

## VIII. COASTAL MANAGEMENT ELEMENT

This element was prepared by Volusia County in cooperation with all coastal municipalities within the county. The following introduction is excerpted from the Volusia County Coastal Management Element. The technical database and analysis for the county element is contained in eight (8) background reports. The specific goals, objectives, and policies for New Smyrna Beach follow the Volusia Coastal Management Element "Introduction" and "Coastal Resources".

### INTRODUCTION

"With its abundance of scenic resources, recreational opportunities, waterways and beaches, and natural habitat, coastal Volusia County and its 10 municipalities will continue to experience rapid growth from migration and natural increase. The historical development pattern has resulted in the destruction of critical wildlife habitat and native vegetation, the lowering of water quality, and the degradation or removal of beach and dune systems. If these resources are to be conserved in the future, development must be carefully and deliberately orchestrated.

The Coastal Management Element is one of the critical parts of the overall *Comprehensive Plan* that each municipality and the County must prepare in accordance with State legislation. The purpose of the Element is to "plan for and where appropriate restrict development activities where such activities would damage or destroy coastal resources, and protect human life and limit public expenditures in areas that are subject to destruction by natural disaster" (Rule 9J-5.012, *Florida Administrative Code*).

Within the context of the *Comprehensive Plan*, the Coastal Management Element has a special status. Although it must be integrated into and consistent with all the other elements of the Plan, the Coastal Management Element not only addresses the protection of coastal resources, it also addresses other related issues of land use, traffic circulation, public access, and public services, facilities, and infrastructure.

Volusia County and the coastal municipalities have cooperated in the preparation of this element. Early on, the County and coastal communities recognized that coastal issues and resources should be coordinated with a systems approach. Environmental systems such as estuaries, watersheds, or wildlife habitat, and manmade systems like traffic circulation or drainage structures, do not start or stop at political boundaries.

Although the Coastal Management Element is included in the *Volusia County Comprehensive Plan*, the inventory, analysis, and the goals, objectives, and policies (GOPs) have been structured to be broad based so that each community can choose to adopt all or part of the element into their individual comprehensive plans. An individual municipality can rearrange the goals, objectives, and policies to suit their particular need.

The central concept of the Element is to promote consensus among and between coastal communities so that common problems can be identified and common solutions proposed and implemented. The intent is to emphasize cooperation in implementing and achieving the goals, objectives, and policies. It is not the intent of the County to mandate certain requirements through this Element beyond their statutory authority. Rather, the approach taken is to stress intergovernmental coordination through the use of interlocal agreements, the continuation of the Technical Steering Committee and a set of consistent goal, objective, and policy statements.

Rule 9J-5, *Florida Administrative Code*, does require the inclusion of specific GOPs in order to be in compliance with Chapter 163, *Florida Statutes*. These have been included in the Coastal Management Element and each local government must incorporate them into their respective Plans. They may be modified to fit the needs of a particular jurisdiction. Some cities may be more restrictive. In other cases, the GOPs are specific to Volusia County rather than to the cities.

The coastal study area was established to include all areas of Volusia County seaward of the St. Johns River Basin. Approximately 450.5 square miles of the County is included within this study area. The study area boundary distinguishes the coastal zone from the western portion of the County, which is

# Comprehensive Plan

City of New Smyrna Beach, Florida

hydrologically tied to the St. Johns River Watershed. It ranges from between four (4) and 16 miles wide to approximately 50 miles long, and is bounded to the east by the Atlantic Ocean, to the west by the watershed boundary as determined by the United States Geological Survey (USGS) Hydrologic Unit Map of Florida, to the north by Flagler County, and to the south by Brevard County.

Six (6) distinct primary watersheds were identified within the study area boundary:

1. Tomoka River North
2. Tomoka River South
3. Halifax River
4. Mosquito Lagoon / Indian River North
5. Indian River South
6. Spruce Creek

The Coastal Management Element is separated into several discrete sections or sub elements. Technical background reports and analyses were prepared resulting in an extensive database. This database, along with a series of workshops and meetings with the public, the County Council and the Coastal Management Technical Steering Committee, were used to formulate the goals, objectives, and policies, as well as the Coastal Area Plan. The major sections are:

- Coastal Resources
- Land Use
- Water Quality
- Beach and Dune Systems
- Coastal Hazards
- Public Access
- Public Services
- Intergovernmental Coordination

## COASTAL RESOURCES

The Volusia County Coastal Area is a complex, dynamic natural system comprised of barrier islands, estuarine and river systems, and mainland watersheds. The watershed is considered the basic ecosystem unit for evaluating the combination of natural and man-induced characteristics. Watershed energy flow is affected by biological and physical influences. The physical forces such as tidal fluctuations, rainfall, heat energy, winds, and sunlight form the basic energy sources that determine the composition of the biological community as well as soil and water characteristics.

The hydrologic boundaries between watersheds serve as complex biophysical membranes. They naturally divide the landscape into a mosaic of distinct units, each possessing a physical/chemical integrity defined by topography and drainage. At the same time, these membranes are also permeable. Each watershed, upon closer examination, is itself partitioned into a mosaic of natural habitats and cultural land uses which often transcend hydrological boundaries. Through biological transport, cultural activities, and atmospheric processes, energy and matter are constantly exchanged across watershed boundaries. Within each watershed there is also a systematic partitioning of physical/chemical resources by competing animals and plants.

Although Volusia County has been fortunate in acquiring environmentally sensitive lands and waters for conservation, past practices of land use and development have degraded or destroyed critical natural resources. The Coastal Management Element is a coordinated effort to identify, evaluate and manage these resources as interconnected systems - utilizing watersheds as the basic management unit.

Each of the habitats represented within the natural systems are interdependent, and therefore, future management plans should consider the linkage of these systems. Plans must conserve the variety of interconnected habitats, not permitting their individual isolation and envelopment by urbanization or agriculture. Since organisms and materials move between different types of habitats (i.e., seagrasses and mangroves), terrestrial and marine communities cannot be defined simply by their physical boundaries. The effectiveness of efforts to protect one community type may be diminished by failing to protect neighboring

# Comprehensive Plan

City of New Smyrna Beach, Florida

communities or habitats as well as adjacent watersheds. When such efforts fail, the loss of native habitats causes a direct and proportional loss of fish and wildlife. This has already happened in parts of the coastal area.

