

Comprehensive Plan

Chapter 5

Coastal Management

Element

Goals, Objectives, and Policies

City of Edgewater
Ordinance No. 2019-O-06

GOALS, OBJECTIVES AND POLICIES

GOAL 1: COASTAL RESOURCES. Conserve, protect and manage the coastal resources of the City of Edgewater 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 1.1: *Habitat Preservation.* Utilize development regulations and other management programs in conjunction with the County to ensure 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 hydrological systems where the wetlands and uplands function as a productive unit resembling the original landscape.

Policy 1.1.1: *Management Plans and Standards.* The City will coordinate with the Volusia County Environmental Management Department to maintain, update and implement management plans and standards that protect and conserve natural systems within the City.

Policy 1.1.2: *Conservation Overlay Maintenance and Hydrological Corridors.* The City will maintain a Conservation Overlay area on the *Future Land Use Map* (FLUM) that identifies hydrological corridors in the City that require special review and potential conservation designations.

Policy 1.1.3: *Conservation Overlay Coordination and County Designated Environmental Corridors.* The City will continue to coordinate the Conservation Overlay designation with the County's designated environmental corridors to ensure the natural systems remain intact after annexation.

Policy 1.1.4: *Critical Wetland and Upland Habitats and Connecting Corridors.* Areas of critical wetland and native upland habitats that are not connected to corridors that exhibit resource values shall be evaluated for inclusion as conservation or recreation areas within future development plans. Secondary linkage to nearby corridors, by any artificial means, shall be considered and encouraged. Construction of new corridors, or restoration of existing disturbed corridors, shall be considered as a form of mitigation where appropriate.

Policy 1.1.5: *Minimizing Long-term and Cumulative Impacts.* The City will continue to enforce the conservation, management, and development performance standards and criteria within the Land Development Code which will minimize long-term and cumulative impacts on coastal habitat by requiring site specific analysis during the review process.

Policy 1.1.6: *Habitat Mitigation Standards.* The City will coordinate with the St. Johns River Water Management District regarding standards for

habitat mitigation. These standards will identify situations where mitigation may be acceptable (e.g., non-forested wetland or mangrove swamp creation), unacceptable (e.g., certain endangered species habitat such as an eagles nest), or problematic (e.g., experimental or unproven). In all cases, the proposed mitigation plan must 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 for review by the St. Johns River Water Management District.
- Detailed construction plans, planting materials and maintenance schedules.
- A long term management plan for created habitat in the watershed in which it is located (inappropriate future land uses surrounding the created or enhanced habitat may alter the habitat's character or eliminate it completely).
- The removal or control of exotic or nuisance vegetation.
- Quantifiable 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.

Policy 1.1.7: *Habitat Mitigation Plans, Programs or Activities.* For all habitat mitigation plans, programs, or activities, the City shall require quantifiable, realistic goals; maintain direct supervision through the construction and monitoring process; and, if problems or failures result, be able to enforce permit conditions.

Policy 1.1.8: *Development in Habitat Areas and Impact to Listed Species.* Development in habitat areas listed by the State of Florida and U.S. Fish and Wildlife Service as Endangered, Threatened or Species of Special Concern shall not adversely impact the listed species.

Policy 1.1.9: *Development Proposals and Submitting a Mitigation Plan.* Development proposals which propose to alter wetlands, or which cannot preserve the required portion of native vegetation on the site shall submit a mitigation plan (may include creation of new habitat of the same type destroyed, restoration of previous disturbances, and purchase of similar habitat for preservation).

Policy 1.1.10: *Maintaining Tree Protection Regulations.* Maintain tree protection regulations to prohibit the removal of native vegetation, including mangroves, without a permit.

Policy 1.1.11: *Development Adjacent to Estuarine and Riverine Shoreline Areas.* Development adjacent to estuarine and riverine shoreline areas shall maintain a habitat buffer zone to protect or conserve the canopy, understory and ground cover of native upland vegetation and wetlands.

Objective 1.2: *Shoreline Protection.* Maintain regulatory programs designed to enhance and protect the natural functions of the estuarine shoreline.

Policy 1.2.1: *Hardening of the Estuarine Shoreline.* Hardening of the estuarine shoreline shall be allowed only when erosion is causing a significant threat to life or property. When hardening of the shoreline is approved, stabilization methods other than vertical seawalls and bulkheads shall be used.

Policy 1.2.2: *Impervious Surface and the Mean High Water Line.* No more than 30% impervious surface shall be allowed within 100 feet of the mean high water line.

Policy 1.2.3: *Shoreline Protection Buffer.* A shoreline protection buffer shall be maintained for a distance extending 50-feet laterally upland from the mean high water line within the buffer zone and 25-feet from wetland vegetation, except that reasonable access shall be permitted.

Policy 1.2.4: *Identifying Critical Habitats and the Estuarine Shoreline.* The City will identify critical habitats along the estuary shoreline on the FLUM in the Conservation Overlay area.

GOAL 2: LAND USE. To conserve, protect and restore coastal resources by managing growth and land uses to prevent damage or destruction of those resources.

Objective 2.1: *Coastal Land Uses.* Continue to enforce land use regulations that provide for the location, extent and distribution of land uses consistent with the protection of coastal resources.

Policy 2.1.1: *Proposed Land Uses and Impact on Coastal Resources.* Proposed land uses which may have significant adverse impact on coastal resources shall be appropriately regulated to mitigate such impacts.

Policy 2.1.2: *Environmental Impact Assessment.* An environmental impact assessment shall be prepared and reviewed for land uses proposed in potential critical habitat areas.

Policy 2.1.3: *Protection of Natural Resource, Environmental, Ecological and Critical Wildlife Habitat Areas.* 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 (TDR's), purchase of development rights or land exchanges.

Policy 2.1.4: *Requirement of Ecology Survey and Proposed Waterfront or Water- dependent Uses.* To limit the cumulative impacts of development on remaining coastal marine resources and wildlife habitats, an ecological survey shall be required for all proposed waterfront or water-dependent uses.

