fast-track review and permitting process and/or waiving or reducing fees).
- C) If minimum state, federal or local standards are demonstrated to be ineffective in furthering the goal of protecting local surface water quality, and if new development fails

to respond to any incentives implemented to encourage exceeding minimum standards, the Town in coordination with any applicable interlocal agreement partners shall consider increasing the existing minimum standards required.

69. Low Impact Development (LID)

- A) The Town intends to evaluate the results of Low Impact Development practices implemented in the adjacent Lockwood's Folly watershed and other similar coastal watersheds to determine its practicality for use in the Sunset Beach planning jurisdiction. Such LID practices required may include retaining/infiltrating most of the runoff on-site, maximizing the use of permeable pavements, reducing the amount of impervious coverage, and clustering housing to allow a profitable development density while maximizing open space.
- B) Key to LID practicality and effectiveness, Town policy shall be to first seek to establish coordination and interlocal agreement among local governments with jurisdiction over land development affecting the local watershed to both support and implement LID standards in their jurisdictions.

70. Elimination of Septic System Use

Town policy is to support the implementation of a sewer system and require the elimination of septic system and package treatment plant use. See Policies 48, 49 and 51.

71. Septic System Decommissioning and Encouraged Re-use for Stormwater

- A) When central sewer service becomes available, the Town shall require all septic systems in use in the Town's jurisdiction to be professionally pumped-out and crushed, filled or retrofitted to be used as a "stormwater cistern".
- B) The Town prefers the re-use of appropriate septic systems as "stormwater cisterns", over crushing or filling, as an innovative method to help capture and retain stormwater on-site. This practice is intended to help minimize the volume of stormwater and pollutants entering local surface waters, streets and ditches.
- C) To encourage (b) above, The Town shall provide owners of septic systems with information on how to retrofit and re-use septic systems as stormwater cisterns.
- D) If and when a stormwater utility is established under Phase II stormwater rules, the Town shall encourage Brunswick County (Phase II stormwater administrator) to apply "credits" on any stormwater utility fees to those property owners who re-used their septic system as a stormwater cistern.

72. Retrofitting of Existing Stormwater Drainage Systems

- A) The Town supports the eventual retrofit, or elimination (where complete detention or infiltration is feasible), of Town-owned outfalls that are not able to treat stormwater runoff during targeted storm events. Those outfalls which carry runoff from existing

development, including roads, through conveyances that may not adequately handle the removal of pollutants during certain storm events shall receive prioritization for retrofit. Testing of outfalls may be necessary to identify pollutant load, runoff volume and appropriate retrofits.

- B) Where complete retrofit or elimination of certain outfalls is not feasible, the Town and Brunswick County (as Phase II stormwater administrator) shall encourage and publicize private property practices that are intended to reduce stormwater volume and pollutant load entering the Town's stormwater drainage system.
- C) If the retrofit or elimination of certain outfalls is deemed feasible, the Town shall pursue funding from the Clean Water Management Trust Fund, other water quality improvement funding sources, or any other appropriate funding source to implement and utilize new technology and/or install vegetated systems to provide greater infiltration, filtration, retention and/or detention of runoff from existing development.

End of Policy Statements

Section 9: Future Land Use Classification Map and Standards for the Town of Sunset Beach

The Future Land Use Classification Map is meant to visually depict the major land use and development goals and policies to be implemented by the Town. The Map is intended to show the community's planned future growth patterns in distinct areas (i.e. the "future land classification areas") within the Town's planning jurisdiction. The Map also shows the planned future boundaries of those respective areas to ensure that incompatible uses or types of development do not encroach.

To be used in conjunction with the *Future Land Use Classification Map (FLUCM)* is the *Future Land Use Classification Area Development Standards Table (or FLU Table)*. The table lists the desired predominant land uses and development characteristics for each respective area, as well as the intensity and density goals and standards for each area. While the *Future Land Use Classification Map* and *FLU Table* establish goals and policy direction for various areas in the Town's planning jurisdiction, it shall be the Town's Official Zoning Map and Zoning Ordinance, and other supporting ordinances, that codify the actual development regulations within the various areas of the planning jurisdiction.

IMPORTANT NOTE: The *FLUCM* and *FLU Table* act as official Town policy statements just like those found in Section 8. Any official land use or development related decisions made by the Town after the adoption of this Land Use Plan are expected to be consistent with both the policy statements in Section 8 and the development standards outlined in the *FLUCM* and *FLU Table* (Table 40) in Section 9. Any official Town decisions that are inconsistent with the *Future Land Use Classification Map* and *Future Land Use Classification Area Development Standards Table* must follow Policy # 30, and if substantially inconsistent, may require a Land Use Plan amendment process with a public hearing and a certification review by the Coastal Resources Commission.

Map 15: Future Land Use Classification Map

See Map Appendix: Map Number 15

9.1 Future Land Use Classification Area Development Standards Table

Table 40, following, outlines the key desired development standards for each individual future land use classification area depicted on the *Future Land Use Classification Map*. In the *FLUCM* and *FLU Table*, the Town has identified its standards for future growth, development and redevelopment. Those standards include:

1. The predominant and planned land uses (i.e. residential, conservation, recreation, etc.) for each classification area.
2. The planned density (i.e. dwelling units per acre) and intensity (i.e. height, setback, and overall bulk) for development in each classification area.
3. The establishment of "conservation" areas and the compatible uses within those areas.

Table 40: Future Land Use Classification Area Development Standards Table

- Total Area in Planning Jurisdiction = Approximately 7,030 acres (includes recent annexation of the 530 ac Sandpiper/Wyndfall area).
- Total Area of Planning Jurisdiction Est. to Be Above Mean High Water (MHW) Line [“not regularly inundated by tide and likely dry/buildable land”] = 4,130 acs.
- Du/ac means the gross number of dwelling units possible/allowed per acre.
- PRD is Planned Residential Development (PRD may allow changes in traditional lot configuration and setback to allow for avoiding sensitive areas and limiting the scale of infrastructure needed). PRD requires a Special Use (SU) Permit.
- SF is single-family (one unit) detached structure; DUP is Duplex (two attached units); MF is multi-family (three or more units) in a single or attached structure.

Classification Area	Total Acres In Classification Area	Percent of Total Planning Jurisdiction / Percent of Jurisdiction Above MHW	Permitted/ Spec. Uses (SU) Allowed	Min Lot Size / Units per acre	Residential Structure Types Allowed	Maximum Structure Height	Percent of “Open Space” Required on Development Lot
RESIDENTIAL							
“Residential Very Low Density” (AF-1)	19 ac	.3% of total jurisdiction; .5% of jurisdiction above estimated MHW line	Residential/ Agriculture/ Silviculture/ Institutional/ SU for PRD	43,560 ft ² / 1 du/ac	Single-family	35 feet [†] 50 feet max.	85%
“Residential Low Density” (MR-1)	50 ac	.7% of total jurisdiction; 1% of jurisdiction above estimated MHW line	Residential/ Institutional/ SU for PRD	15,000 ft ² / 2.9 du/ac	Single-family	35 feet [†] 50 feet max.	35% for PRDs
“Residential Medium Density 1” (MR-2 & MR-2A)	668* ac (*Includes 130 acres of inland water and areas below MHW)	9% of total jurisdiction; 13% of jurisdiction above estimated MHW line	Residential/ Institutional/ SU for PRD	10,000 ft ² / 4.3 du/ac	Single-family	35 feet [†] 50 feet max.	35% for PRDs
“Residential Medium Density 2” (MH-1)	230 ac	3% of total jurisdiction; 5% of jurisdiction above estimated MHW line	Residential/ SU for PRD	9,000 ft ² - 10,000 ft ² / 4.3 du/ac	Single-family (including manufactured housing)	35 feet [†] 50 feet max.	35% for PRDs
“Residential Medium-High Density 1” (BR-1)	91 ac	1% of total jurisdiction; 2% of jurisdiction above estimated MHW line	Residential	SF = 7,500 ft ² / 5.8 du/ac; DUP = 7,500 ft ² / 11.6 du/ac	Single-family/ Duplex	35 feet	N/A
“Residential Medium-High Density 2” (MH-2)	16 ac	.2% of total jurisdiction; .4% of jurisdiction above estimated MHW line	Residential	9,000 ft ² - 10,000 ft ² / 4.3-4.8 du/ac	Single-family (including manufactured housing)	35 feet [†] 50 feet max.	N/A

[†] May exceed 35 feet on the condition that it shall be set back, in addition to any other yard requirements, from the front and from each side lot line on a ratio of one foot for every two feet of rise above 35 feet.

RESIDENTIAL CLASSIFICATION AREA CONT'D

Classification Area	Total Acres In Classification Area	Percent of Total Planning Jurisdiction / Percent of Jurisdiction Above MHW	Permitted/ Spec. Uses (SU) Allowed	Min Lot Size / Units per acre	Residential Structure Types Allowed	Maximum Structure Height	Percent of "Open Space" Required on Development Lot
<u>RESIDENTIAL</u> Continued							
"Residential Medium-High Density 3" (BR-2)	220* ac. (*Includes 40 acres of area below MHW)	3% of total jurisdiction; 4% of jurisdiction above estimated MHW line	Residential/SU for PRD	4,500 ft ² / 9.7 du/ac	Single-family	35 feet	35% for PRDs
"Residential High Density" (MR-3)	2,500* ac (*Includes 59 acres of inland water)	35% of total jurisdiction; 60% of jurisdiction above estimated MHW line	Residential/ Institutional/ SU for PRD	SF = 7,500 ft ² / 5.8 du/ac; MF = 40,000 ft ² min. lot, with 2,000 ft ² of "net lot area" required per dwelling unit / 14.7 du/ac <i>"Net lot area" excludes using required 35% Open Space of lot in calculation of lot area per dwelling unit.</i>	Single-family/ Duplex/ Multi-family	SF = 35 feet MF = 50 feet	35% for individual MF developments 35% for PRDs
TOTAL for RESIDENTIAL Land Use Classification	3,565 ^{††} ac	51% of total jurisdiction; 86% of jurisdiction above estimated MHW line					

^{††} Total equals only the "land" and "area above MHW" in the areas classified residential above. The substantial inland water bodies and areas regularly inundated by the tide were removed from the total. *The formula used was 19ac + 50ac + 538ac + 230ac + 91ac + 16ac + 180ac + 2,441ac = 3,565ac.*

MIXED USE CLASSIFICATION AREA

Classification Area	Total Acres In Classification Area	Percent of Total Planning Jurisdiction / Percent of Jurisdiction Above MHW	Permitted/ Spec. Uses Allowed	Min Lot Size / Units per acre	Residential Structure Types Allowed	Maximum Structure Height	Percent of “Open Space” Required on Development Lot
MIXED USE							
Mixed Use Area (MB-2)	36 ac	.5% of total jurisdiction; .9% of jurisdiction above estimated MHW line	Commercial/ Office/ Residential/ Commercial/ Office and Residential in common structure	20,000 ft ² lot per commercial structure or non-multi-family residential structure. MF = 40,000 ft ² min. lot, with 2,000 ft ² of “net lot area” required per dwelling unit / 14.7 du/ac <i>“Net lot area” excludes using required 35% Open Space of lot in calculation of lot area per dwelling unit.</i>	Single-family, Duplex and Multi-family	35 feet [†] 50 feet maximum height	NOTE: MF in this district as of 2007 does not require open space (OS). The Land Use Plan is recommending OS be required for MF per § 151.195 in the “Mixed Use Area” (MB-2). See Table 42 items 5 & 6.
Mixed Use District (MUD)	73 ac	1 % of total jurisdiction; 2% of jurisdiction above estimated MHW line	Commercial/ Office/ Residential/ Commercial/ Office and Residential in common structure	No minimum lot size (for flexibility in design)	Single-family/ Duplex/ Multi-family	50 feet maximum height	35% for multi-family developments
TOTAL for MIXED USE Land Use Classification	109 ac	1.5% of total jurisdiction; 3% of jurisdiction above est. MHW line					

[†] May exceed 35 feet on the condition that it shall be set back, in addition to any other yard requirements, from the front and from each side lot line on a ratio of one foot for every two feet of rise above 35 feet, or, may exceed 35 feet to accommodate the use of mansard, gambrel, gable, hip roofs and other architectural design without increased setbacks.