The coastal wetlands remain generally intact. However, the interface of remaining native uplands with these shoreline areas has all but disappeared throughout most of the coastal zone. Upland habitats, such as coastal scrub, may not have a high number of animal species present, but may have a high proportion of species not found elsewhere (i.e., high endemism). Such areas are considered valuable for maintaining biological diversity. Without immediate institution of a balanced resource management plan, the future Volusia County coastal zone will consist of completely urbanized lands with a fringe of saltmarsh and mangroves. Gone will be the functioning native lands, their floral and faunal constituents, and the contribution attributable to the natural systems.

The coastal wetlands are dominated by 15,196 acres of salt marsh and 1,265 acres of mangrove remaining intact outside the urban centers on the estuary. Freshwater wetlands are dominated by 44,006 acres of forested habitats generally occurring within the interior of the coastal zone, west of the estuary. The coastal wetlands are currently afforded some degree of regulatory protection by the U.S. Army Corps of Engineers (aided by the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and National Marine Fisheries Service), Florida Department of Environmental Protection (FDEP), St. John's River Water Management District (SJRWMD) and the County. The protective measures generally afforded by these agencies are limited only to wetlands. However, the County does regulate upland buffer areas adjacent to wetlands.

The coastal zone contains a variety of native upland habitats including:

- pine flatwood (18,046 acres)
- pine-mesic oak (7,112 acres)
- temperate hardwoods (5,517 acres)
- coastal scrub (5,267 acres)
- palmetto prairie (5,159 acres)
- cabbage palm (4,112 acres)
- rangeland (2,736 acres)
- sand pine (2,493 acres)
- sand live oak (2,368 acres)
- long leaf pine - xeric oak (985 acres)
- live oak (602 acres)

As with the wetland habitats, these upland communities provide habitat to a wide range of flora and wildlife species including many species listed as endangered, threatened, or endemic.

The Coastal High Hazard Area (CHHA) for the Comprehensive Plan is depicted by Map VIII-1 within this Element. The 2010 East Central Regional Evacuation Study prepared by the East Central Florida Regional Planning Council served as the basis for identification of the CHHA. The CHHA is defined as the area below the elevation of the category 1 storm surge line as established by a Sea, Lake and Overland Surges from Hurricanes (SLOSH) computerized storm surge model.

The CCHA is a component of the broader Hurricane Vulnerability Zone (HVZ). The entire City of New Smyrna Beach is contained within the HVZ. The HVZ evacuation plan is based on and is effective for category 3 or greater hurricanes.

The Saffir/Simpson Hurricane Scale categorizes hurricanes into 5 different types of storms. A Category 1 storm has winds of 74-95 mph, with storm surges of 4-5 feet above normal. A Category 2 storm has winds of 96-110 mph, with storm surges of 6-8 feet above normal. A Category 3 storm has winds of 111-130 mph, with storm surges of 9-12 feet above normal. A Category 4 storm has winds of 131-155 mph, with storm surges of 13-18 feet above normal. A Category 5 storm has winds greater than 155 mph, with storm surges greater than 18 feet above normal.

# Comprehensive Plan

City of New Smyrna Beach, Florida

## GOALS, OBJECTIVES, AND POLICIES

### GOAL 1:

Conserve, protect, and manage the coastal resources of New Smyrna Beach, including the wetland and upland ecosystem, so as to maintain and enhance native habitats, floral and faunal species diversity, water quality, and natural surface water characteristics.

#### OBJECTIVE:

1. New Smyrna Beach will continue to regulate and monitor the long-term protection and enhancement of selected natural upland and wetland habitats and water quality. The primary means of accomplishing this objective will be through the retention of interconnected hydro-ecological systems where the wetlands and uplands function as a productive unit resembling the original landscape.

#### POLICIES:

- a. The Volusia County Environmental Management Division (EMD), in connection with the Environmental and Natural Resources Advisory Committee, will be responsible for developing management plans and standards that protect and conserve natural systems within the coastal area. From these plans and standards, New Smyrna Beach will review and adopt the ones that are appropriate for the City.

The Volusia County EMD will identify all hydro-ecological corridors in the New Smyrna Beach watershed, using the Coastal Management Element Natural Resource database. Environmental management corridors will integrate the critical habitats listed below to the maximum extent possible as an interconnected system.

<b>Native Uplands</b>	<b>Wetlands</b>
Palmetto Prairie	Natural streams, ponds, sloughs, creeks,
Coastal Scrub	rivers, estuaries, and beach shorelines
Pine Flatwood	Wetland Hardwoods
Longleaf Pine Xeric Oak	Bay Swamps
Sand Pine	Mangrove Swamps
Pine Mesic Oak	Mixed Wetland Hardwoods
Oak Pine Hickory Cypress Pine Cabbage Palm	Wetlands Forested
Live Oak	Mixed Freshwater Marsh
Cabbage Palm	Saltwater Marsh
Sand Live Oak	Wet Prairies
Mixed Hardwoods and Conifers	

- b. New Smyrna Beach will prepare development review standards to be incorporated into the development review process, which will minimize long term and cumulative impacts on coastal habitat by requiring site specific analysis during the review process.
  - i. The City will prepare standards for habitat mitigation on public and private lands. These standards will identify situations where mitigation may be acceptable (e.g., non forested wetland or mangrove swamp creation), unacceptable (e.g., endangered species habitat impacts), or problematic (e.g., experimental or unproven). In all cases, the proposed mitigation plan should be designed and the project monitored by a qualified professional. The mitigation plan should include the following:
    - A statement of mitigation goals and objectives.
    - Watershed and adjacent habitat evaluation.
    - Geohydrological analysis.
    - Detailed construction plans, planting plans, and maintenance schedules.
    - A long-term management plan for the created habitat in the watershed in which it is located to avoid inappropriate future land uses surrounding the created or enhanced habitat, which may alter the habitat's character or eliminate it