Objective 2.2: *Coastal Resource Protection.* Continue to enforce performance standards for appropriate densities, intensities, buffer zones, resource protection, and location of development adjacent to aquatic and natural preserves, wildlife refuges, and environmental system corridors to protect the natural character, scenic values and public benefit of these areas.

Policy 2.2.1: *Permitting Inconsistent or Incompatible Land Use Amendments or Rezonings.* The City shall not allow land use amendments or rezonings which would be inconsistent or incompatible with the protection or conservation of coastal resources.

Policy 2.2.2: *Innovative or Alternative Techniques to Protect Coastal Resources.* Utilize innovative or alternative techniques to protect coastal resources. Such techniques could include Conservation Overlay areas, buffer zones, restoration, conservation easements, quality development programs, acquisition, density transfers, transfer of development rights, or land exchanges.

Policy 2.2.3: *Developing Consistent Standards, Criteria and Land Development Regulations.* 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.

Policy 2.2.4: *Permitting New Point Sources and the Indian River Lagoon.* No new point sources shall be permitted to discharge into the Indian River Lagoon.

Policy 2.2.5: *Manatee Habitat Areas, Marinas and Boating Speed Limits.* In order to protect manatees, marinas shall not be built in designated manatee habitat areas. Boating speed limits shall be coordinated with the County in manatee- designated areas.

Objective 2.3: *Priorities for Shoreline Water Dependent Uses.* Ensure that priorities for shoreline land use shall be given to water-dependent uses over water-related land uses and shall be based on the type of water-dependent use, adjacent land use, water quality, impact on critical habitat, and impact on coastal resources.

Policy 2.3.1: *Resource Management Plan for the Indian River Shoreline.* The City shall continue to work with Volusia County to develop a Resource Management Plan for the Indian River shoreline. Upon adoption of

the Plan, the City shall adopt the goals, objectives and policies that reflect the Plan.

Policy 2.3.2: *Developing Performance Standards for Water Dependent Uses.* The City will coordinate with the resource management plans of other agencies, such as aquatic preserve management plans or Surface Water Improvement Management (SWIM) plans in developing performance standards for water dependent uses.

Policy 2.3.3: *Performance Criteria and the Resource Management Plan.* Any performance criteria identified in the Resource Management Plan for shoreline uses will be adopted into the Land Development Code.

GOAL 3: WATER QUALITY. To protect, enhance and improve the quality of the estuarine environment.

Objective 3.1: *Estuarine Quality.* Coordinate and maintain records of estuarine water quality sampling through the Volusia County monitoring program to measure changes in water quality.

Policy 3.1.1: *Corrective Action.* The City will review the County's data and coordinate to determine where corrective action is needed. Corrective action shall be coordinated with SJRWMD and FDEP.

Policy 3.1.2: *Point Source Discharge Permits.* Annually, the City and the Department of Environmental Protection shall review and update all point source discharge permits, checking for accuracy and compliance.

Policy 3.1.3: *Non-point Source Discharge Permits.* Annually, the City and the SJRWMD shall review and update all non-point source discharge permits, checking for accuracy and completeness.

Policy 3.1.4: *Point and Non-point Source Discharges and Facilities.* Provide the County with SJRWMD and FDEP data that includes point and non-point source discharges and facilities, which are identified as potential water quality problems annually.

Policy 3.1.5: *Coastal Planning Areas and Septic Tanks.* The City will continue to prioritize Coastal Planning Areas that are currently using septic tanks to be incorporated into public sewage treatment systems. Criteria to be used in the ranking systems shall include:

- Areas known or suspected to be negatively impacting surface or groundwater quality;
- 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; and
- Proximity to existing or planned public wastewater treatment systems.

Policy 3.1.6: *Future Placement of Septic Tanks.* The City will not allow the future placement of septic systems in those areas identified as unsuitable for septic tank use. The City will continue to coordinate with the Volusia County Department of Health regarding septic tank permits.

Policy 3.1.7: *Sewage Treatment Plants and Level of Treatment.* As additional sewage treatment plants are constructed and/or existing plants are expanded within the City, a concerted effort and commitment shall be made to utilize the highest level of treatment possible.

Policy 3.1.8: *Alternative Methods of Effluent Disposal.* The City will continue to use alternative methods of effluent disposal such as re-use and land spreading/spray irrigation to reduce nutrient loadings in the rivers and estuaries.

Policy 3.1.9: *Maintaining Best Management Practices.* Maintain best management practices in the City's Land 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. The City shall also continue to require erosion and sediment control provisions as part of the development review process.

Policy 3.1.10: *Construction of Future Stormwater Systems.* 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, as well as the potential loadings. Storm water systems should be designed to gradually release water via sheet flow through natural or constructed wetlands.

Policy 3.1.11: *Estuarine Pollution and Controlling Surface Water Runoff.* Utilize the City's most recent *Master Stormwater Management Plan* to address estuarine pollution and control surface water runoff.

Policy 3.1.12: *Preparation of Management Plans, Water Quality Studies and Sampling Programs.* The preparation of management plans, water quality studies and sampling programs will be coordinated with the County, the SJRWMD and the FDEP.

Policy 3.1.13: *Canal Water Quality Monitoring Results.* The City will continue to implement its *Quality Assurance Plan* and submit canal water quality monitoring results to the SJRWMD.

Policy 3.1.14: *Improving and Enhancing Water Quality and Estuarine Conditions.* The City shall continue its commitment to improve and enhance water quality and estuarine conditions through intergovernmental cooperation by a variety of mechanisms such as:

- Participation in ad-hoc or other special technical advisory committees.
- Exchange of data and information among and between the County and adjacent municipalities.
- Presentations and discussions with the Volusia Council of Governments.
- Updating data in cooperation with FDEP and SJRWMD.
- Notification of proposed programs, development regulations or activities that address water quality.
- Continue participation in the SWIM program.
- Implement the policies or recommendations of the *Mosquito Lagoon Aquatic Preserve Management Plan*.
- Participation and assistance in maintaining and expanding the water quality sampling and monitoring program.

GOAL 4: COASTAL HAZARDS. Lessen the impact of a destructive storm on human life, property, public facilities and natural resources. The City shall also restrict public expenditure in areas subject to destruction by natural disaster.