COMMERCIAL CLASSIFICATION AREA

Classification Area	Total Acres In Classification Area	Percent of Total Planning Jurisdiction / Percent of Jurisdiction Above MHW	Permitted/ Spec. Uses Allowed	Min Lot Size / Units per acre	Residential Structure Types Allowed	Maximum Structure Height	Percent of “Open Space” Required on Development Lot
COMMERCIAL							
“Tourist Commercial Area” (BB-1)	18 ac	.3% of total jurisdiction; .4% of jurisdiction above estimated MHW line	Commercial /Office/ Residential	Comm. = 4,500 ft ² / 9.7 u/ac SF = 4,500 ft ² / 9.7 du/ac north of Main St. 5.8 du/ac south of Main St.	Single-family/ Multi-family (MF restricted to areas north of Main St.)	35 feet	NOTE: MF in this district as of 2007 does not require min. lot size. The Land Use Plan is recommending potential MF density be reduced by requiring a minimum lot size and/or lot area per dwelling unit in the “Tourist Commercial Area” (BB-1). See Table 42 item 7.
“Regional/Local Commercial Area” (MB-1)	67 ac	1% of total jurisdiction; 1.6% of jurisdiction above estimated MHW line	Commercial /Office/ Residential	Comm. = 6,000 ft ² / 7.3 u/ac SF = 15,000 ft ² / 2.9 du/ac MF = 40,000 ft ² min. lot, with 2,000 ft ² of “net lot area” required per dwelling unit /14.7 du/ac <i>“Net lot area” excludes using required 35% Open Space of lot in calculation of lot area per dwelling unit.</i>	Single-family/ Multi-family	35 feet [†] 50 feet maximum height	NOTE: MF in this district as of 2007 does not require open space (OS). The Land Use Plan is recommending OS be required for MF per § 151.195 in the “Regional/Local Comm. Area” (MB-1). See Table 42 items 4 & 6.
TOTAL for COMMERCIAL Land Use Classification	85 ac	1.3% of total juris.; 2% of jurisdiction above estimated MHW line					

[†] May exceed 35 feet on the condition that it shall be set back, in addition to any other yard requirements, from the front and from each side lot line on a ratio of one foot for every two feet of rise above 35 feet.

INSTITUTIONAL/RECREATIONAL CLASSIFICATION AREA and CONSERVATION CLASSIFICATION AREA

Classification Area	Total Acres In Classification Area	Percent of Total Planning Jurisdiction / Percent of Jurisdiction Above MHW	Permitted/ Spec. Uses (SU) Allowed	Min Lot Size / Units per acre	Residential Structure Types Allowed	Maximum Structure Height	Percent of "Open Space" Required on Development Lot
<u>INSTITUTIONAL/RECREATIONAL</u>							
Institutional and Recreational Area (RI-1)	7.5 ac	.1% of total jurisdiction; .2% of jurisdiction above estimated MHW line	Institutional/ Public Facilities/ Recreation/ SU for Telecomm Utilities	15,000 ft ² / 2.9 u/ac	N/A	35 feet [†] 50 feet maximum height	N/A

[†] May exceed 35 feet on the condition that it shall be set back, in addition to any other yard requirements, from the front and from each side lot line on a ratio of one foot for every two feet of rise above 35 feet.

Classification Area	Total Acres In Classification Area	Percent of Total Planning Jurisdiction / Percent of Jurisdiction Above MHW	Permitted/ Spec. Uses Allowed	Min Lot Size / Units per acre	Residential Structure Types Allowed	Maximum Structure Height	Percent of "Open Space" Required on Development Lot
<u>CONSERVATION</u>							
Conservation Reserve (CR-1)	2,725 ac (Of which, 18.5 ac estimated above MHW)	38% of total jurisdiction; .4% of jurisdiction above estimated MHW line	Habitat Conservation/ Residential	*43,560 ft ² / 1 du/ac *Must include a minimum of ½ acre of net buildable area per lot.	Single-family	35 feet	30% of lot must be left uncovered from impervious surfaces

OTHER CLASSIFICATION AREA

Rights-of Way (e.g. streets)	340 ac	1% of total jurisdiction; 8% of jurisdiction above estimated MHW line	N/A	N/A	N/A	N/A	N/A
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Breakdown of the percent of land in the jurisdiction allocated to the various land use classification areas identified in the *Future Land Use Classification Area Development Criteria Table*:

Classification Area by General Land Use	Percent of Land Use in Area of Jurisdiction Above MHW
Residential	86.3%
Mixed Use	3%
Commercial	2%
Institutional/Recreational	0.2%
Conservation	0.4% (does not include public beach strand)
Rights-of-Way	8.1%
TOTAL	100%

Section 10: Tools for Managing Development

The Tools for Managing Development Section provides:

- 1) A description of the role the policies and goals of the Land Use Plan shall play in determining the approval, rejection and/or scale of development projects;
- 2) A description of the Town's current development management and regulation program;
- 3) A description of additional tools used to implement the policies of the Land Use Plan; and
- 4) An Action Schedule for setting an implementation timeframe for the Town's priority goals and policies.

10.1 Role and Status of the Plan

The Town Land Use Plan is a guiding tool that establishes the desired direction for land use and development in the community. Although the statements and policies in the Land Use Plan do not have the authority of an ordinance or regulation, many state and federal decisions on permitting local actions/projects rest on a determination of consistency with the Town's Land Use Plan. Such state permitting decisions include CAMA major permits (see Section 1.4) issued by the Division of Coastal Management. The Town's securing of state or federal grant/loan funding may also be contingent upon review of consistency with the Town's Land Use Plan, and to whether the Town's policies are adequate to meet state and federal standards regarding funded projects (e.g. beach nourishment and public access).

In addition, any future Town zoning ordinance and/or map amendments to accommodate development projects must also be evaluated for their consistency with this Land Use Plan. Any Town decisions to amend zoning regulations must be evaluated, even if they do not relate to a land use, dimensional standard, or area that is not under the purview of state or federal permitting. Section 7 of Session Law 2005-426, which amended North Carolina General Statute 160A-383, requires that planning board review of zoning amendments include a written statement on the consistency of the proposed amendment with the Land Use Plan, as well as any other relevant plans (such as a small area plan, transportation plan, stormwater master plan, etc.) that have been adopted by the Town's governing board. The statute does include provisions that allow the Town's governing board to proceed and adopt proposed zoning amendments in which the planning board may determine to be inconsistent with adopted plans, if the Town governing board can provide a statement as to why the action taken is reasonable, necessary and in the public interest. The Town's governing board is required to adopt such a statement on plan consistency or inconsistency before adopting or rejecting any zoning amendment.

10.1.1 Intended Uses of the Plan

In addition to the above in 10.1, when adopted by the Town governing board and certified by the Coastal Resources Commission, the Land Use Plan shall also be used for the following:

- The approval of routine and major developments (including redevelopments) shall be consistent with the policy direction and goals of the Land Use Plan.
- Amendments to development related ordinances (e.g. rezoning petitions), conditional use permit review, as well as creation and approval of new ordinances shall be consistent with the policy direction and goals of the Land Use Plan.
- The approval of capital improvements (e.g. water, sewer, and stormwater systems, etc.), and related projects, shall be consistent with and prioritized based on the policy direction and goals of the Land Use Plan.
- Town Administration/Planning Staff shall consult the Plan and use it as a basis for making recommendations to the planning board and the Town governing board in such actions as development approval and ordinance amendments. If the proposed development or amendment is in conflict with the policy direction or goals of the Land Use Plan, staff shall notify the planning board and the Town governing board of the possible inconsistency. [See also the discussion of Session Law 2005-426 previously].

In reference to carrying out the above, the policy statements and goals of the Land Use Plan can be found in Sections 8.0 - 8.3. Also refer to Section 9 and Map 15: The Future Land Use Classification Map for policy guidance. In addition, a more general statement of policy direction can be found in Section 2.3: Town's Vision Statement.

In addition to the Town Planning Board and Town Council, the Land Use Plan may also be used by:

- **The Public** - The Land Use Plan shall be available to any interested member of the public. The Plan can inform the public of the direction and future of their community and give them a sense of knowing and understanding what is going on. Public knowledge of the goals and policies of the Land Use Plan will also assist the public in forming support or opposition for actions in their community.
- **Landowners and Developers** - The Land Use Plan provides developers and landowners with guidance and expectations on the types of land uses and development that are desired by the community. Knowledge of expectations and possible requirements of development will aid developers and land owners in preparing sound proposals and plans which will be more likely to be approved by Town officials in a more time-efficient manner. The Land Use Plan and its mapping and analysis can also provide landowners and developers with general information that could make them aware of possible capabilities and limitations of their property.

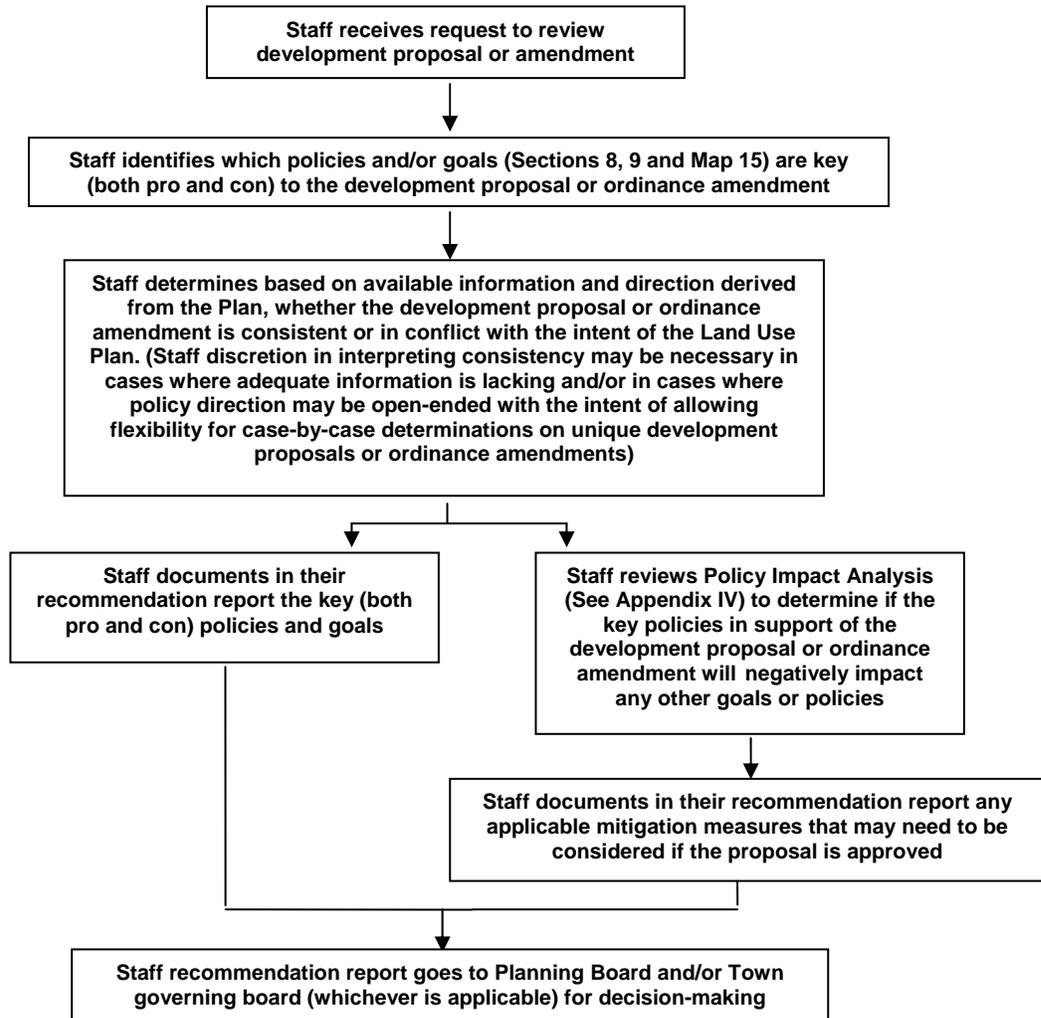
- **Town Staff** - Town staff, beyond the Administration/Planning Department, can use the plan as a tool for evaluating project proposals (such as new public access sites or bike paths) and for preparing plans for public facilities and infrastructure (such as stormwater system upgrades). Town Staff could also use the plan and its policies and goals when preparing its budget requests and recommendations, and make reference to the plan when preparing applications for grants and other assistance.
- **Area Jurisdictions** – Local jurisdictions that may be affected, either positively or negatively, by actions of Sunset Beach can use the plan to understand and predict the intents and purposes behind such actions. Area jurisdictions may also want to coordinate with the Town on achieving certain common goals, or in implementing similar policies. Such common goals could be the improvement of surface water quality in the local watershed which includes multiple jurisdictions.

10.1.2 Amendment of the Land Use Plan

In addition to amending Town zoning regulations, the Town's Land Use Plan may be amended if situations arise where the Land Use Plan becomes in conflict with new local, state or federal policy needs (consult NCAC 7B Section .0900 for Amendment Rules, which can also be found at <http://dcm2.enr.state.nc.us/Rules/Text/t15a-07b.0900.pdf>). The scope of the amendment procedure is related to the scope of the amendment. In other words, minor updates or minor changes in policy require minor amendment procedures, whereas substantial amendments to Town policy will require substantial amendment procedures such as public hearings, review by the Division of Coastal Management and other agencies and jurisdictions, and recertification by the Coastal Resources Commission.