- completely.
- The removal of exotic or nuisance vegetation.
  - Monitoring methodology to evaluate the degree of success obtained.
  - Proper contracted supervision by a qualified expert.
  - A detailed budget and cost estimates.
  - The entity responsible for undertaking maintenance and a long-term management plan with available funding required to ensure future success.
- ii. For all habitat mitigation plans, programs or activities, the City should identify quantifiable, realistic goals, maintain direct supervision through the construction and monitoring process, utilize a minimum of flexibility for minor or insignificant post-construction modifications and if problems or failures result, be able to enforce permit conditions.
- c. Prior to November 1, 2015, *Land Development Regulations*, which require an environmental impact assessment, shall be adopted, to include assessment for sensitive native flora and fauna habitat and a determination of their presence on sites within the City as part of the building permit and site plan review process, as applicable. The assessment shall be submitted, reviewed, and approved prior to the issuance of a development order for areas that contain active uplands or wetlands identified by this element.
- d. The County Charter provisions relating to the beach delegate the sole authority and responsibility of all beach regulations, beach operations, beach access, and beach maintenance to the County of Volusia. The City is preempted on all matters, except licensing, by the Charter. The County levies beach tolls and ad valorem taxes to fund all beach related expenses.
- The City will continue to assist Volusia County by abiding by the provisions of the County Charter. The City would, if it had the legal authority, prohibit the man made destruction or removal of the existing primary oceanfront sand dune and the dune vegetation.
- e. New Smyrna Beach will ensure compliance with standards for mitigation by either adopting, or allowing Volusia County to enforce, standards adopted by the county.
- f. The City will continue to support the acquisition of lands/areas proposed under the Volusia Forever Program, the process and evaluation of which is provided by the applicable Volusia County Resolution. The City may also recommend prioritization and inclusion of lands/areas within the City's incorporated boundaries based on, but not limited to, the following criteria:
- i. Rarity of habitat in corridor or watershed.
  - ii. Utilization of habitat/property by wildlife, particularly protected species (fauna and flora).
  - iii. Strategic location in corridor or along shoreline.
  - iv. Groundwater recharge area.
  - v. Surface water storage area.
  - vi. Recreation value (i.e., canoeing, fishing, hunting, swimming, nature study, hiking, and camping).
  - vii. Funding sources and inter-agency joint acquisition programs.
- g. New Smyrna Beach will support and sponsor the plan prepared by the county for estuarine and oceanfront shoreline habitat reclamation and protection projects. Projects target identified shorelines where reclamation and/or restoration is required to offset impacts from existing upland development, including stormwater discharges, bulk heading, dumping, and land clearing. Reclamation will include, but not be limited to:
- i. Removing debris and toxic materials.
  - ii. Stabilizing shorelines.
  - iii. Creating wetland habitat such as mangrove and salt marsh.

# Comprehensive Plan

City of New Smyrna Beach, Florida

- iv. Dune restoration.
- v. Relocating or eliminating stormwater / domestic waste and effluent.
- vi. Maintenance of stormwater facilities and retrofitting where needed.
- h. New Smyrna Beach will assist the EMD in maintaining a central clearinghouse for environmental and natural resources studies and recommendations by both public and private organizations.
- i. The Volusia County EMD will periodically update the Florida Land Use Cover and Forms Classification System maps and database of the Coastal Management Element Natural Resources Summary Report to reflect changing conditions.
- j. The EMD will provide periodically specific reports and updates to the County on the status of natural resources. The report will focus on the adequacy of land use and development regulations and management plans to protect and enhance the natural systems. Adjustments shall be made in the regulatory process whenever deficiencies are noted.
- k. Development adjacent to estuarine and riverine shoreline areas shall maintain a buffer zone to protect or conserve the canopy, understory, and ground cover of natural upland vegetation and wetlands.
- l. Development in habitat areas listed by the State of Florida and US Fish and Wildlife Service as Endangered, Threatened, or Species of Special Concern shall not adversely impact the listed species.
- m. The city will continue to enforce the County- and State- adopted beachfront lighting restrictions, as they relate to sea turtle nesting.
- n. The City will continue to support the adopted Manatee Protection Plan.
- o. The City, through interlocal agreements with Volusia County and other coastal cities within the County, shall coordinate with the other units of local government to ensure adequate sites for water dependent uses, to protect living marine sources, to reduce exposure to natural hazards and to ensure public access.

## OBJECTIVE:

- 2. Discourage the location of new development in the Coastal High Hazard Areas by limiting new public expenditures in these areas.

## GOAL 2:

To conserve, protect, and restore coastal resources by managing growth and land use so as not to damage or destroy those resources.

## OBJECTIVE:

- 1. Establish land use regulations that provide for the location, extent, and distribution of land uses consistent with the protection of coastal resources.

## POLICIES:

- a. Land uses which have significant adverse impact on coastal resources to the point where they would cease to be viable as a result of the proposed land use shall be appropriately regulated. An environmental impact assessment shall be prepared and reviewed for land uses proposed in critical habitat areas.
- b. Designated natural resource areas, significant environmental or ecological features, critical wildlife habitat, environmental system corridors, or conservation areas shall be protected through a variety of mechanisms, including buffer zones, restoration, limiting density and intensity, conservation easements, acquisition, density transfers, transfer of development rights (TDRs), purchase of development rights or land exchanges.
- c. The priority for new development shall be in areas of urban infill in order to contain sprawl,

use existing developable lands, maximize the provision of urban services and facilities, and protect remaining coastal habitat.

- d. Continue to monitor development standards for appropriate densities, intensities, and buffer zones.
- e. Develop regulations for resource protection, and location of development adjacent to aquatic and natural preserves, wildlife refuges, and environmental system corridors, to protect the natural character, scenic value, and public benefit of these areas.
- f. Prior to 2015, New Smyrna Beach shall undertake a zoning evaluation program to identify, review, and prepare recommendations for lands zoned for development, which are inconsistent or incompatible with the protection or conservation of coastal resources.
- g. Utilize innovative or alternative zoning districts or techniques to protect coastal resources. Such techniques could include overlay districts, floating zones, bonus ordinances, performance standards, fast tracking of development applications, quality development programs, transferable development rights, planned unit developments, or other incentive based methods.
- h. Cooperate and coordinate with local governments, state agencies, and special districts in developing consistent standards, criteria, and Land Development Regulations for protection of coastal resources.

## OBJECTIVE:

2. Priorities for shoreline land use shall be given to water dependent uses over water related land uses, and shall be based on type of water dependent use, adjacent land use, water quality, impact on critical habitat, and impact on coastal resources.