Objective 4.1: *Evacuation of Population.* Maintain the clearance time for the evacuation of the population in six (6) hours based on a level-of-service standard "D", as defined in the *Transportation Element*, during the time of hurricane in any category storm.

Policy 4.1.1: *Land Use Plan Amendments and Increasing Clearance Times.* Land use plan amendments shall not increase the clearance time for evacuation of the population above six (6) hours. The Level-of-Service "D" is established for the purpose of calculating the capacity of road facilities to clear evacuees within the hurricane evacuation time.

Policy 4.1.2: *Assessing Impact of New Development and Clearance Times.* The City shall assess the impact of all new development on the hurricane evacuation network to ensure it will not increase clearance time for evacuation of the population above six (6) hours.

Policy 4.1.3: *Adequate Roadway Capacity and Evacuation of Residents.* The City shall coordinate with the County and FDOT to ensure adequate roadway capacity to facilitate the evacuation of residents.

Policy 4.1.4: *Minimizing Impact of Flooding and Storm Surge and Evacuation Routes.* Future development and roadway improvements shall be designed to minimize the impact of flooding and storm damage on evacuation route facilities.

Policy 4.1.5: *Design of Evacuation Routes.* Evacuation routes shall be designated in such a way as to distribute traffic demand to provide optimum utilization of available roadway facilities.

Policy 4.1.6: *Comprehensive Emergency Management Plan.* The City shall maintain and update its “*Comprehensive Emergency Management Plan*” in coordination with the County’s “*Comprehensive Emergency Management Plan*” to ensure the orderly evacuation of the population.

Policy 4.1.7: *Peacetime Emergency Plan and Evacuation Plan.* The City shall coordinate a Peacetime Emergency Plan and evacuation plan with the applicable Federal, State and Regional agencies and other local municipalities. This coordination will be accomplished by membership, cooperation and regular attendance at meetings held by the Volusia County Office of Civil Preparedness Advisory Board. This Board represents the lead agency for disaster planning within the County.

Objective 4.2: *Shelter for Population.* Designate hurricane evacuation shelters to protect the population in the event of a hurricane, in cooperation with the American Red Cross and Volusia County.

Policy 4.2.1: *Hurricane Emergency Shelters.* The City shall coordinate with Volusia County to ensure that there are hurricane emergency shelter facilities available in the County to accommodate at least 23% of the City’s population, based upon a standard of 40-square feet of shelter space per person.

Policy 4.2.2: *Location of New Hurricane Emergency Shelter Facilities.* New hurricane emergency shelter facilities shall not be located in the Hurricane Vulnerability Zone.

Objective 4.3: *Mitigation of Property Damage.* Ensure that development in the coastal high hazard area and hurricane vulnerability zone minimizes danger to life and property.

Policy 4.3.1: *Public Facilities in the Coastal High Hazard Area.* Prior to the development of public facilities in the Coastal High Hazard Area, it shall be determined that there are no other feasible sites within the City outside of that area.

Policy 4.3.2: *Public Facilities in the Coastal High Hazard Area and Building Requirements.* If constructed or redeveloped, all public facilities in the coastal high hazard area shall be required to meet strict building code regulations for hurricane wind design and flood control to ensure minimum damages during storm events.

Policy 4.3.3: *Development in the Hurricane Vulnerability Zone.* All development in the Hurricane Vulnerability Zone shall be consistent with the federal flood hazard requirements.

Policy 4.3.4: *Participation in the National Flood Insurance Program.* The City shall continue to participate in the National Flood Insurance Program (NFIP).

Objective 4.4: *Post Disaster Redevelopment.* Maintain a *Comprehensive Emergency Management Plan* to ensure that the most effective practices are utilized to provide safety and relief to citizens during and after a natural disaster.

Policy 4.4.1: *Comprehensive Emergency Management Plan Requirements.* The *Comprehensive Emergency Management Plan* shall include: an evacuation plan; disaster assistance; public information; damage assessment procedures; and recovery activities.

Policy 4.4.2: *Comprehensive Emergency Management Plan Priorities.* The *Comprehensive Emergency Management Plan* shall maintain priorities for repairing, replacing, modifying or relocating public facilities.

Policy 4.4.3: *Comprehensive Emergency Management Plan Procedures.* The *Comprehensive Emergency Management Plan* procedures will be consistent with the County's evacuation and recovery procedures.

Policy 4.4.4: *Build-back Policies.* The City shall enforce the build-back policies contained in its *Comprehensive Emergency Management Plan* after a hurricane.

Policy 4.4.5: *Public Infrastructure and the Coastal High Hazard Area.* Public infrastructure receiving damage of more than fifty percent (50%) of its value that is not necessary to support adopted levels of service shall be relocated away from the Coastal High Hazard Area.

Policy 4.4.6: *Rebuilding Existing Residential Units and Disasters.* Existing residential units destroyed in a disaster may be rebuilt to the same density (limited to the pre-disaster number of units and square footage).

Objective 4.5: *Coastal High Hazard Area.* Limit development in the Coastal High Hazard Area and direct population concentrations away from this area.

Policy 4.5.1: *Defining the Coastal High Hazard Area.* The coastal high-hazard area is hereby 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.

Policy 4.5.2: *New Public facilities and Coastal High Hazard Areas.* No new public facilities shall be located in the Coastal High Hazard Areas other than those necessary to support the levels of service identified in the *Capital Improvement Element* and for overriding health and safety reasons.

Policy 4.5.3: *Identifying Redevelopment Areas in the Coastal High Hazard Area.* The City shall identify areas in the Coastal High Hazard Area needing redevelopment, including eliminating unsafe conditions and inappropriate uses as opportunities arise.

Policy 4.5.4: *Coastal High Hazard Area and Clearance Times.* Land use amendments for areas within the Coastal High Hazard Area shall not increase the clearance time for evacuation above six (6) hours.

Policy 4.5.5: *Permitted Densities and the Coastal High Hazard Area.* No future land use amendments shall be approved within the Coastal High Hazard Area which will increase the previously permitted density.