10.2 Staff Flow Chart for Determining Consistency of Development Proposals and Ordinance Amendments

The following flow chart is an example of the process by which Town Staff may determine consistency of local development and regulatory decisions with the policy direction and goals of the Land Use Plan.



10.3 Existing Development Program

The Town Code of Ordinances contains all the local ordinances and many of the regulations used by the Town to manage growth and development. Some of the primary ordinances, regulations and plans regarding land use management are listed in Table 41 below.

Table 41: Existing Development Program

Ordinances/Regulations	Responsible Department
Zoning Ordinance <ul style="list-style-type: none"> ▪ Land Use and Structural Dimension Standards ▪ Density and Intensity Restrictions ▪ Open Space Requirements ▪ Landscape/Tree Removal Restrictions ▪ Parking Regulations 	Administration/Planning/Inspections*
Subdivision Ordinance	Administration/Planning/Inspections*
Flood Damage Prevention Ordinance	Administration/Planning/Inspections*
CAMA Local Permitting Officer Authority	Inspections
Building Code (State Building Code) <ul style="list-style-type: none"> • Filling, Grading and Excavating • Relocation/Demolition of Structures 	Inspections
Water and Sewer Use Ordinance	Administration
Stormwater Regulations <ul style="list-style-type: none"> • Stormwater Management • Illicit Discharge 	Administration/Planning/Inspections*
Beaches and Waterways Regulations <ul style="list-style-type: none"> • Dune Protection • Personal Watercraft Safety • Obstruction of Canals • Unattended Property on Beach Strand 	Administration/Planning/Inspections*
Nuisance Ordinance <ul style="list-style-type: none"> • Noise and Weeds, Grass and Refuse 	Administration
Adopted Plans	
CAMA Land Use Plan	Administration/Planning/Inspections*
Hazard Mitigation Plan	Administration /Contains Implementation Measures for All Departments
Emergency Operations Plan	Administration /Contains Implementation Measures for All Departments

* The Town of Sunset Beach currently does not have a formal Planning Department. The planning duties (including development plan review, zoning administration, code enforcement, and building inspections, etc.) are carried out by the Town Administrator, Town administration staff and the Building Inspector.

10.3.1 Existing Development Program in Implementing the LUP Policies and Goals

See Appendix V for a table describing how the existing ordinances and plans will assist in implementing the policies and goals of CAMA and the Land Use Plan.

10.4 Additional Tools for Managing Development

In addition to the existing development management program described in subsection 10.3, the Town may seek to establish additional programs or plans, or amend existing ordinances, to address currently unmet and/or future needs. Acquisition programs for the purchase of land for public uses or for infrastructure improvements may also be used as an additional tool for managing development. Some of those additional tools, their estimated implementation date and the responsible department for overseeing the development of those tools are listed in Table 42 below.

Table 42: Schedule for Implementing Additional Management Tools

Ordinances/Regulations	To be Done in Fiscal Year	Department Responsibility
Zoning Ordinance Amendments*		
1. Re-zone parcels currently used in a golf course field of play from MR-3 to “AF-1” or other zone with one acre minimum lot size, with allowable Planned Residential Developments as a Conditional Use if it meets the intent of Policy 19 (B) of the Land Use Plan.	FY 10-11	Administration
2. Text Amendment to Section 151.191 (B) to include allowing duplex in the MR-3 zoning district.	FY 10-11	Administration
3. Text Amendment to Section 151.003 to change the definition of multi-family to specifically refer to a structure as classified as multi-family if it contains “three or more attached units” on a single parcel.	FY 10-11	Administration
4. Text Amendment to Section 151.213 (B) (2) to add Section 151.195 (A) (1) to the listing of required standards for multi-family developments in the MB-1 zoning district.	FY 10-11	Administration
5. Text Amendment to Section 151.218 to add reference to Section 151.195 (A) (1) as a requirement for multi-family developments in the MB-2 zoning district.	FY 10-11	Administration
6. Text Amendment to § 153.193 (I) to change density requirement to reference “net” property area instead of “gross” property area. The definition of “net” property area shall exclude counting the lot’s required 35% open space as part of the total buildable lot area when determining the required lot area per unit. <i>Example: a 40,000 ft² lot would have a total buildable lot area of 26,000ft² when factoring out the required open space lot area.</i>	FY 10-11	Administration
7. Establish standards for density, open space, access management, architectural, landscaping, and types of allowable uses to establish an “island gateway” in the BB-1.	FY 10-11	Administration

Ordinances/Regulations	To be Done in Fiscal Year	Department Responsibility
Stormwater Management Ordinance Amendments <i>(in conjunction with County)</i> <ol style="list-style-type: none"> 8. Incorporate Phase II NPDES coastal rules 9. Consider requiring use of permeable surfaces for driveways, Parking spaces and other related structures 10. Consider Stormwater Utility 11. Consider using decommissioned septic systems as stormwater/rain retention cisterns 	FY 10-11	Administration
<ol style="list-style-type: none"> 12. Sewer Use Ordinance <i>(in conjunction with County)</i> <ol style="list-style-type: none"> b. To include requirement that mandatory connection apply for all private wastewater treatment systems in the Town. 	FY 10-11	Administration

10.5 Action Schedule

The Action Schedule is a listing of the priority actions the Town has set to accomplish in the planning period of this Land Use Plan (typically 5-6 years). The ‘actions’ to implement are derived from the goals and policy statements of the Land Use Plan. Actions may be added to the list in the future if situations change or new needs arise. The Action Schedule should be referenced with **subsection 10.4: Additional Tools for Managing Development** and **Table 42: Scheduled Additional Management Tools** which show the expected ordinance amendments intended to assist in reaching the goals and policies found in the Action Schedule and the Land Use Plan in general. Finally, the Action Schedule will be used as the benchmark to prepare a CAMA required implementation status report every two years for the life of the plan, beginning upon the Coastal Resources Commission’s certification of the Town’s Land Use Plan (see North Carolina Administrative Code 15A 7L .0511).

Note: A 2-year implementation status report must be submitted to the NCDCM (North Carolina Division of Coastal Management) within two years following certification by the Coastal Resources Commission.

Table 43: Action Schedule

Action	Management Topic Goal	Responsible Entity	2007-2008	2008-2009	2010-2011	2011-2012	2012-2013
1. Continue Expanding Public Participation in Land Use Planning.		Administration	→				→
2. Revise portions of the Zoning Ordinance to address internal consistency and to implement LUP goals and policies. See Table 42 for detailed list of recommended amendments.	Land Use Compatibility	Administration					
3. Construct sewer system to serve platted/developable areas (eliminate septic system and package treatment use).	Water Quality/ Infrastructure Carrying Capacity	Administration	→				
4. Revise stormwater management regulations to incorporate Phase II rules, and consider permeable surface provisions, LID and other management recommendations of County stormwater planning.	Water Quality	Administration	→				
5. Consider Establishing a Local Watershed Planning Group. Coordinate with adjacent jurisdictions and state agencies.	Water Quality	Administration	→				
7. Pursue mechanisms to preserve the existing 18-hole golf courses.	Land Use Compatibility	Administration	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
8. Conduct Bicycle and Pedestrian facilities planning to increase interconnectivity and access.	Land Use Compatibility/ Infrastructure Carrying Capacity	Administration	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
9. Implement public parking and public access enhancements as required by beach nourishment funding or other grant funding.	Public Access/ Land Use Compatibility	Administration	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing

Section II: Conclusion

This Land Use Plan (LUP) contains the adopted goals and policies for the Town of Sunset Beach which are to be implemented and followed over the next five to ten year planning period (from the date of LUP certification by the CRC), and beyond if an update is not conducted within 10 years. The intent of the policies and actions detailed in this plan are to be carried out in good faith by current and future elected officials and Town staff. Any public decisions by Town officials regarding growth and development (e.g. re-zonings, land use related ordinance revisions, conditional use permits, capital improvement projects, public grants, etc.) are to remain consistent with the policies, goals and objectives in this plan. To allow flexibility if circumstances or community preferences change, the Land Use Plan can be updated or amended. Current Land Use Plan updates are conducted through a grant from the Division of Coastal Management and are on a seven to ten year cycle, which is primarily determined by funding availability. The Town may undertake an amendment of the Land Use Plan at any time, but must follow the regulations found in North Carolina Administrative Code Title 15A, Chapter 7, Subchapter 7B, Section .0900-.0901.

Town of Sunset Beach CAMA Land Use Plan Appendix

Appendix I:	Community Land Use and Development Survey
Appendix II:	Citizen Participation Plan (Phase I and II)
Appendix III:	County Water System Master Plan - Program of Construction Table
Appendix IV:	Policy Impact Analysis Table
Appendix V:	Existing Development Program in Implementing the Policies and Goals of the Land Use Plan

TOWN OF SUNSET BEACH CAMA LAND USE PLAN SURVEY

The Town of Sunset Beach is currently updating its 1997 CAMA Land Use Plan with a grant received from the NC Division of Coastal Management. This opportunity allows town officials and citizens to plan for the future of Sunset Beach. As a first step in this process, the Town Council and Land Use Plan Steering Committee are surveying all residents and property owners to gather opinions on the desired direction for the community. Your opinion could help shape the future of the Town. **UPON COMPLETION OF THE SURVEY, PLEASE PLACE IN A STAMPED ENVELOPE AND MAIL BY DECEMBER 15, 2006 TO "TOWN OF SUNSET BEACH SURVEY", 700 SUNSET BOULEVARD N., SUNSET BEACH, NC 28468, OR YOU MAY ALSO DROP OFF THE SURVEY AT TOWN HALL.** Information on the progress of the CAMA Land Use Plan can be found at Town Hall or the Town website: <http://www.sunsetbeachnc.gov/>.

1. Please check your residency status and state the number of months of the year that you live at your Sunset Beach residence.

Type of Residency (Please check the most applicable status)	Check Residency Status	Number of Months Reside At Sunset Beach	Average Number of Household Residents/Occupants
Year-round Resident			
Seasonal/Second Home Property Owner or Resident			
Business Owner/Resident			
Business Owner/Non-Resident			

2. Do you feel that growth and development in Sunset Beach is happening...

- 1) Too fast 2) Just about right 3) Too slow 4) Sunset Beach has had enough growth

Why? (briefly) _____

3. Do you feel that the summer seasonal population and tourist population...

- 1) Exceeds town capacity 2) Is about right 3) Is low compared to other coastal towns

Why? (briefly) _____

4. The Town is made up of two distinct geographic areas (island and mainland), what type of development should be encouraged or discouraged on the island and mainland portions of Town? Please leave blank if you have no preference.

Type of Development	ISLAND		MAINLAND	
	Encouraged	Discouraged	Encouraged	Discouraged
Single-family Residential				
Duplexes				
Multi-family/Condominiums				
Mobile Homes				
Hotels and Motels				
Restaurants				
Retail and Services				
Recreation				

5. What do you think are the most important issues facing Sunset Beach? Rank each item according to the following scale: 5 = Major Issue 3 = Minor Issue 0 = Not an Issue

Type of Buildings Allowed on the Island Growth Management and Regulation Environmental Protection Housing Types Being Developed (e.g. Multi-family) Types of Commercial Development Sewer and Water Capacity Managing Stormwater Runoff Density of Development	Redevelopment of Existing Structures Traffic Congestion and Management Beach Renourishment Beach Access and Parking Public Boat Access Annexation Other Issues: _____ _____
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6. What in your opinion is the most important issue facing the Town of Sunset Beach and why (briefly)?

7. What is your vision for Sunset Beach by 2015? (Please Circle One Choice)

- To develop as a small-scale¹ residential community
- To develop as a large-scale² residential community
- To develop as a small-scale tourist resort area
- To develop as a large scale tourist resort area
- To develop as a small-scale golfing/retirement community
- To develop as a large-scale golfing/retirement community

Other/Combination or variation of above: _____

¹Small-scale means allowing for limited population growth through lower density residential and commercial buildings, and limited height of buildings.

²Large-scale means allowing for higher population growth through higher density residential and commercial buildings, and a wider range of height in buildings.

MEMO

To: Linda Fluegel, Town Administrator
From: Scott Logel, Cape Fear Council of Governments
Date: February 22, 2007
Re: 2006/2007 CAMA Land Use Plan Survey Tabulated Responses

Attached are the tabulated responses of the 2006/2007 Land Use Plan survey.
The following pages contain:

1. The tabulated responses of all survey responses received (pages 1 and 2)
2. The tabulated responses of the surveys received from year-round residents (pages 3 and 4)
3. The tabulated responses of the surveys received from non-residents (pages 5 and 6).