## POLICIES:

- a. When reviewing applications for zoning, plan amendments, or development orders, shoreline land uses shall have the following priorities:
  - i. Water dependent uses such as fish, shellfish and wildlife production, protection, and conservation of coastal and natural resources, recreation, public access, marinas and navigation, and water-dependent utilities and industry, which do not create a significant adverse impact upon the waters or land use.
  - ii. Water enhanced uses such as recreation, certain utilities, commerce, and industrial uses.
  - iii. Low-density residential.
  - iv. Non-water dependent or related activities such as intensive urban residential, non-water dependent industry and commerce.
  - v. Of lowest priority are those uses which are non-water dependent, non-water enhanced which result in a reduction of coastal resources.
- b. The first priority for providing new slips is for the expansion of existing marinas, and to new areas for marinas using the criteria in Policy 2.c. below.
- c. Adopt standards for marina siting or expansion as part of *Land Development Regulations*, to include the following criteria, and with priority given to expansion of existing marinas:
  - i. Consistency with provisions included in the Manatee Protection Plan for Volusia County.
  - ii. Marinas shall be located in areas where the least dredging and maintenance are required.
  - iii. Sufficient upland areas shall be made available to accommodate needed support facilities such as adequate parking, dry storage, work areas, stormwater management facilities, and other non-water dependent uses.
  - iv. Marinas and docking facilities shall be located in areas that require minimal or no dredging or

# Comprehensive Plan

City of New Smyrna Beach, Florida

- filling to provide access by either canal, channel, or road.
- v. The marina areas and navigation access channels shall not be dredged to depths greater than necessary to prevent prop dredging.
- vi. When possible, marina basins shall be located where there is an existing basin and access channel and adequate depths to accommodate the proposed use. A minimum of four (4) feet below mean low water shall be required.
- vii. Facilities shall be designed to maximize or improve water circulation patterns.
- viii. Any buffer zones established by Florida Department of Environmental Protection (FDEP) Shellfish Environmental Assessment Section shall be maintained.
- ix. Marinas shall not be permitted in areas where approved or conditionally approved shellfish harvesting would be severely impacted and/or sections closed to shellfish harvesting.
- x. Marinas should be discouraged in areas that have been determined by FDEP and USFWS to be critical to the survival of the endangered manatee. These areas may include, but are not limited to, manatee sanctuaries, feeding areas or areas that have been identified in manatee recovery plans.
- xi. Sewer pump out service and facilities shall be available and accessible to all boat slips constructed or renovated inside marinas.
- d. New or expanded marina facilities shall utilize dry storage to the fullest extent possible, in addition to wet slips.
- e. The City shall consider utilizing the dock facility slip allocation identified in the Manatee Protection Plan as a tool to stimulate high-quality, employment intensive waterfront development.

## OBJECTIVE:

3. Consistent with the Historic Preservation Chapter of the *Code of Ordinances*, protect and preserve historic and archaeological resources.

## POLICIES:

- a. Include historic and archaeological resources in land acquisition programs for open space, recreation, preservation, or conservation.
- b. Continue to enforce appropriate standards, regulations, and guidelines for the protection of historic and archaeological resources.
- c. Nominate eligible historic and archaeological resources to the National Register of Historic Places.
- d. Utilize, as feasible, incentive-based techniques for historic and archaeological preservation, such as building code relief, TDRs, tax relief, or waiving of certain zoning requirements (setbacks, lot coverage, parking, etc.).
- e. New Smyrna Beach shall cooperate in establishing historic preservation commissions, conducting surveys and studies, developing standards, regulations and guidelines, adopting historic preservation ordinances, and developing historic and archaeological preservation programs.
- f. Areas identified as having a high redevelopment probability shall be evaluated for appropriate land uses, eliminating unsafe conditions, and restoring coastal resources.
- g. Redevelopment activity shall not result in increasing hurricane evacuation times above the clearance time identified in the Volusia County Coastal Management Element.
- h. Redevelopment should be viewed as an opportunity to restore beach and dune systems, improve visual appearance, incorporate landscaping and buffer areas, improve traffic circulation, and upgrade stormwater management systems.

## GOAL 3:

To protect, enhance, and improve the quality of the estuarine environment throughout New Smyrna Beach.

**OBJECTIVE:**

1. To support Volusia County's efforts to monitor and improve estuarine water quality through an ongoing water quality sampling and monitoring program, establishing base line conditions, and identifying standards as parameters to measure changes in water quality.

**POLICIES:**

- a. The City will support Volusia County's ongoing water quality sampling and monitoring network for the coastal area. The data shall be evaluated on an annual basis to detect possible problems, and to determine where corrective action is needed.
  - i. The City will continue to support the Volusia County water sampling program regarding point and non point sources and facilities, through which potential water quality problems are identified and are regularly and periodically inspected.
  - ii. Permits issued by the Health Department for individual septic tank systems shall include a nomenclature system so that the information can be retrieved and evaluated by basin, sub-basin, and jurisdiction.
  - iii. In coordination with the Utilities Commission, City of New Smyrna Beach, and Volusia County Health Department, areas presently using septic tank systems within the coastal area shall be quantified and delineated on City maps. Prior to 2015, a ranking system shall be established which will identify the priority of areas to be incorporated into public sewage treatment systems. Criteria to be used in the ranking systems shall include:
    - Soil type
    - Water table level
    - Proximity to aquatic preserves and outstanding Florida waters
    - Proximity to open shellfish harvesting areas
    - Proximity to other water bodies
    - Density of septic tank systems
    - Areas known or suspected to be impacting surface or ground water quality
    - Proximity to existing or planned public wastewater treatment systems
  - iv. Upon completion of the identification of the priority areas to be incorporated into public sewage treatment systems, adopt in conjunction with the Health Department, regulations and criteria restricting future placement of septic systems in these areas.
- b. Continue to upgrade existing sewage treatment plants. As additional sewage treatment plants are constructed, and/or existing plants are expanded, a concerted effort and commitment shall be made to utilize the highest level of treatment possible; or alternative methods of effluent disposal, such as reuse and land spreading / spray irrigation, should be used to reduce nutrient loadings to the rivers and estuaries.
- c. Incorporate best management practices into development regulations that limit the amount of sediment reaching all surface waters. These practices shall be used in agriculture, silviculture, construction, dredge, and fill operations, and stormwater management systems. Incorporate erosion and sediment control provisions as part of the development review process.
- d. The construction of future stormwater management systems, and the redesign of existing systems, shall consider the timing of discharge of fresh water to the estuary, the hydroperiod of the wetlands, and the potential loadings. Stormwater systems should be designed to gradually release water via sheet flow through natural or constructed wetlands.
- e. The use of pipes, ditches, and canals which transport large volumes of fresh water rapidly to the estuaries shall be prohibited.
- f. The Master Stormwater Management Plan, which was most recently revised in 2004, will continue to be implemented and prioritized. The plan shall address specific and cumulative impacts to prevent estuarine pollution, and to control surface water runoff.