Objective 4.6: When opportunities arise, the City shall eliminate inappropriate and unsafe development, and mitigate the flood risk to existing and future development, in the coastal areas that are of high risk of flooding due to storm surge, high tide events, flash flood, stormwater runoff and sea level rise.

Policy 4.6.1 New development and redevelopment in areas at high risk of flooding due to storm surge, high tide events, flash flood, stormwater runoff and sea level rise shall be required to utilize storm resistant and resilient building design specifications. Specific solutions shall be evaluated and approved by the Chief Building Official and City Engineer in accordance with available options contained in the Flood Plain Protection Standards section of the City's Land Development Code.

Policy 4.6.2 The City shall continue to include development and redevelopment principles strategies and engineering solutions that reduce the flood risk in coastal areas which results from high tide events, storm surge, flash floods, stormwater runoff and the related impacts of sea level rise.

Policy 4.6.3 The City shall encourage the use of best management practices development and redevelopment principles strategies and engineering solutions that will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency.

Policy 4.6.4 Structures shall be discouraged within the 100-year flood plain; however, if located therein, they shall be constructed to minimize the amount of additional fill, thereby reducing the potential for flood damage to the structure, supporting facilities, and adjacent property, consistent with the Flood Plain Protection Standards section of the City's Land Development Code regarding Floodplain Resistant Development Standards which include, but are not limited to Compensatory Storage requirements.

Policy 4.6.5 As funding opportunities become available (such as the use of grants, or tax deed sales) the City shall continue the acquisition for use, as public

open space and/or common retention areas, severe repetitive loss properties which have sustained repeated flood losses thereby reducing potential losses due to flooding.

- Policy 4.6.6** New development and redevelopment shall be consistent with, or more stringent than, flood-resistant construction requirements in the Florida Building Code and applicable flood plain management regulations set forth in 44 C.F.R. part 60.
- Policy 4.6.7** Construction activities seaward of the coastal construction control lines established pursuant to s. 161.053 shall be consistent with Chapter 161, Florida Statutes.
- Policy 4.6.8** The City shall continue to participate in and comply with the National Flood Insurance Program (NFIP) regulations.
- Policy 4.6.9** The City shall continue to participate in the Community Rating System (CRS) administered by the Federal Emergency Management Agency (NFIP) to achieve flood insurance premium discounts for residents.

GOAL 5: PUBLIC ACCESS. Provide, maintain and improve public access to the sovereign lands of the coastal management areas through the provisions of coastal access facilities, fishing piers, boat ramps and marinas.

Objective 5.1: *Public Shoreline Access Facilities.* Provide and maintain physical public access to the shoreline of the Indian River, consistent with the City's population.

- Policy 5.1.1:** *Physical Public Access Facilities.* Wherever feasible, the City shall ensure that all physical public access facilities to the shoreline shall be accessible by a public road with adequate public parking.
- Policy 5.1.2:** *New Pedestrian Access.* The priority for new pedestrian access shall be pedestrian walkovers or other alternatives that do not cause environmental degradation.
- Policy 5.1.3:** *Public Access to the River.* The City shall prohibit the vacation of public rights-of-way that provide or could provide public access to the river.
- Policy 5.1.4:** *Rehabilitation and Redevelopment of Public Access Facilities.* The City shall pursue rehabilitation or redevelopment of any public access facilities that indicate deterioration or negative impacts to natural resources.
- Policy 5.1.5:** *Public Access Facilities Consistency Requirements.* The City shall ensure that the public access facilities are consistent with the requirements of the *Coastal Zone Protection Act of 1985*.

Objective 5.2: *Fishing Piers.* Coordinate with Volusia County to ensure that adequate

allocation of fishing piers is provided to meet the demands of the current population.

Policy 5.2.1: *Fishing Pier Provision.* The City shall provide 0.0181-linear feet of fishing pier for each resident of the Coastal Planning Area (181 linear feet/10,000 persons) consistent with Volusia County.

Objective 5.3: *Boat Ramps.* Provide an adequate number of boat ramps to meet the needs of the existing population.

Policy 5.3.1: *Boat Ramp Provision.* The City shall provide 0.0002 of boat ramp lane for each resident (1 ramp lane for every 7,500 residents) consistent with Volusia County.

Policy 5.3.2: *Future Boat Ramp Lanes.* To the greatest extent possible, future boat ramp lanes shall be built as part of a Regional boat launching facility.

Objective 5.4: *Marina Slips.* Provide the private sector with the ability to accommodate the projected demand of additional boats slips in marinas.

Policy 5.4.1: *Marinas.* Marinas shall be encouraged to include both wet slip and dry slip capacity.

Policy 5.4.2: *New Slips and the Expansion of Existing Marinas.* Priority for new slips will be given to the expansion of existing marinas.

Objective 5.5: *Scenic Routes.* Establish scenic routes and roadways consistent with the County's *Scenic Roadway Element*, to preserve the natural beauty and vistas of the Coastal Planning Area.

Policy 5.5.1: *Riverside Drive Scenic Roadway.* Riverside Drive shall remain designated as a scenic roadway because of its significant aesthetic value.

Policy 5.5.2: *Riverside Drive as a Conservation Overlay.* A Conservation Overlay will be indicated on the FLUM along Riverside Drive to protect the scenic quality.

GOAL 6: PUBLIC SERVICES AND FACILITIES. Public services and facilities in the Coastal Planning Area shall be adequate and available to serve both current and future residents.

Objective 6.1: *Infrastructure Coordination.* Ensure through the Land Development Code that the provisions of roads, potable water, sanitary sewer, drainage, solid waste and recreation facilities and services required to maintain the adopted level-of-service standards throughout the Coastal Planning Area shall be consistent and phased with the level of development proposed in the *Future Land Use Element*.

Policy 6.1.1: *Development or Redevelopment within the Coastal Areas.* Development or redevelopment within the coastal areas shall have

public services and facilities available concurrent with the impacts of development.

Policy 6.1.2: *Limiting Public Expenditures in the Coastal High Hazard Area.* The City shall limit public expenditures in the coastal high hazard area to the restoration or enhancement of natural resources and the improvement of public parks and historic related facilities obtained from the City's Historic Resources Survey or the Florida Master Site File upon adoption of this *Plan*.