Summary of Survey Highlights

- The survey was mailed to all properties (tax parcels) in the Town limits and ETJ between November and December 2006.
- The total number of surveys mailed was 3,656.
- There were 1,146 surveys returned (31% return rate).
- There were 427 surveys returned from year-round residents (37% of the total returned). 427 is approximately 20% of the Town's total permanent population.
Note: Only one survey sent per household/address not per person. In other words, 427 surveys likely means 427 households with one or more people contributing to the completion of the survey.
- There were 719 surveys returned from non-residents (63% of the total returned).
- The surveys were 'voluntary response' and were intended to be a wide-spread method of gathering public opinion on a few key land-use and growth related topics.
- The results on the following pages indicate that there was a substantial majority opinion among those who responded to the survey for discouraging multi-family housing.
- The results on the following pages indicate that there was a substantial majority opinion among those who responded to the survey for developing the Town over the next ten years with structures and amenities that are consistent with a "small-scale" Town characteristic.
- The results on the following pages also indicate that there was a substantial majority opinion among those who responded to the survey for closely managing growth and development which includes building heights, uses and densities.
Please see the following pages for a tabulation of the responses.

Results of All Surveys (Both Resident and Non-Resident)

Question: Do you feel that growth and development in Sunset Beach is happening...

Too Fast	479 (42%)
Just About Right	333 (29%)
Too Slow	31 (3%)
Town Has Had Enough Growth	280 (24%)
No Response to Question	18 (2%)
TOTAL	1,146

Question: Do you feel that the summer seasonal population and tourist population...

Exceeds Town Capacity	437 (38%)
Just About Right	620 (54%)
Is Low In Comparison to Other Beaches	41 (4%)
No Response to Question	48 (4%)
TOTAL	1,146

Question: What type of development should be encouraged or discouraged on the island and mainland portions of Town?

Type of Development	Island			Mainland		
	Encouraged	Discouraged	No Response	Encouraged	Discouraged	No Response
Single-family Residential	855 (75%)	129 (11%)	162 (14%)	875 (76%)	53 (5%)	218 (19%)
Duplexes	300 (26%)	670 (59%)	176 (15%)	409 (36%)	439 (38%)	298 (26%)
Multi-family	54 (5%)	920 (80%)	172 (15%)	221 (19%)	649 (57%)	276 (24%)
Mobile Homes	6 (0.5%)	966 (84%)	174 (15%)	76 (7%)	789 (69%)	281 (24%)
Hotels and Motels	84 (7%)	888 (77%)	174 (15%)	254 (22%)	595 (52%)	297 (26%)
Restaurants	415 (36%)	516 (45%)	215 (19%)	792 (69%)	134 (12%)	220 (19%)
Retail and Services	284 (25%)	590 (52%)	272 (24%)	718 (63%)	163 (14%)	265 (23%)
Recreation	538 (47%)	367 (32%)	241 (21%)	771 (67%)	118 (10%)	257 (22%)

Question: What in your opinion is the most important issue facing the Town of Sunset Beach and why?

Density/Height and Growth Management	536 (47%)
Sewer	167 (15%)
Bridge	125 (11%)
Traffic	65 (6%)
Environmental Protection and Stormwater	47 (4%)
Infrastructure in General	23 (2%)
Beach/Water Access and Parking	25 (2%)
Community Cooperation	17 (1.5%)
Fire/Emergency Services	6 (0.5%)
Town Fiscal Responsibility	3 (0.3%)
Re-development of Run-down Structures	3 (0.3%)
More Input from Non-Residents	3 (0.3%)
Code Enforcement	2 (0.2%)
Fairly Promoting Growth	2 (0.2%)
More Jobs	2 (0.2%)
Impact Fees	2 (0.2%)
Trash Pick-up	1 (0.05%)
No Response to Question	117 (10%)
TOTAL	1,146

Question: What is your vision for Sunset Beach by 2015?

Small-scale Residential	434 (38%)
Small-scale Retirement/Golfing	192 (17%)
Small-scale Tourist Resort	185 (16%)
Small-scale Residential and Tourist	106 (9%)
Small-scale Residential and Retirement	72 (6%)
Small-scale Residential/Retirement/Tourist	47 (4%)
Large-scale Retirement/Golfing	33 (3%)
Large-scale Residential	28 (2%)
Large-scale Tourist Resort	12 (1%)
Medium Scale Residential	5 (0.4%)
Large-scale Residential and Retirement	4 (0.4%)
No Response to Question	28 (2%)
TOTAL	1,146

END OF QUESTIONS

Year-Round Resident Responses Only

Question: Do you feel that growth and development in Sunset Beach is happening...

Too Fast	225 (53%)
Just About Right	108 (25%)
Too Slow	10 (2%)
Town Has Had Enough Growth	79 (19%)
No Response to Question	5 (1%)
TOTAL	427

Question: Do you feel that the summer seasonal population and tourist population...

Exceeds Town Capacity	161 (37%)
Just About Right	238 (56%)
Is Low In Comparison to Other Beaches	17 (4%)
No Response to Question	11 (3%)
TOTAL	427

Question: What type of development should be encouraged or discouraged on the island and mainland portions of Town?

Type of Development	Island			Mainland		
	Encouraged	Discouraged	No Response	Encouraged	Discouraged	No Response
Single-family Residential	294 (69%)	59 (14%)	74 (17%)	336 (79%)	27 (6%)	64 (16%)
Duplexes	124 (29%)	193 (45%)	110 (26%)	142 (33%)	181 (42%)	104 (25%)
Multi-family	23 (5%)	339 (79%)	65 (16%)	42 (10%)	299 (70%)	86 (20%)
Mobile Homes	4 (1%)	349 (82%)	74 (17%)	21 (5%)	314 (74%)	92 (21%)
Hotels and Motels	42 (10%)	312 (73%)	73 (17%)	80 (19%)	236 (55%)	111 (26%)
Restaurants	174 (41%)	163 (38%)	90 (21%)	280 (66%)	63 (15%)	84 (19%)
Retail and Services	123 (29%)	193 (45%)	111 (26%)	251 (59%)	71 (17%)	105 (24%)
Recreation	228 (53%)	103 (24%)	96 (23%)	298 (70%)	39 (9%)	90 (21%)

Question: What in your opinion is the most important issue facing the Town of Sunset Beach and why?

Density/Height and Growth Management	181 (42%)
Sewer	72 (17%)
Traffic	38 (9%)
Bridge	29 (7%)
Environmental Protection and Stormwater	17 (4%)
Infrastructure in General	17 (4%)
Beach/Water Access and Parking	10 (2%)
Community Cooperation	9 (2%)
Fire/Emergency Services	4 (1%)
Town Fiscal Responsibility	3 (1%)
Re-development of Run-down Structures	3 (1%)
Fairly Promoting Growth	2 (.5%)
More Jobs	2 (.5%)
Impact Fees	2 (.5%)
No Response to Question	38 (9%)
TOTAL	427

Question: What is your vision for Sunset Beach by 2015?

Small-scale Residential	151 (35%)
Small-scale Retirement/Golfing	114 (27%)
Small-scale Tourist Resort	38 (9%)
Small-scale Residential and Retirement	34 (8%)
Small-scale Residential and Tourist	28 (7%)
Small-scale Residential/Retirement/Tourist	18 (4%)
Large-scale Residential	15 (3.5%)
Large-scale Retirement/Golfing	10 (2%)
Large-scale Tourist Resort	4 (1%)
Large-scale Residential and Retirement	2 (0.5%)
No Response to Question	13 (3%)
TOTAL	427

END OF QUESTIONS

Non-Resident Responses Only (seasonal residents, property owners, and business owners)

Question: Do you feel that growth and development in Sunset Beach is happening...

Too Fast	254 (35%)
Just About Right	225 (31%)
Too Slow	21 (3%)
Town Has Had Enough Growth	201 (28%)
No Response to Question	18 (3%)
TOTAL	719

Question: Do you feel that the summer seasonal population and tourist population...

Exceeds Town Capacity	276 (38%)
Just About Right	382 (53%)
Is Low In Comparison to Other Beaches	24 (3%)
No Response to Question	37 (5%)
TOTAL	719

Question: What type of development should be encouraged or discouraged on the island and mainland portions of Town?

Type of Development	Island			Mainland		
	Encouraged	Discouraged	No Response	Encouraged	Discouraged	No Response
Single-family Residential	561 (78%)	70 (10%)	88 (12%)	539 (75%)	26 (4%)	154 (21%)
Duplexes	176 (24%)	477 (66%)	66 (9%)	267 (37%)	258 (36%)	194 (27%)
Multi-family	31 (4%)	581 (81%)	107 (15%)	179 (25%)	350 (49%)	190 (26%)
Mobile Homes	2 (0.3%)	617 (86%)	100 (13%)	55 (8%)	475 (66%)	189 (26%)
Hotels and Motels	42 (6%)	576 (80%)	101 (14%)	174 (24%)	359 (50%)	186 (26%)
Restaurants	241 (34%)	353 (49%)	125 (17%)	512 (71%)	71 (10%)	136 (19%)
Retail and Services	161 (22%)	397 (55%)	161 (22%)	467 (65%)	92 (13%)	160 (22%)
Recreation	310 (43%)	264 (37%)	145 (20%)	473 (66%)	79 (11%)	167 (23%)

Question: What in your opinion is the most important issue facing the Town of Sunset Beach and why?

Density/Height and Growth Management	355 (49%)
Bridge	96 (13%)
Sewer	95 (13%)
Environmental Protection and Stormwater	30 (4%)
Traffic	27 (4%)
Beach/Water Access and Parking	15 (2%)
Community Cooperation	8 (1%)
Infrastructure in General	6 (0.8%)
More Input from Non-Residents	3 (0.4%)
Fire/Emergency Services	2 (0.2%)
Code Enforcement	2 (0.2%)
Trash Pick-up	1 (0.1%)
Town Fiscal Responsibility	0
<i>No Response to Question</i>	79 (11%)
<i>TOTAL</i>	719

Question: What is your vision for Sunset Beach by 2015?

Small-scale Residential	283 (39%)
Small-scale Tourist Resort	147 (20%)
Small-scale Retirement/Golfing	78 (11%)
Small-scale Residential and Tourist	78 (11%)
Small-scale Residential and Retirement	38 (5%)
Small-scale Residential/Retirement/Tourist	29 (4%)
Large-scale Retirement/Golfing	23 (3%)
Large-scale Residential	13 (2%)
Large-scale Tourist Resort	8 (1%)
Medium-scale Residential	5 (0.7%)
Large-scale Residential and Retirement	2 (0.2%)
<i>No Response to Question</i>	15 (2%)
<i>TOTAL</i>	719

END OF QUESTIONS

**CITIZEN PARTICIPATION PLAN
TOWN OF SUNSET BEACH
CAMA CORE LAND USE PLAN
PHASE I**

I. Introduction

The Town of Sunset Beach is beginning the development of a Core Land Use Plan (LUP) under the North Carolina Coastal Area Management Act (CAMA). Land use planning provides one of the best opportunities for public involvement in the NC Coastal Management Program, and the CAMA planning program emphasizes public participation in the planning process. Interested citizens and nonresident property owners will have an opportunity to help shape the policies that will impact the growth of the Town in the future and guide CAMA permit decisions in the community.

Coordination and discussion with other municipalities and County officials on policy matters will be a part of this process. All socio-economic, ethnic, and cultural viewpoints will be considered through the plan review and revision process. To the fullest extent possible, persons representing diverse viewpoints will be identified and specifically notified and asked for their input.

II. Purpose of Citizen Participation Plan

This Citizen Participation Plan (CPP) has been prepared to describe a process by which the public will be encouraged to participate in the planning process leading to the revision of the Town of Sunset Beach CAMA Core LUP. This Citizen Participation Plan has been designed to meet the requirements for public participation as outlined in 15A NCAC 7L.0506. It is the intent of the process described herein that the public would have ample opportunity to become a meaningful part of the planning process. This plan addresses the following objectives.

1. To share information about the CAMA planning process and its requirements;
2. To increase the community's understanding of the impact that land use and development issues have on quality of life;
3. To provide opportunities for the residents and property owners to participate in the identification of land use and development policies and to assess the impact of the policies on the community; and
4. To provide a forum where all economic, social, ethnic and cultural viewpoints will be considered throughout the land use process.