# Comprehensive Plan

City of New Smyrna Beach, Florida

- g. Continue to implement recommendations in the Master Stormwater Management Plan, which provides for the maintenance or restoration of the desired seasonal base flows and water quality.
- h. The prepared management plans, water quality studies, and sampling programs will be coordinated with Volusia County, St. Johns River Water Management District (SJRWMD), and FDEP.
- i. The findings and recommendations from the Surface Water Improvement and Management (SWIM) program, last updated in 2002, will be incorporated into the plans and regulations of the City of New Smyrna Beach.
- j. The City will incorporate pertinent recommendations of the Volusia Council of Governments' Action Plan to implement the 2008 Water Quality Plan.
- k. New Smyrna Beach shall continue its commitment to improve and enhance water quality and estuarine conditions through intergovernmental cooperation by a variety of mechanisms, such as:
  - i. Continuation of the Coastal Management Technical Steering Committee.
  - ii. Participation in ad hoc or other special technical advisory committees.
  - iii. Exchange of data and information among and between the county and the municipalities within the county.
  - iv. Presentations and discussions with the Volusia Council of Governments.
  - v. Updating data in cooperation with FDEP and SJRWMD.
  - vi. Notification of proposed programs, development regulations, or activities that address water quality.
  - vii. Participation in the SWIM program.
  - viii. Support and assistance to Volusia County in establishing and maintaining the water quality sampling and monitoring program.

## GOAL 4:

Protect, enhance and restore the functioning of the beach and dune systems, and prohibit development activities that would damage or destroy such systems.

### OBJECTIVE:

- 1. Work with Volusia County to maintain standards to minimize the impacts of structures and development on beach and dune systems and, where necessary, initiate dune restoration programs.

### POLICIES:

- a. Actively participate with the Bureau of Beaches and Coastal Systems concerning the Coastal Construction Control Line (CCCL) and the City's Coastal Construction Setback Line (CCSL) to implement the following criteria:
  - i. For non-seawalled open-ocean coast, the CCCL and CCSL should be located behind the landward base of the foredune ridge. The foredune ridge should be allowed to expand landward. A buffer between the landward base of the foredune ridge and building construction should be established.
  - ii. For seawalled coast, the CCCL and CCSL should be drawn behind the bulkhead line in accordance with the 100-year storm surge.
- b. Protection of property threatened by beach erosion should be encouraged by employing "soft engineering techniques" such as sand nourishment, the development of new sand dunes, or the enhancement of existing or historical dunes rather than "hard erosion control" such as bulkheads and seawalls.
- c. After the designation of the new CCCL, prohibit the construction of new seawalls, except for the following conditions: (1) replacement of existing seawalls, consistent with Policy 1.h. below; (2) in an emergency event to protect public health and safety (if approved by FDEP); and (3) to fill in small

- gaps (less than 250 feet) between existing seawalls.
- d. Where seawalls are permitted, require them to comply with a county wide uniform construction code that specifies minimum design criteria- and includes provisions that the seawalls be engineered to withstand a 100 year storm event.
  - e. Discourage the man-made destruction or removal of existing dunes and dune vegetation.
  - f. Structural development along beaches fronting the Atlantic Ocean shall enhance and not further degrade the coastal beach and dune system.
  - g. A dune system shall be developed and vegetated with suitable materials to bury all new, and/or reconstruction or replacement seawalls and bulkheads within the City. Standards for the maintenance and restoration of dune areas are maintained by FDEP.
  - h. Prior to 2020, the City will perform an analyses of allowance or prohibition of reconstruction or replacement regulations pertaining to existing hard erosion control structures along the oceanfront that are damaged by storm events, except for maintenance and care of public navigational structures (such as Ponce de Leon Inlet) and structures which are needed to protect evacuation routes and public facilities and utilities.
  - i. As part of the coastal resource function, participate with Volusia County in the exchange of information, and monitor data collected by FDEP, the US Army Corps of Engineers, the Florida Sea Grant College, universities, and other appropriate agencies.
  - j. In cooperation with the FDEP, assist Volusia County in the development of information and education programs to inform citizens on how the coastline works. Provide technical assistance to land owners, citizens, and community interest groups.
  - k. Utilize state and federal grants and community resources to implement beach and dune restoration projects, such as civic association and community group involvement, "Adopt a Dune" programs, private donations, or other similar techniques.
  - l. Incorporate dune restoration projects and revegetation into public improvement projects, such as park and recreation facilities on or adjacent to the beach.
  - m. Prepare interlocal agreements with Volusia County and the State of Florida for the funding and development of beach maintenance and restoration programs and projects.
  - n. Sands dredged from the Ponce de Leon Inlet should be used to stem beach erosion. If determined not to cause any long-term damage, FDEP should be requested to permit the placement of the dredged sands in the longshore transport zone (surf zone).
  - o. Work with Volusia County to develop strategies for responding to sea level rise, including:
    - i. Analysis of the estimated sea level rise and its effects on estuaries, wetlands, barrier islands, and uplands.
    - ii. Identification of structures and areas of possible risk.
    - iii. Determination of additional data and research needed.
    - iv. Assistance from state and federal agencies.
    - v. Analysis of Volusia County environmental buffer requirements and whether dune buffers should be required.
    - vi. Evaluation of locating public facilities in areas projected to be affected by rising sea level.
    - vii. Consideration of the effects on potable water sources, saltwater intrusion, septic systems, wastewater treatment facilities, and the water table.

## GOAL 5:

Lessen the impact of a destructive storm on human life, property, public facilities, and natural resources.

# Comprehensive Plan

City of New Smyrna Beach, Florida

## OBJECTIVE:

1. Evacuation of Population. Maintain the clearance time for the evacuation of the population in the Hurricane Vulnerability Zone at 6 hours, based on a level-of-service standard "D" during time of hurricane or any category storm.

## POLICIES:

- a. Land use plan amendments in the Hurricane Vulnerability Zone shall strive to reduce, and shall not increase, the clearance time for evaluation of the population in the Hurricane Vulnerability Zone above 6 hours.
- b. Assess the impact of new development on the hurricane evacuation network to ensure it will not increase clearance time for evacuation of the population in the Hurricane Vulnerability Zone above 6 hours.
- c. Ensure adequate roadway capacity to facilitate the evacuation of residents in the Hurricane Vulnerability Zone. The City shall continually maintain the New Smyrna Beach Emergency Preparedness Plan and Evacuation Routes Plan, after FEMA training and in conjunction with the Volusia County Plan to maintain the hurricane evacuation time period below 6 hours.
- d. Future roadway improvements shall minimize the impact of flooding and storm damage on evacuation route facilities.
- e. Evacuation routes shall be designated in such a way as to distribute traffic demand to provide optimum utilization of available roadway facilities. This will include the redistribution of a portion of the traffic from the North Causeway to the Harris Saxon Bridge.
- f. Volusia County shall coordinate the Peacetime Emergency Plan and evacuation plan with the New Smyrna Beach plan to ensure the orderly evacuation of the population in the Hurricane Vulnerability Zone.