Objective 6.2: *Concurrency.* Ensure through the Land Development Code, development review process, concurrency management system and capital improvements schedule that adopted level-of- service standards are sufficient and provided for the existing and projected Coastal Planning Area population.

Policy 6.2.1: *New Development and Redevelopment and the Adopted Level of Service Standards.* New development and redevelopment projects within the Coastal Planning Area shall be consistent with the adopted Level of Service Standards established in this *Comprehensive Plan*.

Objective 6.3: *Potable Water.* Ensure through the City's development review process, concurrency management system and capital improvements schedule that there are sufficient water resources to provide potable water to meet the needs of the Coastal Planning Area population.

Policy 6.3.1: *Future Development and Potable water System Hook Up Requirement.* Require future development to hook up to centralized potable water systems.

Policy 6.3.2: *Planning for Facilities and the Demand of Growth and Development.* Plan for facilities including, but not limited to, potable water storage, treatment, and distribution facilities needed to meet the demand of projected growth and development and include them in the City's *Water Supply Facilities Work Plan (WSFWP)*.

Policy 6.3.3: *Maintaining Interlocal Agreements and Potable Water.* Maintain interlocal agreements with the County and adjacent local governments to identify future potable water service areas and modify the *WSFWP* when needed to accommodate added users.

Policy 6.3.4: *Wellfield Protection Standards.* The City shall continue to maintain and update wellfield protection standards in the City's Land Development Code pursuant to FDEP regulations.

Policy 6.3.5: *Locating Future Wellfields and Saltwater Intrusion.* Locate future wellfields away from the shoreline to protect against saltwater intrusion.

Policy 6.3.6: *Potable Water Withdrawal.* Potable water withdrawal shall be

pumped at an appropriate volume and rate to avoid saltwater intrusion and decreased aquifer levels.

Policy 6.3.7: *Water Transmission Facilities.* 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 6.4: *Sanitary Sewer.* Provide sufficient sanitary sewer treatment capacity, effluent reuse and disposal methods to meet the demand projected by growth and development consistent with adopted water quality standards and the *WSFWP*.

Policy 6.4.1: *Future Development Connection Requirement and Wastewater Facilities and Reclaimed Water.* Require future development to connect to the public wastewater treatment system and reclaimed water distribution systems, if available.

Policy 6.4.2: *New Development or Substantial Redevelopment and Reclaimed Water Distribution System.* The City will require each new development or substantial redevelopment project to construct reclaimed water distribution system and whenever feasible to connect to the City's existing irrigation water supply system. However, the City may accept an alternative supply for irrigation water subject to review and approval by the City, including private systems.

Policy 6.4.3: *Existing and Future Wastewater Treatment Facilities and Water Quality Standards.* The City shall continue to require existing and future wastewater treatment facilities to meet or exceed adopted FDEP water quality standards.

Policy 6.4.4: *Maintaining Interlocal Agreements and Future Wastewater Service.* Maintain interlocal agreements with the County and adjacent local governments to identify future wastewater service areas.

Policy 6.4.5: *Consistency of Wastewater Treatment Level-of-Service.* The level-of- service for the provision of wastewater treatment in the coastal area shall be consistent with the *Sanitary Sewer Sub-Element* of this *Comprehensive Plan*.

Policy 6.4.6: *Hazardous Waste Evaluation.* In cooperation with the County, a hazardous waste evaluation shall be undertaken for all known active and inactive solid waste disposal facilities and dump sites to determine possible contamination of ground and surface waters.

Policy 6.4.7: *Public Services and Facilities and Concurrency.* The City shall continue to make public services and facilities available concurrent with the impacts of development. In cases of phased development, the City shall determine when public facilities and services are necessary to maintain concurrency.

Objective 6.5: *Stormwater Management.* Will implement its *Stormwater Master Plan* and coordinate stormwater management systems with Volusia County to prevent degradation of coastal resources.

Policy 6.5.1: *Untreated Direct Discharge of Stormwater Runoff.* For new development, the City shall prohibit the untreated direct discharge of stormwater runoff into Class II Waters.

Policy 6.5.2: *Discharge from Stormwater Facilities and Water Quality Standards.* Discharge from stormwater facilities shall not result in violation of adopted water quality standards.

Policy 6.5.3: *Design of Stormwater Management Systems.* Stormwater management systems shall be designed to remove oil and suspended solids prior to discharge.

Objective 6.6: *Public Buildings.* Ensure through capital improvement planning and site selection that public buildings meet the needs of population growth and are located, if possible, outside of areas susceptible to damage from storms or flooding.

Policy 6.6.1: *Identifying Future School Sites in the Coastal Planning Area.* Cooperate with the Volusia County School Board in identifying future sites for school facilities within the Coastal Planning Area.

Policy 6.6.2: *Locating Future School Facilities.* Locate future school facilities outside of areas susceptible to hurricane storm damage or areas prone to flooding.

Policy 6.6.3: *Design of Future School Facilities.* Future school facilities should be designed to be utilized as emergency and evacuation shelters. The City shall work with the Red Cross and the Volusia County School District in the identification and designation of school facilities as hurricane evacuation and emergency shelters.

Policy 6.6.4: *Law Enforcement and Law Enforcement Facilities.* Provide for fire and law enforcement facilities commensurate with population growth and development in the Coastal Planning Area.

Policy 6.6.5: *Locating New Fire and Law Enforcement Facilities.* Locate new fire and law enforcement facilities outside of the areas susceptible to hurricane storm damage or flooding where feasible. Continue to update procedures as part of the *Peacetime Emergency Plan* for emergency fire and police protection and response.

Policy 6.6.6: *Comprehensive Emergency Management Plan.* Continue to update procedures as part of the *Comprehensive Emergency Management Plan* for emergency fire and police protection and response.

GOAL 7: INTERGOVERNMENTAL COORDINATION. Foster and encourage

intergovernmental coordination in the Coastal Planning Area between Volusia County, the City of Edgewater, adjacent Local governments, Regional, State and Federal government entities.

Objective 7.1: *Volusia County Coordination.* Coordinate with Volusia County to maintain area-wide standards to protect coastal resources.