Views gathered as a part of this process will be informative and instructional for citizens of the Town of Sunset Beach, interested parties, and the Town's elected and appointed Boards. Interested citizens shall have an opportunity to participate in the development of the CAMA Core LUP through oral and written comments as provided for in the Citizen Participation Plan. Copies of informational CAMA Core LUP materials shall be provided at all meetings, available at a designated area of Town Hall, via an email list serve or upon request by members of the public. The Citizen Participation Plan shall be available to the public throughout the planning process. The CPP is a working document, and may be amended on an as needed basis.

III. Designation of Lead Planning Group and Points of Contact

By designation of the Mayor and Town Council, the principle local board responsible for supervision of the planning process will be the Town of Sunset Beach Planning Board. The principal points of contact for land use plan preparation shall be Al Seibert, Chairman of the Planning Board; Penny Tysinger, Planner in Charge; and Linda Fluegel, Town Administrator. The names and contact information for the Planning Board and Town Council are listed in Attachment A, attached hereto and made a part of by reference.

The Planning Board is responsible for providing overall leadership and guidance for preparation of the land use plan. The members of the Planning Board have the following specific duties and responsibilities:

1. Faithfully attend Planning Board meetings and provide overall direction for development of the draft land use plan;
2. Serve as a public contact to make it easier for citizens to get information and to make comments on the plan;
3. Review technical planning materials provided by staff to help ensure that they accurately represent the current situation and recent trends in Sunset Beach;
4. Assist the Town's planning advisors (Administrator, Public Works, etc.) with preparation of major plan elements, which includes identifying concerns and key planning issues, developing community vision, developing goals, and preparing draft policies and the future land use map;
5. Assist with organization, management, and facilitation of public participation events;
6. Help publicize public participation events in the community and recruit residents and property owners to attend; and
7. Recommend and present a complete land use plan to the Town Council at the end of the planning process.

IV. Public Information and Public Input

Planning Board Meetings

The Planning Board meets regularly on the Third Thursday of each month at 9:00 AM in the Council Chambers of Town Hall. Workshops on the Land Use Plan will be held on the First Thursday of each month at 9:00 AM in the Council Chambers of Town Hall. Special meetings may be called as necessary. In order to comply with the NCGS 143-318.9 to 143-318.18, a schedule of the Planning Board's meetings is available from the Town Administrative Department. This schedule is also provided to the Town Clerk for posting and distribution of the required notices. The Planning Board Chairman will notify Town staff of any changes to the schedule and of any special meetings so that proper notice may be given.

All Planning Board agendas will allocate time to hear comments on the land use plan from the public. The Town will keep a record in the minutes of all residents, property owners, and others who speak at any of the Planning Board meetings or other events and will retain any land use plan comments that it receives. The names of speakers and written comments will be kept in a file maintained by the planner in charge and will be provided to the NC Division of Coastal Management District Planner during draft plan review. Attachment B provides a general outline of the meeting schedule and gives a purpose for each meeting.

Initial Public Information Meeting

The initial public information meeting (Community Meeting), which is a required portion of the CAMA planning process, will be held on April 6, 2006. The Town will conduct a second public information meeting (Open House) in the late Fall of 2006. The Town must give two public notices of the initial public information meeting. The first notice must appear not less than 30 days before the meeting and the second must appear not less than 10 days before the meeting. Affidavits of publication will be kept as evidence that this requirement has been met. In addition to the public notices, the CAMA grant requires the Town to notify the Coastal Resources Advisory Council area representative(s) and the NC Division of Coastal Management District Planner of the date, time, and place of the public information meeting.

The planning team (Town staff, Planning Board members and planner in charge) will periodically issue press releases and make efforts to notify the local media of available information on the Town's land use planning program.

The purpose of the initial public meeting will be to inform citizens about the purpose of the CAMA land use plan, to solicit public input in the identification of key growth and development issues facing the Town, and to solicit public input in the creation of a Town Vision Statement.

V. Participation Methods

The Town will use two methods of public participation in the preparation of the land use plan. The first method will be to hold a Community Meeting that will allow residents and property owners to express concerns about land use and development and to set priorities for development of the land use plan. The second method will be to hold a community Open House where the community can review and comment on the complete first phase (Phase I) draft of the land use plan.

Community Meeting

The Planning Board will conduct a facilitated Community Meeting to assist in identifying a broad range of land use issues, concerns, and opportunities within the community. The Community Meeting will be held in April of 2006. At this meeting, residents and property owners will create a single list of issues and opportunities about which there is a high level of agreement among those attending. The Community Meeting will be conducted in two parts. The first part will include a brief introduction to the CAMA planning process and background planning materials. The second part may involve small group brainstorming sessions, depending on number of citizens in attendance, on land use planning concerns, issues, and opportunities. After the small group sessions, the entire group will generate a single list of the most important issues and opportunities within the community. After the top issues have been identified, the participants of the Community Meeting will review a draft Vision Statement. The Vision Statement is intended to briefly describe the desired characteristics and growth patterns the Town wishes to pursue in the near future (5-10 years).

The Planning Board Chairman will chair the meeting. Town staff and the planner in charge will provide background information and will facilitate the overall group exercise. Planning Board members may assist as facilitators for the small group exercises.

The Community Meeting will be publicized through the local media, informational flyers, posting on the Town's web page (if applicable), and through "recruiting" and "word of mouth" by members of the Planning Board and other interested citizens.

The intended audience for this public participation opportunity may include residents, and nonresident property owners, business owners and operators, real estate professionals, members of Town committees and associations and other parties with a stake in the Town's land use plan.

Community Open House

The Town of Sunset Beach will hold a community Open House near the end of Phase I of the land use planning process. The Open House will be held in the late Fall of 2006. The Open House may be held on a Saturday to allow nonresident property owners a convenient opportunity to attend.

The Open House will provide residents with an easy opportunity to review all the information (tables, summaries, maps, etc) prepared as part of the first phase (Phase I) of the planning process. By review of the material presented, residents will be able to assess trends, find out about their community, and to express support or recommend adjustments. An introduction of the second phase (Phase II) of the Land Use Plan will also be included in the Open House. At the Open House, the attendees will be able to interact informally with members of the planning team. A Joint Meeting with Town Council may be held immediately after the Open House, where Council is presented with a draft plan of Phase I and may wish to formally comment on the direction of the Plan.

VI. Citizen Participation Plan Evaluation

The Planning Board will conduct an on going evaluation of the Citizen Participation Plan and will make amendments to this plan as it becomes necessary. It is expected that Phase II of the LUP will begin at the beginning of calendar year 2007. A major review of the process and a reevaluation will be conducted at that time. Any amendments will be reviewed by the Planning Board and recommended to the Town Council for adoption.

This Citizen Participation Plan is adopted this the ____ day of _____, 2006 at the Town of Sunset Beach, North Carolina.

By _____ s/ _____
Ron Klein, Mayor
Town of Sunset Beach

ATTEST:

By _____ s/ _____
Kim Allen, Town Clerk

By _____ s/ _____
Linda Fluegel, Town Administrator

Attachment A

Sunset Beach Town Council

Members

Term Expires

Ronald Klein, Mayor
952 Oyster Pointe Drive
Sunset Beach, NC 28469
579-1354 (H)

December 2007

W. Carl Bazemore, Mayor Pro-Tem
407 Shoreline Drive West
Sunset Beach, NC 28468
579-0261 (H)

December 2007

Ron Watts, Councilman
421 Shoreline Drive West
Sunset Beach, NC 28469
579-3452 (H)

December 2009

Bob Bobinski., Councilman
155 Edgewater Circle
Sunset Beach, NC 28468
579-3866 (H)

December 2007

Lou DeVita, Councilman
223 Crooked Gulley Circle
Sunset Beach, NC 28468
579-2780 (H)

December 2009

Len Steiner, Councilman
613 Kings Trail
Sunset Beach, NC 28468
579-4949 (H)

December 2009

Sunset Beach Planning Board/Board of Adjustment

Members

Term Expires

Al Selbert, Chairperson
731 Longleaf Drive
Sunset Beach, NC 28468
579-9889

August 2006

Eddie Walters, Vice Chairperson
643 Shoreline Drive West
Sunset Beach, NC 28468
579-5968

August 2008

Fred Abernethy
219 Baroney Place Drive
Sunset Beach, NC 28468
579-9179

August 2007

Carol Santavicca (ETJ Alternate Member)
9109 Forest Drive SW
Calabash, NC 28467
579-7868

August 2006

Shirley Shape
8916 Bonaparte Drive SW
Sunset Beach, NC 28468
579-7821

August 2006

Linda Thole
642 Oyster Bay Drive
Sunset Beach, NC 28468
575-3240

August 2007

Leon August (Alternate Member)
279 Heather Drive
Sunset Beach, NC 28468
575-0751

August 2008

Attachment B

ITEMS COVERED IN MEETING (SUBJECT TO CHANGE)

<u>Meeting</u>	<u>Items Covered</u>
February/March 2006 meeting	Hold Orientation session with Planning Board. Presentation of Citizen's Participation Plan (adoption by Council at April meeting). Discussion of CAMA regulations, planning process, & key growth issues & planning issues. Begin to create vision statement.
April 2006 (Community Meeting)	Initial public information meeting. Discussion of existing & emerging conditions, and Vision Statement
April 2006 meeting	No Meeting
May 2006 meeting	Discussion of Population, Housing and Economy. Discussion of Natural Systems Analysis. Discussion of Land Use & Development (including existing land use map)
June 2006 meeting	No Meeting
July 2006 meeting	Discussion of Community Facilities. Environmental Composite Map and Land Suitability Analysis (LSA)
September/October 2006 meeting	Community Open House. Joint meeting/public hearing with Council to discuss plan elements. Phase I completed and recommended to Council.

**CITIZEN PARTICIPATION PLAN
TOWN OF SUNSET BEACH
CAMA CORE LAND USE PLAN
PHASE TWO**

I. Introduction

The Town of Sunset Beach is beginning development of a Core Land Use Plan under the North Carolina Coastal Area Management Act (CAMA). The CAMA planning program emphasizes public participation in the planning process and land use planning provides one of the best opportunities for public involvement in the NC Coastal Management Program. Interested citizens and non resident property owners will have an opportunity to help shape the policies that will guide CAMA permit decisions in the community and the growth of the Town in the future.

Coordination and discussion with area/island municipalities and County officials on policy matters will be a part of this process. All socio-economic, ethnic, and cultural viewpoints will be considered through the review and revision process. To the extent possible, persons representing diverse viewpoints will be identified and specifically notified and asked for their input.

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1. To share information about the CAMA planning process and its requirements;
2. To increase the community's understanding of the impact that land use and development issues have on quality of life;
3. To provide opportunities for the residents and property owners to participate in the identification of land use and development policies and to assess the impact of the policies on the community; and
4. To provide a forum where all economic, social, ethnic and cultural viewpoints will be considered throughout the land use process.

Views gathered as a part of this process will be informative and instructional for citizens of the Town of Sunset Beach, interested parties, and the Town's elected and appointed Boards. Interested citizens shall have an opportunity to participate in the development of the CAMA Core LUP through oral and written comments as provided for in the Citizen Participation Plan. Copies of informational CAMA Core LUP materials shall be provided at all meetings. The Citizen Participation Plan shall be available to the public throughout the planning process. All socio-economic, ethnic and cultural viewpoints will be considered through the review and revision process. To the extent possible, persons representing diverse socio-economic, ethnic and cultural viewpoints will be identified and specifically notified and asked for their input. The CPP is a working document, and may be amended on an as needed basis.

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8. Faithfully attend Planning Board meetings and provide overall direction for development of the draft Land Use Plan;
9. Serve as a public contact to make it easier for citizens to get information and to make comments on the plan;
10. Review technical planning materials to help ensure that they accurately represent the current situation and recent trends in Sunset Beach;
11. Assist the Town's planning advisors (Town Administrator, planning consultants and other staff) with preparation of major plan elements, which includes identifying concerns and key plan issues, developing community vision, developing goals, and preparing draft policies and the future land use map;
12. Assist with organization, management, and facilitation of public participation events;
13. Help publicize public participation events in the community and recruit residents and property owners to attend; and
14. Recommend and present a Land Use Plan to the Town Council.

IV. Public Information and Public Input

Planning Board Meetings

The Planning Board meets regularly on the first and third Thursdays of each month at 9:00 AM in Town Hall. Workshops on the Land Use Plan update will be held on the first Thursday of each month at 9:00 AM in Town Hall. Special meetings may be called as necessary. In order to comply with the NCGS 143-318.9 to 143-318.18, a schedule of the Planning Board's meetings is available from the Town Administration Department. This schedule is also provided to the Town Clerk for posting and distribution of the required notices. The Planning Board Chairman will notify Town staff of any changes to the schedule and of any special meetings so that proper notice may be given.