## OBJECTIVE:

2. Shelter for Population. In cooperation with the American Red Cross, New Smyrna Beach shall designate hurricane evacuation shelters to protect the population in the Hurricane Vulnerability Zone.

## POLICIES:

- a. New Smyrna Beach, in cooperation with the American Red Cross, shall designate hurricane emergency shelter facilities to accommodate at least 23 percent of the population in the Hurricane Vulnerability Zone, based on the appropriate standards.
- b. New hurricane emergency shelter space shall not be located in the Hurricane Vulnerability Zone.
- c. In cooperation with the American Red Cross, existing hurricane emergency shelters, which are located in life threatening areas susceptible to flooding during a hurricane, shall be replaced as replacement facilities can be identified and agreements secured.

## OBJECTIVE:

3. Mitigation of Property Damage. Adopt land development regulations governing development in the Hurricane Vulnerability Zone and the Coastal High Hazard Areas that minimize danger to life and property.

## POLICIES:

- a. If constructed, all public facilities in the Hurricane Vulnerability Zone shall be flood proofed to ensure minimum damage from storms and hurricanes.
- b. The City will continue to enforce regulations that provide for: setbacks in areas of critical erosion; conservation and enhancement of dunes and vegetation; flood proofing of utilities; and appropriate requirements for structural wind resistance and floodplain management.
- c. All development in the Hurricane Vulnerability Zone shall be consistent with the federal flood hazard requirements.

**OBJECTIVE:**

4. By 2020 the City will develop and adopt a Post Disaster Relief Plan.

**POLICIES:**

- a. The Post Disaster Relief Plan shall include: identification of land areas that should not be reconstructed; abandonment and/or relocation of buildings; rebuilding of public facilities; and reconstruction with structural modification.
- b. The Post Disaster Relief Plan shall also identify structures in the Coastal High Hazard Areas that might be of some use for public access to coastal beaches and waterways, and shall make recommendations for acquisition when post disaster opportunities arise. It shall establish guidelines for determining priorities for the acquisition of storm damaged property in the Hurricane Vulnerability Zone.
- c. The Post Disaster Relief Plan shall establish principles for repairing, replacing, modifying, or relocating public facilities in the Hurricane Vulnerability Zone.
  - i. The *Land Development Regulations* may establish procedures to document actual uses, densities, intensities, and compliance with regulations in effect at the time of construction, through such means as photographs, diagrams, plans, affidavits, permits, appraisals, and tax rewards.
- d. The New Smyrna Beach Emergency Preparedness Plan for post disaster relief provides for disaster assessment by utilizing immediate repair and cleanup actions, as well as the provision of temporary housing and the provision of individual assistance. These efforts shall be coordinated with Volusia County and other coastal cities. Any development activities shall be consistent with the Hazard Mitigation section of the Emergency Preparedness Plan, until such time as the Post Disaster Redevelopment element of the Emergency Preparedness Plan is adopted.

**OBJECTIVE:**

5. Public Expenditures. New public expenditures shall be prohibited that will subsidize development inside the Coastal High Hazard Areas, unless it is consistent with policies specifically identified in the Coastal Management Element or cross reference to another appropriate element and included in the Capital Improvements Element.

**POLICIES:**

- a. The Coastal High Hazard Area is defined as the area below the Category 1 hurricane storm surge line as established by the Sea, Lake, and Overland Surges (SLOSH) storm surge model, pursuant to §163.3178(2)(h), *Florida Statutes*, and shown on Map VIII-1.
- b. Public facilities may be constructed within the Coastal High Hazard Areas when the public facility construction falls into one of the following categories:
  - i. The public facilities are required to meet minimum level-of-service standards.
  - ii. The public facility improvements are required to meet regulatory mandates resulting from changes in laws or rules.
  - iii. The public facilities are part of the adopted Community Redevelopment Agency redevelopment plan.
  - iv. The public facility improvements are essential to support other *Comprehensive Plan* policies.
  - v. The public facility will provide service on a par with other neighborhoods in the City.
- c. Prior to the development of public facilities in the Hurricane Vulnerability Zone, it shall be determined that there are no other feasible sites outside that area.
- d. If constructed, all public facilities in the Hurricane Vulnerability Zone shall be flood proofed to ensure minimum damages from storms and hurricanes.
- e. When public facilities within the Coastal High Hazard Areas are proposed for renovation or

# Comprehensive Plan

City of New Smyrna Beach, Florida

expansion, relocation shall be considered as an option.

## OBJECTIVE:

6. Population Concentrations: The City shall direct population concentrations away from the Coastal High Hazard Areas by limiting infill development to the currently established *Comprehensive Plan* limits and by acquiring significant undeveloped parcels when feasible.

## POLICY:

When feasible, the City shall work with County and State agencies to acquire undeveloped parcels that have significant environmental assets.

## GOAL 6:

Maintain and improve public access to the sovereign lands of the coastal management area through the provision of coastal beach access facilities, fishing piers, boat ramps, and marinas.

## OBJECTIVE:

1. Coastal Beach Access Facilities. In the areas of unincorporated Volusia County (except Ormond by the Sea) and the coastal cities of Ponce Inlet and Oak Hill, coastal beach access facilities (vehicular beach ramps, walkways, or walkovers) shall be provided at no greater than 1/2 mile intervals, except for the area north of Bass Drive and the area in Canaveral National Seashore. In the area of the coastal cities of Daytona Beach, Daytona Beach Shores, Ormond Beach, New Smyrna Beach, and in unincorporated Ormond by the Sea, coastal beach access facilities shall be provided every 1/4 mile, on the average. Volusia County shall be responsible for the actual provision, maintenance, and operation of these facilities.

## POLICIES:

- a. Work with Volusia County on signage and traffic control measures for the causeways and State Road A1A will be implemented to divert traffic away from areas that are suffering capacity problems.
- b. The priority for new pedestrian access shall be pedestrian walkovers or other alternatives that do not harm the dune system.
- c. Volusia County shall improve coastal beach access facilities to better accommodate handicapped persons. VOTRAN shall be encouraged to provide additional routes and stops at coastal beach access facilities, as well as more equipment on the buses, to accommodate wheel chairs and the needs of the handicapped.
- d. The County of Volusia has the sole authority and responsibility of all beach regulations, beach operations, beach access, and beach maintenance. The City is preempted on all matters, except licensing. The County levies beach tolls and ad valorem taxes to fund all beach related expenses.

## OBJECTIVE:

2. Marina Slips. Develop a marina siting program prior to 2015 that accommodates the projected demand for additional boat slips in marinas.