Policy 7.1.1: *Consistent Development Standards.* Ensure consistency between development standards adopted by Volusia County and the City.

Policy 7.1.2: *Identification and Protection of the Environmental System Corridors.* The City shall coordinate with Volusia County in the identification and protection of the environmental systems corridors to ensure the viability and continuation of the system.

Policy 7.1.3: *Florida Land Use Cover and Forms Classification System.* The City shall cooperate with Volusia County in maintaining and updating the Florida Land Use Cover and Forms Classification System maps and database.

Policy 7.1.4: *Participating in Basin-wide Stormwater Management Programs and Studies.* The City shall continue to coordinate and cooperate with Volusia County, FDEP, SJRWMD and ECFRPC by participating in basin-wide stormwater management programs and studies.

Objective 7.2: *Land Use.* Utilize Volusia County's *Coastal Management Element* land use plan as a guide in deciding issues of land use and zoning, the extension and provision of urban services, annexation, and the general location of environmental systems corridors in the Coastal Management Area.

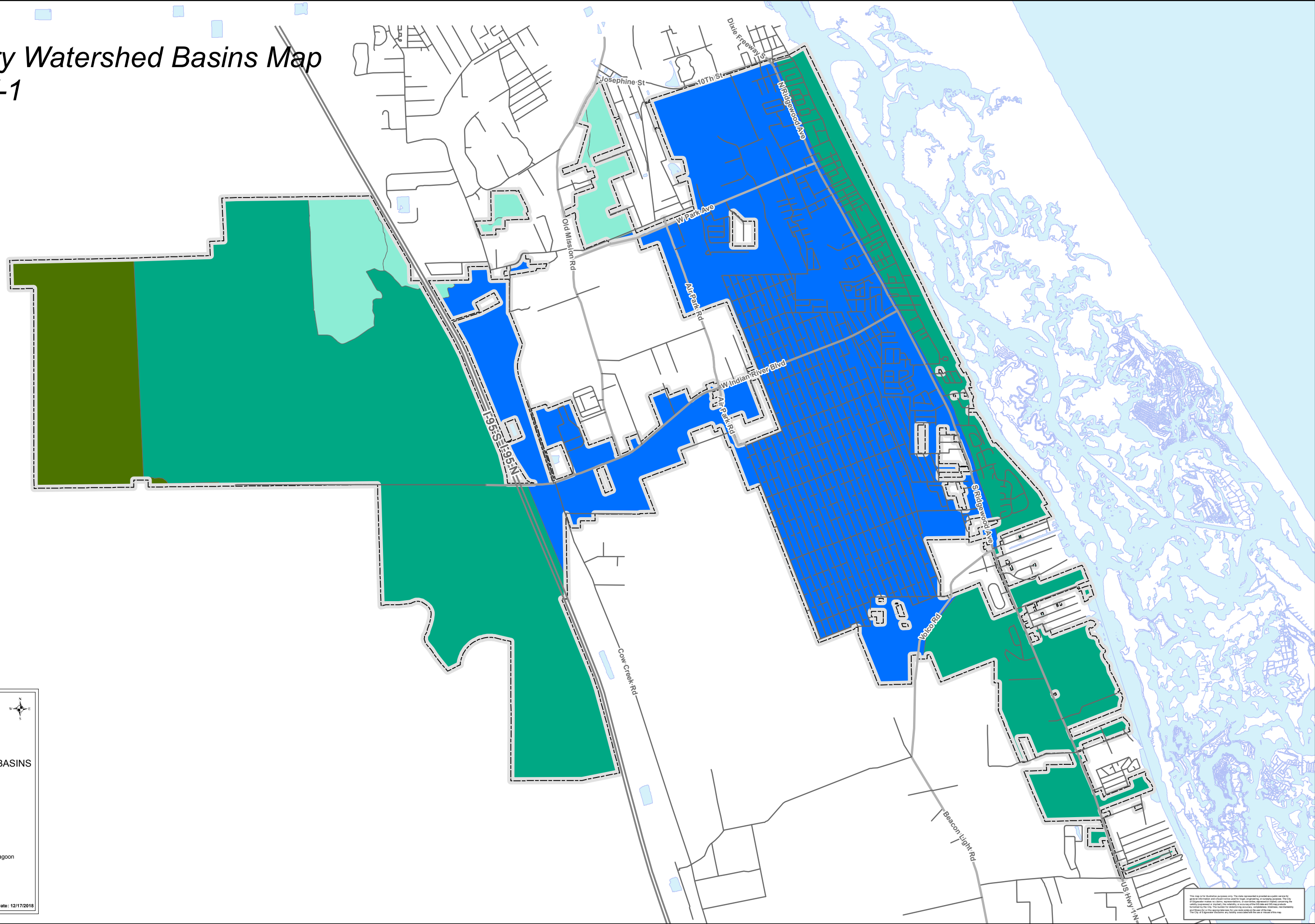
Policy 7.2.1: *Impacts on Coastal Resources in Adjacent Local Governments.* Applications for land use amendments, zoning, and development shall consider the impacts on coastal resources in adjacent local governments.

Policy 7.2.2: *Extension and Provision of Urban Services and Facilities.* The extension and provision of urban services and facilities and the identification of future annexation areas shall be accomplished through the adoption of inter-local agreements or any other sufficient means as prescribed by law.

Policy 7.2.3: *Maintaining and Updating Land Use Information by Watershed.* The City shall cooperate with the County in maintaining and updating land use information by watershed.