All Planning Board agendas will allocate time to hear comments on the Land Use Plan from the public. The Town will keep a record of all residents, property owners, and others who attend any of the Planning Board meetings or other events and will retain any written Land Use Plan comments that it receives. Any written comments received will be kept in a file and will be provided to the NC Division of Coastal Management District Planner during draft plan review. Attachment B provides a general outline of the meeting schedule and gives a purpose for each meeting.

Initial Public Information Meeting

The initial public information meeting, which is a required portion of the CAMA planning process, *was held* on April 6, 2006. *The Town conducted a second public information meeting on February 1, 2007.* The Town gave two public notices prior to the public information meetings, and must give two public notices prior to any other scheduled public information or public hearing meetings. The first notice must appear not less than 30 days before the meeting and the second must appear not less than 10 days before the meeting. Affidavits of publication will be kept as evidence that this requirement has been met. In addition to the public notices, the CAMA grant requires the Town to notify the Coastal Resources Advisory Council area representative(s) and the NC Division of Coastal Management District Planner of the date, time, and place of the public information meeting.

The planning team will periodically issue press releases and make efforts to notify the local media of available information on the Town's land use planning program.

The purpose of the initial public meeting was to inform citizens about the purpose of the CAMA Land Use Plan and the steps that will be taken to update it. The purpose of the second public information meeting was to solicit additional public comment and formally conclude the first phase and enter the second and final phase of the Land Use Plan Update.

V. Participation Methods

The Town will use three methods of public participation (or public information meetings) in the preparation of the Land Use Plan. The first method was to hold a community meeting that allowed residents and property owners to express concerns about land use and development and to set priorities for development of the Land Use Plan. The second method was to hold a community open house where the community could review draft information available as a part of phase I of the Land Use Plan preparation. The third method will be to hold a public hearing in which the Town Council will allow additional public comment and will adopt the Land Use Plan Update by formal resolution.

Community Meeting

The Planning Board conducted a facilitated community meeting to assist in identifying a broad range of land use issues, concerns, and opportunities. At this meeting residents and property owners created a single list of issues and opportunities about which there is a high level of agreement among those attending. The community meeting was conducted in two parts. The first part included a brief introduction to the CAMA planning process and background planning materials. The second part involved small group brain storming sessions on land use planning concerns, issues, and opportunities. After the small group sessions, the entire group generated a single list of the most important issues and opportunities.

The Planning Board Chairman chaired the meeting. Town staff and the planner in charge provided background information and assisted with the overall group exercise. Planning Board members assisted as facilitators for the small group exercises.

The community meeting was publicized through the local media, information flyers, posting on the Town's web page, and through recruiting by members of the Planning Board and other interested citizens.

The intended audience for this public participation opportunity included residents, resident and nonresident property owners, business owners and operators, real estate professionals, members of Town committees and associations and other parties with a stake in the Town's Land Use Plan.

Community Open House

The Town of Sunset Beach held a community open house near the end of phase I of the land use planning process. The open house *was held on February 1, 2007*. The open house provided residents with an easy opportunity to review the information prepared as a part of the planning process. By review of the material presented, residents were able to assess trends, find out about their community, and to express support or recommend adjustments. The attendees were able to interact informally with lay and professional members of the planning team.

Public Hearing

The Town of Sunset Beach will hold a public hearing at the end of phase II of the land use planning process. The public hearing will be publicized by two public notices in a locally circulated newspaper. The first notice must appear not less than 30 days before the hearing and the second must appear not less than 10 days before the hearing. Affidavits of publication will be kept as evidence that this requirement has been met. The purpose of the public hearing is to allow final public comment on the draft Land Use Plan Update and for the Town Council to adopt the Land Use Plan Update by formal resolution.

VI. Citizen Participation Plan Evaluation

The Planning Board will conduct an on going evaluation of the Citizen Participation Plan and will make amendments to this plan as it becomes necessary. It is expected that phase II of the LUP will begin at the beginning of calendar year 2007 and end in late summer of 2007. A review of the process and a reevaluation will be conducted at that time. Any needed changes will be reviewed by the Planning Board and recommended to the Town Council.

This Citizen Participation Plan is adopted this the 2nd day of April, 2007 by the Town of Sunset Beach, North Carolina.

By _____ s/ _____
Ronald Klein,
Mayor, Town of Sunset Beach

ATTEST:

By _____ s/ _____
Kim Cochran, Town Clerk

By _____ s/ _____
Gary Parker, Town Administrator

Attachment A

Sunset Beach Town Council

Members

Term Expires

Ronald Klein, Mayor
952 Oyster Pointe Drive
Sunset Beach, NC 28469
579-1354 (H)

December 2007

W. Carl Bazemore, Mayor Pro-Tem
407 Shoreline Drive West
Sunset Beach, NC 28468
579-0261 (H)

December 2007

Ron Watts, Councilman
421 Shoreline Drive West
Sunset Beach, NC 28469
579-3452 (H)

December 2009

Bob Bobinski, Councilman
155 Edgewater Circle
Sunset Beach, NC 28468
579-3866 (H)

December 2007

Lou DeVita, Councilman
223 Crooked Gulley Circle
Sunset Beach, NC 28468
579-2780 (H)

December 2009

Len Steiner, Councilman
613 Kings Trail
Sunset Beach, NC 28468
579-4949 (H)

December 2009

Sunset Beach Town Council (2010)

Members

Term Expires

Ronald Klein, Mayor
952 Oyster Pointe Drive
Sunset Beach, NC 28469
579-1354 (H)

December 2011

Lou DeVita, Mayor Pro-Tem
233 Crooked Gulley Circle
Sunset Beach, NC 28468
579-2780 (H)

December 2013

Karen Joseph, Councilwoman
915 Sandpiper Bay Drive
Sunset Beach, NC 28468
579-4891 (H)

December 2013

Wilson Sherrill, Councilman
1112 Park Road
Sunset Beach, NC 28468
575-3083 (H)

December 2011

Carol Scott, Councilwoman
1214 East Main Street
Sunset Beach, NC 28468
579-9104 (H)

December 2013

Bob Bobinski, Councilman
155 Edgewater Circle
Sunset Beach, NC 28468
579-3866 (H)

December 2011

Sunset Beach Planning Board/Board of Adjustment (2010)

<u>Members</u>	<u>Term Expires</u>
William (Bill) McDonald, Chairperson 7487 Balmore Dr Sunset Beach, NC 28468	August 2010
Russell Allen, Vice Chair 9048 Sea Lane SW Sunset Beach, NC 28468	August 2010
Al Siebert 731 Longleaf Drive Sunset Beach, NC 28468	August 2011
Leon August 279 Heather Drive Sunset Beach, NC 28468	August 2007
Sybil Kesterson, Alternate ETJ Member 8975 Woodbine Rd SW Sunset Beach, NC 28468	February 2012
Eddie Walters, Alternate Member 10020 Beach Dr SW Calabash, NC 28467	August 2011

Sunset Beach Planning Board/Board of Adjustment

Members

Term Expires

Al Selbert, Chairperson
731 Longleaf Drive
Sunset Beach, NC 28468

August 2009

Eddie Walters, Vice Chairperson
643 Shoreline Drive West
Sunset Beach, NC 28468

August 2008

Fred Abernethy
219 Baroney Place Drive
Sunset Beach, NC 28468

August 2007

Carol Santavicca
9109 Forest Drive SW
Calabash, NC 28467

August 2009

Leon August
279 Heather Drive
Sunset Beach, NC 28468

August 2007

Bob Perry (Alternate Member)
932 Oyster Point Drive
Sunset Beach, NC 28468

August 2009

T.S. Childers (ETJ Alternate Member)
9097 Forest Drive SW
Calabash, NC 28467

August 2009

Attachment B (Subject to Change)

<u>Meeting</u>	<u>Items Covered</u>
December 2006 meeting	Review of the 1997 Plan & Evaluate implementation of Policies to date.
January 2007 meeting	No meeting.
February 2007 meeting	Begin establishing LUP policy. "Land Use Compatibility".
March 2007 meeting	Continued discussion of LUP Policies.
April 2007 meeting	Continued discussion of LUP Policies.
May 2007 meeting	Discussion of Future Land Use Map.
June 2007 meeting	Discussion of Development Management tools and policy implementation actions. Analysis of developed policies for compliance with management topics.
July 2007 meeting	Review of Draft Plan. Public Information meeting. Submit to DCM Staff for review. Submit to adjacent jurisdictions for review.
August 2007 meeting	Revise plan as needed per comments and recommendations received from DCM.
September 2007 meeting	Final review by the Planning Board. Conduct public hearing and Council adoption.
October 2007 meeting	<i>Submit plan for CRC Certification.</i>

Appendix III: County Water System Master Plan - Program of Construction Table

Program of Construction						
Map Ref. No.	Location	Size(in) of No. Items	Length feet	Estimated Cost	Totals	Reason for Improvement
Phase 1 - Immediate Needs						
I-1	Bethel Road Loop pipeline	12	10,000	\$475,000		Poor Fire Flow
I-2	Beach Road parallel line in Calabash	12	8,300	\$395,000		Poor Fire Flow
I-3	Shallotte Interconnection	16	6,600	\$495,000		Poor Fire Flow
I-4	Dutchman's Acre Tie-In	12	100	\$5,000		Poor Fire Flow
I-5	River Road/Southport Connection	24	425	\$61,000		12-inch bottleneck
I-6	Sandpiper Bay Loop Tie-In	12	1,300	\$62,000		Poor Fire Flow
I-7	Caswell Meter/Piping Modifications			\$25,000		High head loss through pipe/meters
Phase 1 - Subtotal					\$1,518,000	
Phase 2A - Pipeline Improvements Needed By 2015						
IIA-1	Northwest Loop Pipeline from Leland Tank to Highway 17 along US 74/76, Malmo Loop, Colin-Mintz Rd and Maco Road (NC 87)	36	45,700	\$13,500,000		Low Pressures in 2015
IIA-2	Northwest Loop Pipeline to tie-in with 36-inch pipeline following NC 74/76 and Maco Road (NC 87)	12	31,400	\$1,500,000		Low Pressures in 2015
IIA-3	Parallel 30-inch line from NC 17 and NC 87/17 Intersection to Bell Swamp Pumping Station	30	20,000	\$4,250,000		Low Pressures in 2015
IIA-4	Hwy 211/17 area to Stone Chimney Line	16	2,500	\$188,000		
IIA-5	Bell Swamp BPS parallel line to Hwy 211/17 Intersection following Highway 17 Bypass	30	70,000	\$17,875,000		Low Pressures in 2015
IIA-6	Parallel Line from Boiling Spring Lakes Tank to Boiling Spring Lakes meter vaults	24	12,100	\$1,750,000		Low Pressures in 2015
Phase 2A - Subtotal					\$39,063,000	
Phase 2B - Pumping Station/Storage Improvements Needed By 2015						
IIB-1	Additional NW WTP Finished Water Pumps	2		\$150,000		Need increased capacity 2015
IIB-2	Replace BPS10 pumps with higher capacity and higher head pumps	2		\$150,000		Need increased capacity 2015
IIB-3	Additional Bell Swamp Southwest Booster Pumps	2		\$150,000		Need increased capacity 2015
IIB-4	Replace 2 pumps with higher capacity and higher head pumps at BPS6	2		\$150,000		Need increased capacity 2015
IIB-5	New 1MG Elevated Storage Tank southwest of BPS6	1		\$1,750,000		Need increased capacity 2015
Phase 2B - Subtotal					\$2,350,000	
Phase 3 - WTP Improvements Needed by 2008						
III-1	Upgrade Existing Northwest WTP by adding 8 MGD to firm capacity of 24 MGD including conversion to Superpulsators, additional dewatering building, filters and clearwell storage, yard piping, electrical, I/C, chemical, and contingency	1		\$20,000,000		Need increased capacity 2015
III-2	Upgrade Existing 211 WTP	1		\$6,000,000		Regulatory/Upgrades
Phase 3 - Subtotal					\$26,000,000	
Grand Total (2006 US Dollars)					\$68,931,000	

Source: Brunswick County, North Carolina: Water System Master Plan. July 2006. Prepared by Hazen & Sawyer, P.C.

Appendix IV: Policy Impact Analysis Table

The policy impact analysis is intended to identify any potential **negative, neutral, or positive** impacts to CAMA Management Topic goals by the implementation of Town policies. The Town of Sunset Beach drafted their policy statements specifically to remain consistent with and further the goals of the Coastal Area Management Act (CAMA). There were no negative or neutral-negative impacts to CAMA management Topic goals identified from the policies established in this Land Use Plan. The following list defines the impact designations that may be used in the analysis:

- Negative - Implementation of the policy will more than likely have an immediate or long-range negative impact on the Management Topic goals. The policy could conflict with the attainment of other goals.
- Neutral - Implementation of the policy will more than likely not have any impact on the Management Topic goals. The policy will probably not effect the attainment of other goals.
- Positive - Implementation of the policy will more than likely have an immediate or long-range positive impact on the Management Topic goals. The policy could foster the attainment of other goals.
- Neutral-Negative - Implementation of the policy could range from no impact to an immediate or long-range negative impact on the Management Topic goals. The policy may not effect the attainment of other goals if carried-out with other polices or goals in mind, or the policy could conflict with the attainment of other goals if carried-out without mitigation or management activities.
- Neutral-Positive - Implementation of the policy could range from no impact to an immediate or long-range positive impact on the Management Topic goals. The policy may have no effect on the attainment of other goals or the policy could foster the attainment of other goals if actions are coordinated or expanded.