## POLICIES:

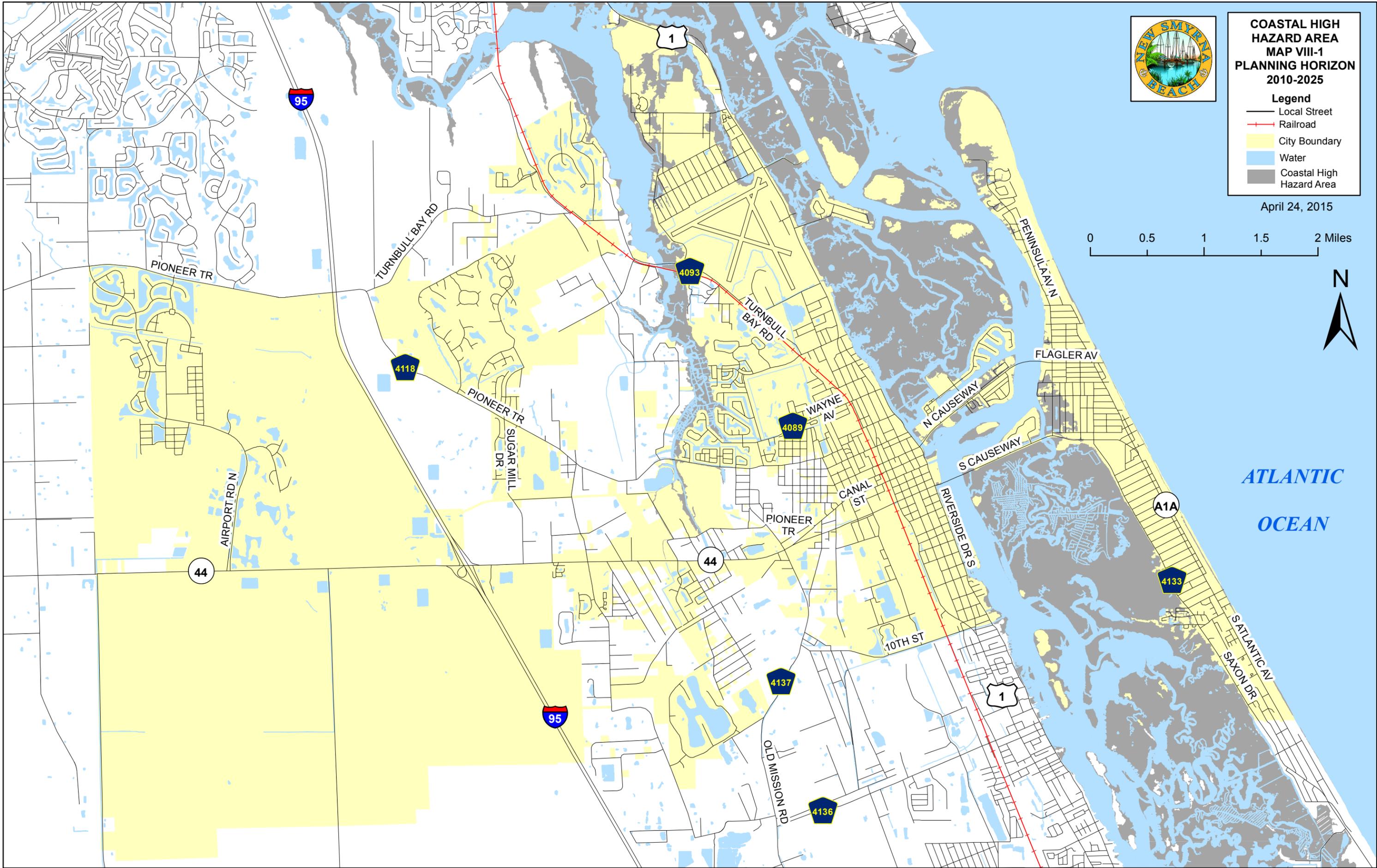
- a. A priority shall be placed on the development of boat slip capacity in the City, as well as in existing marinas.
- b. Marinas shall be encouraged to include both wet slip and dry slip capacity.
- c. Priority for new slips will be given to the expansion of existing marinas and new marinas, which would minimize travel distance to the Ponce de Leon Inlet.
- d. The City shall consider utilizing the dock facility slip allocation identified in the Manatee Protection Plan as a tool to stimulate high-quality, employment intensive waterfront development.



**COASTAL HIGH HAZARD AREA  
MAP VIII-1  
PLANNING HORIZON  
2010-2025**

- Legend**
- Local Street
  - Railroad
  - City Boundary
  - Water
  - Coastal High Hazard Area

April 24, 2015



*ATLANTIC  
OCEAN*

# Comprehensive Plan

City of New Smyrna Beach, Florida

## OBJECTIVE:

3. Boat Ramps and Fishing Piers. Implement a program to provide for public boat ramp and fishing pier facilities to accommodate the needs of the residents of New Smyrna Beach for water-oriented access.

## POLICIES:

- a. The City shall provide one (1) boat ramp for public utilization for each 12,500 municipal population.
- b. Fishing piers, catwalks, and jetties shall be provided at a rate of 800 lineal feet per 25,000 population.

## GOAL 7:

Public services and facilities shall be adequate and available to serve both current and future residents.

## OBJECTIVE:

1. The Land Development Regulations shall ensure that the provision of roads, recreation facilities, potable water, sanitary sewer, drainage and solid waste facilities and services required to maintain the adopted level-of-service standards shall be consistent and phased with the level of development proposed in the Future Land Use Element.

## POLICIES:

- a. Development or redevelopment within the coastal areas shall have public services and facilities available concurrent with the impacts of development.
- b. The City will maintain the level-of-service standards adopted in this and other elements of this plan.

## OBJECTIVE:

2. Ensure through the *Land Development Regulations* and Capital Improvements Element of the *Comprehensive Plan* the adopted level-of-service standards.

## POLICIES:

- a. Establish a level-of-service consistent with the Transportation Element for roadway facilities within the municipal coastal area.
- b. Establish a level-of-service "D" for the purpose of calculating the capacity of road facilities to clear evacuees within the hurricane evacuation time.

## OBJECTIVE:

3. Ensure - through the *Land Development Regulations*, Capital Improvements Element, and development review - that sufficient water resources are available to meet the potable water needs of the New Smyrna Beach population.