Primary Watershed Basins Map

Map V-1



EDGEWATER

PRIMARY WATERSHED BASINS

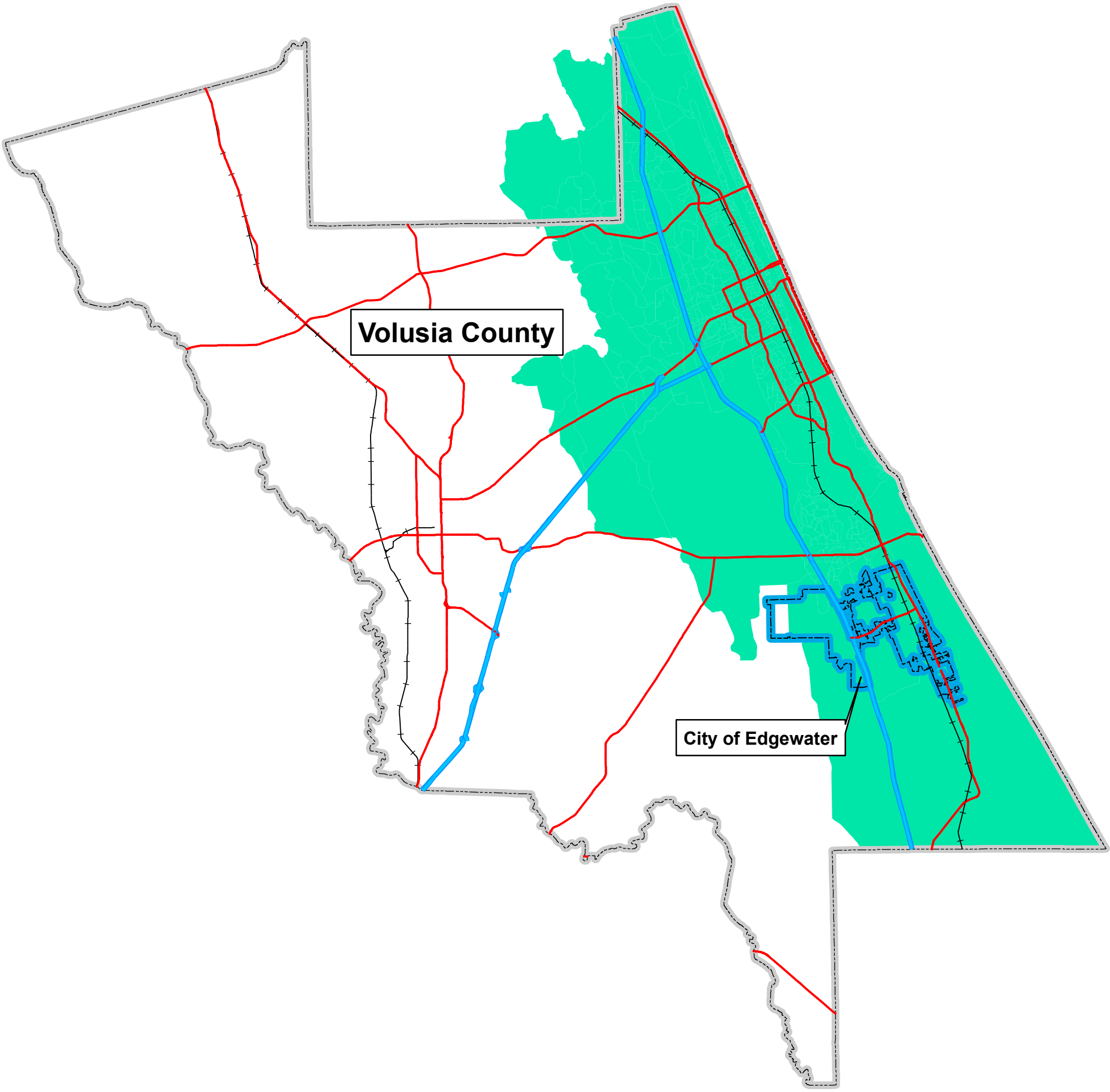
- City Limits
- Watersheds
 - Deep Creek
 - Edgewater
 - Indian River/Mosquito Lagoon
 - Turnbull

1 inch = 4000 feet
Scale when Printed at 11 X 17
Date: 12/17/2018



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Coastal Planning Area Map

Map V-2



COASTAL PLANNING
AREA BOUNDARY

-  City Limits
-  Coastal Planning Area



1 inch = 30000 feet

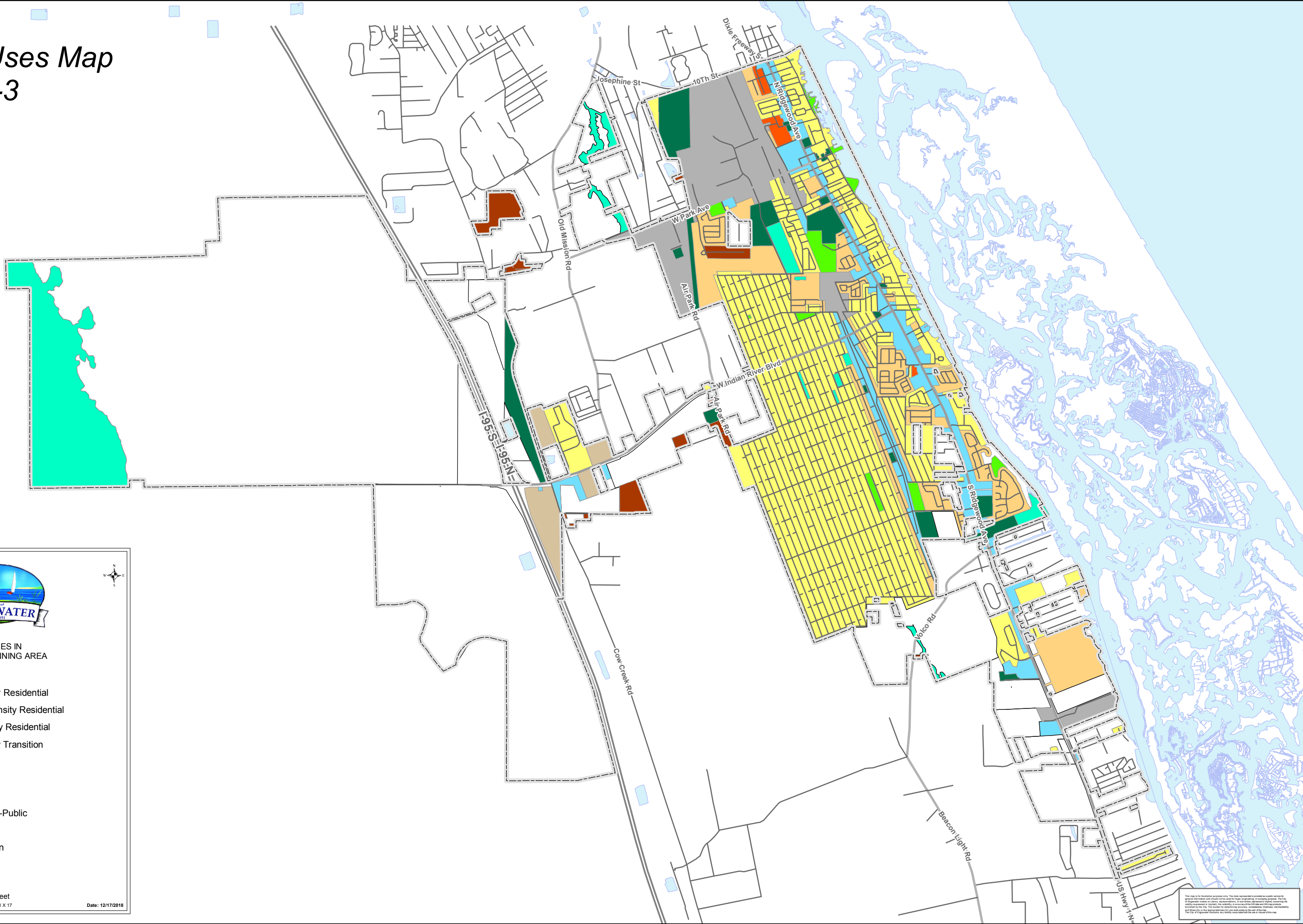
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Date: 12/17/2018