For simplification, a cross-referenced table (matrix) was used to list the potential impact of each policy in boxes under each Management Topic. If a policy has the potential to have a negative impact on a goal or goals of any of the Management Topics, a course of action or policy must be established to mitigate the negative impacts.

Management Topics	Land Use Compatibility	Infrastructure	Public Access	Water Quality	Natural Hazards
	<i>Reduction in Habitat Loss and Fragmentation Related to Impacts of Land Use and Development</i> <i>Reduction of Water Resource and Water Quality Degradation</i>	<i>Water, Sewer and Other Key Community Facilities and Services Being Available in Required Locations at Adequate Capacities to Support Planned Community Growth and Development Patterns</i>	<i>More Planned Access Locations</i> <i>Upgrades to Existing Access Locations</i>	<i>Land Use and Development Criteria and Measures That Abate Impacts That Degrade Water Quality</i>	<i>Land Uses and Development Patterns That Reduce Vulnerability to Natural Hazards</i> <i>Land Uses and Development Patterns That Take Into Account the Existing and Planned Capacity of Evacuation Infrastructure</i>
LUP Policies: Land Use Compatibility					
Policy 1 Areas of Environmental Concern in General	Positive	Neutral	Neutral-Positive	Positive	Positive
Policy 2 Coastal Wetlands	Positive	Neutral-Positive	Neutral-Positive	Positive	Positive
Policy 3 Estuarine Waters	Positive	Neutral	Positive	Positive	Positive
Policy 4 Estuarine Shorelines	Neutral-Positive	Neutral	Neutral-Positive	Neutral-Positive	Neutral-Positive
Policy 5 Ocean Hazard Areas	Positive	Neutral	Positive	Positive	Positive
Policy 6 Areas that Contain Remnant Species	Positive	Neutral	Neutral-Positive	Positive	Positive
Policy 7 Prime Wildlife Habitat Areas	Positive	Neutral	Neutral-Positive	Neutral-Positive	Neutral-Positive
Policy 8 Protection of Wetlands	Positive	Neutral	Neutral	Positive	Positive
Policy 9 Maritime Forests and Tree Cover	Positive	Neutral	Neutral	Positive	Positive
Policy 10 Constraints to Development	Neutral-Positive	Neutral-Positive	Neutral	Neutral-Positive	Neutral-Positive
Policy 11 Upland Excavation for Marinas	Positive	Positive	Neutral	Positive	Positive
Policy 12 Installation of Bulkheads, Groins and Seawalls	Neutral-Positive	Neutral	Neutral-Positive	Neutral	Neutral-Positive
Policy 13 Residential and Commercial Land Development on Any Natural Resource	Positive	Positive	Positive	Positive	Positive

Management Topics	Land Use Compatibility	Infrastructure	Public Access	Water Quality	Natural Hazards
	<i>Reduction in Habitat Loss and Fragmentation Related to Impacts of Land Use and Development</i> <i>Reduction of Water Resource and Water Quality Degradation</i>	<i>Water, Sewer and Other Key Community Facilities and Services Being Available in Required Locations at Adequate Capacities to Support Planned Community Growth and Development Patterns</i>	<i>More Planned Access Locations</i> <i>Upgrades to Existing Access Locations</i>	<i>Land Use and Development Criteria and Measures That Abate Impacts That Degrade Water Quality</i>	<i>Land Uses and Development Patterns That Reduce Vulnerability to Natural Hazards</i> <i>Land Uses and Development Patterns That Take Into Account the Existing and Planned Capacity of Evacuation Infrastructure</i>
LUP Policies: Land Use Compatibility					
Policy 14 Types of Development to be Encouraged	Positive	Positive	Neutral-Positive	Positive	Positive
Policy 15 Annexation	Positive	Neutral	Neutral-Positive	Positive	Positive
Policy 16 Types of Urban Growth Patterns Desired	Positive	Neutral-Positive	Positive	Positive	Positive
Policy 17 Types, Density and Location of Anticipated Residential Development	Positive	Neutral-Positive	Neutral-Positive	Neutral-Positive	Neutral-Positive
Policy 18 Residential Density – Standards, Options and Mitigation of Environmental Impacts	Positive	Neutral-Positive	Neutral	Positive	Neutral-Positive
Policy 19 Potential for Transition of Golf Course Land to Residential Use	Positive	Neutral-Positive	Neutral	Positive	Neutral
Policy 20 Types of Commercial and Institutional Development Desired	Positive	Neutral-Positive	Neutral-Positive	Neutral	Neutral-Positive
Policy 21 Redevelopment of Developed Areas	Positive	Neutral-Positive	Neutral	Positive	Positive
Policy 22 Civic Efforts to Maintain Town Character	Positive	Neutral-Positive	Neutral	Positive	Neutral-Positive
Policy 23 Types and Location of Industry Desired	Positive	Positive	Positive	Positive	Positive

Management Topics	Land Use Compatibility	Infrastructure	Public Access	Water Quality	Natural Hazards
	<i>Reduction in Habitat Loss and Fragmentation Related to Impacts of Land Use and Development</i> <i>Reduction of Water Resource and Water Quality Degradation</i>	<i>Water, Sewer and Other Key Community Facilities and Services Being Available in Required Locations at Adequate Capacities to Support Planned Community Growth and Development Patterns</i>	<i>More Planned Access Locations</i> <i>Upgrades to Existing Access Locations</i>	<i>Land Use and Development Criteria and Measures That Abate Impacts That Degrade Water Quality</i>	<i>Land Uses and Development Patterns That Reduce Vulnerability to Natural Hazards</i> <i>Land Uses and Development Patterns That Take Into Account the Existing and Planned Capacity of Evacuation Infrastructure</i>
LUP Policies: Land Use Compatibility					
Policy 24 Prod. Agri. Lands, Comm. Forests Lands, and Potntl. Mineral Areas	Positive	Positive	Positive	Positive	Positive
Policy 25 Energy Facility Siting and Development	Positive	Positive	Positive	Positive	Positive
Policy 26 Swimming Pools on the Island	Positive	Neutral	Positive	Positive	Positive
Policy 27 Clubhouse and Community Center Uses	Positive	Neutral-Positive	Neutral-Positive	Neutral-Positive	Neutral-Positive
Policy 28 Density of Future Multi- family Developments	Positive	Positive	Neutral	Positive	Positive
Policy 29 Bike and Pedestrian Interconnectivity	Positive	Positive	Positive	Positive	Neutral
Policy 30 Land Use and Development Decisions Consistent with the Land Use Plan	Positive	Positive	Positive	Positive	Positive

Management Topics	Land Use Compatibility	Infrastructure	Public Access	Water Quality	Natural Hazards
	<i>Reduction in Habitat Loss and Fragmentation Related to Impacts of Land Use and Development</i> <i>Reduction of Water Resource and Water Quality Degradation</i>	<i>Water, Sewer and Other Key Community Facilities and Services Being Available in Required Locations at Adequate Capacities to Support Planned Community Growth and Development Patterns</i>	<i>More Planned Access Locations</i> <i>Upgrades to Existing Access Locations</i>	<i>Land Use and Development Criteria and Measures That Abate Impacts That Degrade Water Quality</i>	<i>Land Uses and Development Patterns That Reduce Vulnerability to Natural Hazards</i> <i>Land Uses and Development Patterns That Take Into Account the Existing and Planned Capacity of Evacuation Infrastructure</i>
LUP Policies: Public Access					
Policy 31 Public Trust Areas	Positive	Neutral	Positive	Positive	Positive
Policy 32 Support for Coastal and Estuarine Beach Access	Positive	Neutral	Positive	Neutral-Positive	Neutral
Policy 33 Support for State and Federal Access Programs	Positive	Neutral	Positive	Positive	Positive
Policy 34 Public Boat Launch and Access Site	Neutral-Positive	Neutral	Positive	Neutral	Neutral
Policy 35 Preservation of Existing Public Access Sites	Positive	Neutral	Positive	Neutral	Neutral
Policy 36 Continuation of On-Street Public Parking	Neutral	Neutral	Positive	Neutral	Neutral
Policy 37 Support for Shuttle Service to Public Access Sites	Positive	Positive	Positive	Positive	Positive
Policy 38 Enhancing Public Access Facilities	Neutral	Neutral	Positive	Neutral	Neutral

Management Topics	Land Use Compatibility	Infrastructure	Public Access	Water Quality	Natural Hazards
	<i>Reduction in Habitat Loss and Fragmentation Related to Impacts of Land Use and Development</i> <i>Reduction of Water Resource and Water Quality Degradation</i>	<i>Water, Sewer and Other Key Community Facilities and Services Being Available in Required Locations at Adequate Capacities to Support Planned Community Growth and Development Patterns</i>	<i>More Planned Access Locations</i> <i>Upgrades to Existing Access Locations</i>	<i>Land Use and Development Criteria and Measures That Abate Impacts That Degrade Water Quality</i>	<i>Land Uses and Development Patterns That Reduce Vulnerability to Natural Hazards</i> <i>Land Uses and Development Patterns That Take Into Account the Existing and Planned Capacity of Evacuation Infrastructure</i>
LUP Policies: Infrastructure					
Policy 39 Development Encouraged to use DOT's Access Management and Design Standards	Positive	Positive	Neutral	Neutral	Positive
Policy 40 Access Management for Commercial and Mixed-use Developments	Positive	Positive	Neutral	Neutral	Positive
Policy 41 Access Management for Residential Developments	Positive	Positive	Neutral	Neutral	Positive
Policy 42 Improvements to Highway 904 Needed	Neutral	Positive	Neutral	Neutral	Positive
Policy 43 Support for Corridor Development Standards	Positive	Positive	Neutral	Neutral	Positive
Policy 44 Encouraged Street Design Within Major Developments	Positive	Positive	Neutral	Positive	Positive
Policy 45 Bike and Pedestrian Plan Update	Neutral	Positive	Positive	Positive	Neutral
Policy 46 Unpaved Public Streets	Positive	Positive	Neutral	Positive	Neutral
Policy 47 Resurfacing Improvements	Neutral	Positive	Neutral	Neutral	Positive
Policy 48 Crosswalks	Neutral	Positive	Positive	Neutral	Neutral-Positive
Policy 49 Use of Package Treatment Plants	Neutral-Positive	Positive	Neutral	Positive	Positive

Management Topics	Land Use Compatibility	Infrastructure	Public Access	Water Quality	Natural Hazards
	<i>Reduction in Habitat Loss and Fragmentation Related to Impacts of Land Use and Development</i> <i>Reduction of Water Resource and Water Quality Degradation</i>	<i>Water, Sewer and Other Key Community Facilities and Services Being Available in Required Locations at Adequate Capacities to Support Planned Community Growth and Development Patterns</i>	<i>More Planned Access Locations</i> <i>Upgrades to Existing Access Locations</i>	<i>Land Use and Development Criteria and Measures That Abate Impacts That Degrade Water Quality</i>	<i>Land Uses and Development Patterns That Reduce Vulnerability to Natural Hazards</i> <i>Land Uses and Development Patterns That Take Into Account the Existing and Planned Capacity of Evacuation Infrastructure</i>
LUP Policies: Infrastructure					
Policy 50 Implementation of Sewer Service	Positive	Positive	Neutral	Positive	Neutral
Policy 51 Mandatory Sewer System Connection	Neutral	Positive	Neutral	Positive	Neutral
Policy 52 Ownership and Operation of Sewer System	Neutral	Neutral-Positive	Neutral	Neutral	Neutral
Policy 53 Sewer System Designed to Limit "Induced Development"	Positive	Positive	Neutral	Positive	Positive
Policy 54 Ownership and Operation of Water System	Neutral	Neutral-Positive	Neutral	Neutral	Neutral
Policy 55 On-going Coordination with Brunswick County Public Utilities	Neutral-Positive	Positive	Neutral	Neutral-Positive	Neutral
Policy 56 Support for Public Utilities Board	Positive	Positive	Neutral	Positive	Neutral