## POLICIES:

- a. Development in prime aquifer water recharge areas shall be consistent with the goal of protecting water resources.
- b. Future development will be required to hook up to centralized potable water systems.
- c. Adequate capacity will be required for potable water storage, treatment, and distribution facilities to meet the demand of projected growth and development.
- d. Adopt and enforce interlocal agreements among and between local governments to identify future service areas and potable water providers.
- e. Continue to assist Volusia County in developing and refining land development regulations to protect potable water wellfields from contamination (a wellfield protection ordinance, for example).
- f. Locate future wellfields west of the ultimate urban boundary line further inland near the center of the county, to protect against saltwater intrusion.

# Comprehensive Plan

City of New Smyrna Beach, Florida

- g. Potable water withdrawal from areas east of the ultimate urban boundary should be consistent with the requirements of FDEP and SJRWMD and pumped at an appropriate volume and rate to avoid saltwater intrusion and decreased aquifer levels.
- h. The level-of-service for potable water within the coastal area shall be consistent with the water and sewer sub-element of the *Comprehensive Plan*.
- i. Continue efforts to assess and upgrade water transmission facilities in areas experiencing low-pressure conditions, to ensure that an adequate water supply will exist during maximum daily demand periods to meet future growth.

## OBJECTIVE:

- 4. Wastewater. Provide sufficient treatment capacity and effluent disposal methods to meet the demand projected by growth and development, consistent with adopted water quality standards.

## POLICIES:

- a. Require future development or redevelopment to connect to wastewater treatment facilities.
- b. Require existing and future wastewater treatment facilities to meet or exceed adopted FDEP water quality standards.
- c. Adopt interlocal agreements among and between local governments to identify future wastewater service areas and collection and treatment responsibility.
- d. The level-of-service for the provision of wastewater treatment in the coastal area shall be consistent with the water and sewer sub-element of the *Comprehensive Plan*.

## OBJECTIVE:

- 5. Stormwater Management. The Stormwater Management Master Plan was last revised in 2004. All stormwater system improvements and repairs should be in compliance with this approved plan. The City will continue to monitor and implement this plan.

## POLICIES:

- a. For new development, prohibit the untreated direct discharge of stormwater runoff into Class II waters.
- b. The minimum level-of-service standard for stormwater runoff in the coastal area shall be as follows:
  - i. The first inch of rainfall shall be retained on site; or
  - ii. In cases where the local government determines that soil and/or groundwater table conditions are not conducive to such retention, the first inch shall be detained and gradually released over a period of 24 to 72 hours; or
  - iii. In the case of wet retention, standards approved by the local government shall be applied.
- c. Discharge from stormwater facilities shall not result in violation of adopted water quality standards.
- d. Stormwater management systems shall be designed to remove oil and suspended solids prior to discharge.

## OBJECTIVE:

- 6. Solid Waste. Ensure through monitoring programs that solid waste facilities do not result in violation of adopted standards or degradation of coastal resources.

## POLICIES:

- a. The level-of-service standard for solid waste shall be as identified within the Solid Waste sub-element.
- b. The City shall continue to investigate and review the available technology for resource recovery and other alternatives to solid waste management, consistent with the protection and conservation of environmental resources and water quality.

# Comprehensive Plan

City of New Smyrna Beach, Florida

## OBJECTIVE:

7. Public Buildings. Ensure through capital improvement planning and site selection that public buildings meet the needs of population growth, and are constructed to reduce the potential for damage from storms or flooding.

## POLICIES:

- a. Cooperate with the Volusia County School Board in identifying future sites for school facilities within New Smyrna Beach.
- b. Locate future school facilities outside of areas susceptible to hurricane storm damage or areas prone to flooding, or as consistent with Chapter 235, *Florida Statutes*, and Rule 7A-2, *Florida Administrative Code*, regarding floodplain and school building requirements.
- c. Cooperate with the Volusia County School Board and the American Red Cross in identifying and designating school facilities as hurricane evacuation and emergency shelters.
- d. Future school facilities should be designed to be used as hurricane evacuation and emergency shelters.
- e. Provide for fire and law enforcement facilities commensurate with population growth and development in the coastal area.
- f. Construct new fire and law enforcement facilities to reduce the potential for damage due to a hurricane or flooding.
- g. Continue to update procedures as part of the New Smyrna Beach Emergency Preparedness Plan for emergency fire and police protection and response.

## GOAL 8:

Protect the waterway resources, specifically manatees, by regulating boating impacts.

## OBJECTIVE:

1. To execute the Volusia County Manatee Protection Plan, as amended, incorporated by reference herein, including municipal options for slip aggregation, the establishment of a manatee conservation trust fund, and other measures designed to protect manatees, while allowing compatible boat facility siting.

## POLICIES:

- a. The maximum number of powerboat slips to be constructed, based upon data and research compiled in the *Volusia County Manatee Protection Plan*, together with shoreline measurements, inventory of existing slips, City level-of-service, and other data, in the areas outlined in Map VIII-2 are as follows:
  - i. Section A – Protected Areas – slips are prohibited;
  - ii. Section B – Intermediate Areas – slips are prohibited;
  - iii. Section C – Case-by-Case Review Areas – 1,204 slips north of the State Road 44 / North Causeway Bridge and 276 south of the State Road A1A / South Causeway Bridge, for a total of 1,480 slips; and
  - iv. Section D – Slip-to-Shoreline Areas – no limitation to the number of slips.
- b. Waterfront single-family residential lots will not be denied their riparian rights to construct a dock for two (2) slips per lot. If single-family residential lots are subdivided subsequent to the approval of the *Volusia County Manatee Protection Plan*, each additional lot shall represent one (1) powerboat slip to be deducted from the total.
- c. All marina development must be consistent with the *Volusia County Manatee Protection Plan*.
- d. Where the opportunity exists, the sharing of multi-slip facilities and aggregation of slips shall be encouraged during development and redevelopment, including single-family residences.

# Comprehensive Plan

City of New Smyrna Beach, Florida

- e. The data and analysis used to determine the allowable densities of powerboat slips shall be monitored by the re-evaluation of data on at least a five (5) year basis. This re-evaluation can be in association with or concurrent with the re-evaluation of the *Volusia County Manatee Protection Plan*.
- f. The City shall consider utilizing the dock facility slip allocation identified in the Manatee Protection Plan as a tool to stimulate high-quality, employment intensive waterfront development.

# BOAT SLIP SITING MAP VIII-2 PLANNING HORIZON 2010-2025

## Legend

- Section A - Protected Areas
- Section C North - Limited to 1204 Slips
- Section C South - Limited to 276 Slips
- Section D - No Limitations
- Local Street
- Railroad
- City Boundary
- Water