Management Topics	Land Use Compatibility	Infrastructure	Public Access	Water Quality	Natural Hazards
	<i>Reduction in Habitat Loss and Fragmentation Related to Impacts of Land Use and Development</i> <i>Reduction of Water Resource and Water Quality Degradation</i>	<i>Water, Sewer and Other Key Community Facilities and Services Being Available in Required Locations at Adequate Capacities to Support Planned Community Growth and Development Patterns</i>	<i>More Planned Access Locations</i> <i>Upgrades to Existing Access Locations</i>	<i>Land Use and Development Criteria and Measures That Abate Impacts That Degrade Water Quality</i>	<i>Land Uses and Development Patterns That Reduce Vulnerability to Natural Hazards</i> <i>Land Uses and Development Patterns That Take Into Account the Existing and Planned Capacity of Evacuation Infrastructure</i>
LUP Policies: Natural Hazards Mitigation					
Policy 57 Hazard Mitigation Plan	Positive	Positive	Neutral	Neutral-Positive	Positive
Policy 58 Sea-level Rise	Positive	Positive	Positive	Positive	Positive
Policy 59 Beach Erosion	Positive	Positive	Positive	Positive	Positive
Policy 60 High Winds	Positive	Neutral-Positive	Positive	Neutral	Positive
Policy 61 Flooding Mitigation	Positive	Positive	Neutral	Positive	Positive
Policy 62 Wave Action and Shoreline Erosion	Positive	Positive	Neutral	Positive	Positive
Policy 63 Development in Hazardous Areas	Positive	Positive	Neutral-Positive	Positive	Positive
Policy 64 Public Acquisition of Hazardous Areas	Positive	Neutral-Positive	Positive	Neutral-Positive	Positive
Policy 65 Reduction of Yard and Construction Debris	Positive	Neutral	Neutral	Neutral-Positive	Positive

Management Topics	Land Use Compatibility	Infrastructure	Public Access	Water Quality	Natural Hazards
	<i>Reduction in Habitat Loss and Fragmentation Related to Impacts of Land Use and Development</i> <i>Reduction of Water Resource and Water Quality Degradation</i>	<i>Water, Sewer and Other Key Community Facilities and Services Being Available in Required Locations at Adequate Capacities to Support Planned Community Growth and Development Patterns</i>	<i>More Planned Access Locations</i> <i>Upgrades to Existing Access Locations</i>	<i>Land Use and Development Criteria and Measures That Abate Impacts That Degrade Water Quality</i>	<i>Land Uses and Development Patterns That Reduce Vulnerability to Natural Hazards</i> <i>Land Uses and Development Patterns That Take Into Account the Existing and Planned Capacity of Evacuation Infrastructure</i>
LUP Policies: Water Quality					
Policy 66 Stormwater Program	Positive	Positive	Neutral	Positive	Positive
Policy 67 Erosion and Sediment Control	Positive	Positive	Neutral	Positive	Positive
Policy 68 Exceeding Minimum Standards Related to Water Quality Rules	Positive	Positive	Neutral	Positive	Neutral
Policy 69 Low Impact Development	Positive	Neutral-Positive	Neutral	Positive	Neutral-Positive
Policy 70 Elimination of Septic System Use	Positive	Positive	Neutral	Positive	Positive
Policy 71 Septic System Decommissioning and Encouraged Re-use for Stormwater	Positive	Positive	Neutral	Positive	Positive
Policy 72 Retrofitting of Existing Stormwater Drainage Systems	Positive	Positive	Neutral	Positive	Positive

Appendix V: Existing Development Program in Implementing the Policies and Goals of the Land Use Plan

Existing Management Program	Land Use Compatibility	Infrastructure	Public Access	Water Quality	Natural Hazards
	<p><i>Reduction in Habitat Loss and Fragmentation Related to Impacts of Land Use and Development</i></p> <p><i>Reduction of Water Resource and Water Quality Degradation</i></p>	<p><i>Water, Sewer and Other Key Community Facilities and Services Being Available in Required Locations at Adequate Capacities to Support Planned Community Growth and Development Patterns</i></p>	<p><i>More Planned Access Locations</i></p> <p><i>Upgrades to Existing Access Locations</i></p>	<p><i>Land Use and Development Criteria and Measures That Abate Impacts That Degrade Water Quality</i></p>	<p><i>Land Uses and Development Patterns That Reduce Vulnerability to Natural Hazards</i></p> <p><i>Land Uses and Development Patterns That Take Into Account the Existing and Planned Capacity of Evacuation Infrastructure</i></p>
Ordinances/Regulations					
Zoning Ordinance	<p>Management of density and intensity standards in traditional residential areas provide less impact on habitat. Zoning environmentally sensitive land as “Conservation” also aids in protecting habitat and protecting water quality.</p>	<p>Density and intensity standards provide greater anticipation of capacity needs and ensures infrastructure improvements can better keep up with growth.</p>	<p>Density and intensity standards prohibit “walling-off” public trust areas with mega structures.</p>	<p>Management of density and intensity standards in traditional residential areas provide less impact on habitat. Zoning environmentally sensitive land as Conservation also aids in protecting habitat and protecting water quality.</p>	<p>Zoning in coordination with the Flood Prevention Ordinance require structural elevations or flood-proofing and other development standards in floodways. Density and intensity standards minimize the size of structures and population exposed to erosion, storm surge and flooding.</p>
Subdivision Ordinance	<p>Same as above. Planned Residential Development (PD) projects can be clustered/designed to avoid sensitive areas while still reaching the allowable development density.</p>	<p>Same as above. Developer pays for additional infrastructure needed to serve subdivision.</p>	<p>Subdivisions may have conditions that new public access be provided in proportion to the density of the subdivision.</p>	<p>Same as above. Planned Development (PD) projects can be clustered/designed to avoid sensitive areas while still reaching the allowable development density. Any future subdivisions would likely be subject to stricter regulations regarding sedimentation and erosion control, and stormwater management which are intended to protect/restore shellfish waters.</p>	<p>Same as above (base zoning and flood ordinance will apply). Planned Residential Development (PD) projects can be clustered/designed to avoid flood prone areas while still reaching the allowable development density.</p>
Flood Damage Prevention Ordinance	<p>Prohibits substantially altering natural drainage and floodways.</p>	<p>N/A</p>	<p>Properties that may be unbuildable or repetitively damaged may be identified for acquisition by the Town for use as public access, parking or other related use.</p>	<p>Prohibits substantially altering natural drainage and floodways, and limits the placing of structures/materials in floodways which could add pollutants to surface water if flooded.</p>	<p>Zoning in coordination with the Flood Prevention Ordinance require structural elevations or flood-proofing and other development standards in floodways. Density and intensity standards minimize the size of structures and population exposed to erosion, storm surge and flooding.</p>

Existing Management Program	Land Use Compatibility	Infrastructure	Public Access	Water Quality	Natural Hazards
	<p><i>Reduction in Habitat Loss and Fragmentation Related to Impacts of Land Use and Development</i></p> <p><i>Reduction of Water Resource and Water Quality Degradation</i></p>	<p><i>Water, Sewer and Other Key Community Facilities Being Available in Required Locations at Adequate Capacities to Support Planned Growth and Development</i></p>	<p><i>More Planned Access Locations</i></p> <p><i>Upgrades to Existing Access Locations</i></p>	<p><i>Land Use and Development Criteria and Measures That Abate Impacts That Degrade Water Quality</i></p>	<p><i>Land Uses and Development Patterns That Reduce Vulnerability to Natural Hazards and Take Into Account the Existing and Planned Capacity of Evacuation Infrastructure</i></p>
Ordinances/Regulations Cont'd					
<p>Building Code (State Building Code)</p> <ul style="list-style-type: none"> Filling, Grading and Excavating Abandoned Structures/Demolition 	In conjunction with Zoning Ord., it regulates the removal of trees/vegetation during development to minimize impacts to wildlife habitat, Town aesthetics, and to lessen erosion and sedimentation of soil associated with stormwater runoff.	N/A	N/A	Regulates the removal of trees/vegetation during development to minimize impacts to wildlife habitat and Town aesthetics, and to lessen erosion and sedimentation of soil associated with stormwater runoff.	In conjunction with Flood Ordinance, requires structures to be built to the state minimum standards regarding wind and flood resistance. Includes provisions to condemn and remove abandoned or dangerous structures which may cause damage to adjacent properties during storm events.
Water and Sewer Use Ordinance (under County authority)	Zoning and other development ordinances, in conjunction with the water use ordinance, limit the locations where water infrastructure can be installed and provided.	Regulates and manages the uses and standards for utilizing the County water distribution system.	N/A	N/A	N/A
<p>Stormwater Regulations</p> <ul style="list-style-type: none"> Stormwater Management Illicit Discharge 	Seeks to provide for the proper management of stormwater on-site or through a stormwater system that can retain/detain, treat and discharge/recharge in a controlled manner to avoid flooding and water quality degradation.	N/A	N/A	Seeks to provide for the proper mngmnt. of stormwater on-site or through a stormwater system that can retain/detain, treat and discharge /recharge in a controlled manner to avoid flooding and water quality degradation.	Requiring development to increase its control of stormwater volume and velocity of discharge can minimize flooding and erosion risks during storm events.
<p>Beaches and Waterways Regulations</p> <ul style="list-style-type: none"> Dune Protection Personal Watercraft Safety Obstruction of Canals Unattended Property on Beach Strand 	Seeks to provide for the proper management of environmentally sensitive and public trust areas so as to avoid user conflicts and disturbance of critical habitat.	N/A	Seeks to provide for the proper management of environmentally sensitive and public trust areas so as to avoid user conflicts and disturbance of critical habitat. Intends to protect the long-term viability of the dune system and public beach strand from erosion by protecting stabilizing vegetation.	N/A	Protection of the dune system provides better protection from erosion and storm surge.

Existing Management Program	Land Use Compatibility	Infrastructure	Public Access	Water Quality	Natural Hazards
	<p><i>Reduction in Habitat Loss and Fragmentation Related to Impacts of Land Use and Development</i></p> <p><i>Reduction of Water Resource and Water Quality Degradation</i></p>	<p><i>Water, Sewer and Other Key Community Facilities and Services Being Available in Required Locations at Adequate Capacities to Support Planned Community Growth and Development Patterns</i></p>	<p><i>More Planned Access Locations</i></p> <p><i>Upgrades to Existing Access Locations</i></p>	<p><i>Land Use and Development Criteria and Measures That Abate Impacts That Degrade Water Quality</i></p>	<p><i>Land Uses and Development Patterns That Reduce Vulnerability to Natural Hazards</i></p> <p><i>Land Uses and Development Patterns That Take Into Account the Existing and Planned Capacity of Evacuation Infrastructure</i></p>
Official Plans					
CAMA Land Use Plan	<p>Policies and goals set desired development patterns that seek to avoid sensitive areas, retain open space and provide anticipation and predictability of growth and development (i.e. no unwanted surprises).</p>	<p>Policies and goals set direction for the design, capacity, and management of Town infrastructure such as water and sewer.</p>	<p>Policies and goals further the expansion of public access by actions such as identification of land with public access site potential.</p>	<p>Policies and goals seek to protect wetlands and address stormwater runoff issues related to new and existing development.</p>	<p>Policies and goals establish development density and intensity standards that avoid placing large structures in hazardous areas. Policies also identify the need for addressing increased development impacts on evacuation and other safety-related issues (i.e. traffic and bridge).</p>
Hazard Mitigation Plan	<p>In conjunction with the Land Use Plan, and other related plans, identifies the need to protect and avoid development in environmentally sensitive and hazardous areas such as wetlands and flood zones.</p>	<p>Provides recommendations on the placement and design of Town infrastructure and buildings that will lessen their vulnerability to hazards.</p>	N/A	<p>References Land Use Plan, and other related plans which are intended to provide guidance for development which seek to minimize damage to environmentally sensitive areas and surface water.</p>	<p>Policies identify the need for addressing increased development impacts on evacuation and other safety-related issues (i.e. traffic and bridge).</p>

Town of Sunset Beach CAMA Land Use Plan
Map Appendix

- Map 1: Areas of Environmental Concern Map
- Map 2: DCM Erosion Rate Map
- Map 3: Water Quality Map
- Map 4: Special Flood Hazard Areas Map
- Map 5: Storm Surge Inundation Map
- Map 6: North Carolina CREWS Wetland Areas Map
- Map 7: Fish Nursery and Natural Heritage Areas Map
- Map 8: Environmental Composite Map
- Map 9: Existing Land Use Map
- Map 10: Regional Wastewater Map
- Map 11: Water and Wastewater Systems Facilities Map
- Map 12: Transportation and Public Access Facilities Map
- Map 13: Town Maintained Stormwater System Outfalls Map
- Map 14: Land Suitability Analysis Map
- Map 15: Future Land Use Classification Map

END OF DOCUMENT