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Land Uses Map

Map V-3



LAND USES IN COASTAL PLANNING AREA

-  City Limits
-  Low Density Residential
-  Medium Density Residential
-  High Density Residential
-  Low Density Transition
-  Mixed Use
-  Industrial
-  Recreation
-  Public/Semi-Public
-  Commercial
-  Conservation
-  Vacant

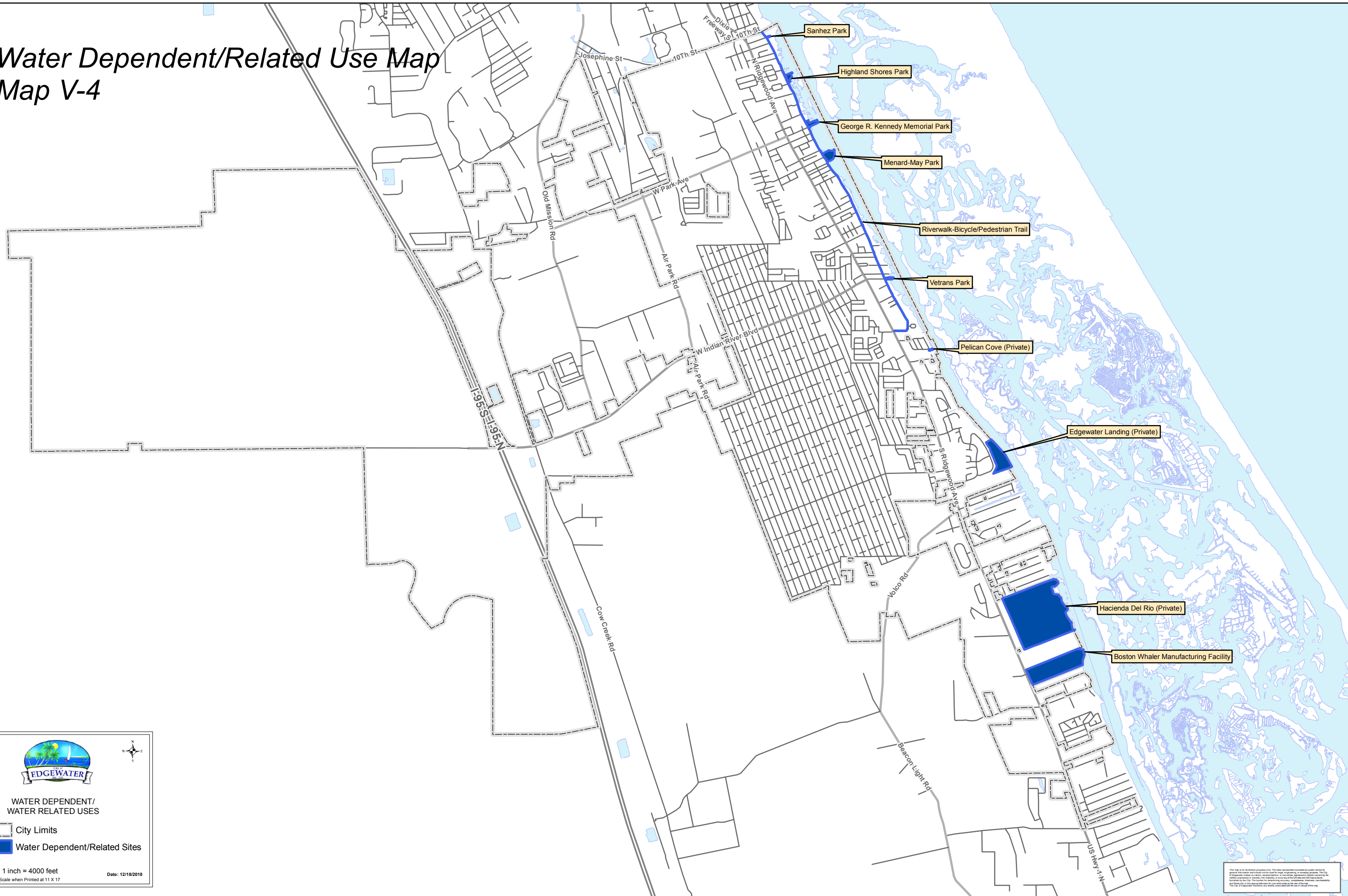
1 inch = 4000 feet
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Date: 12/17/2018



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Water Dependent/Related Use Map

Map V-4



WATER DEPENDENT/
WATER RELATED USES

-  City Limits
-  Water Dependent/Related Sites

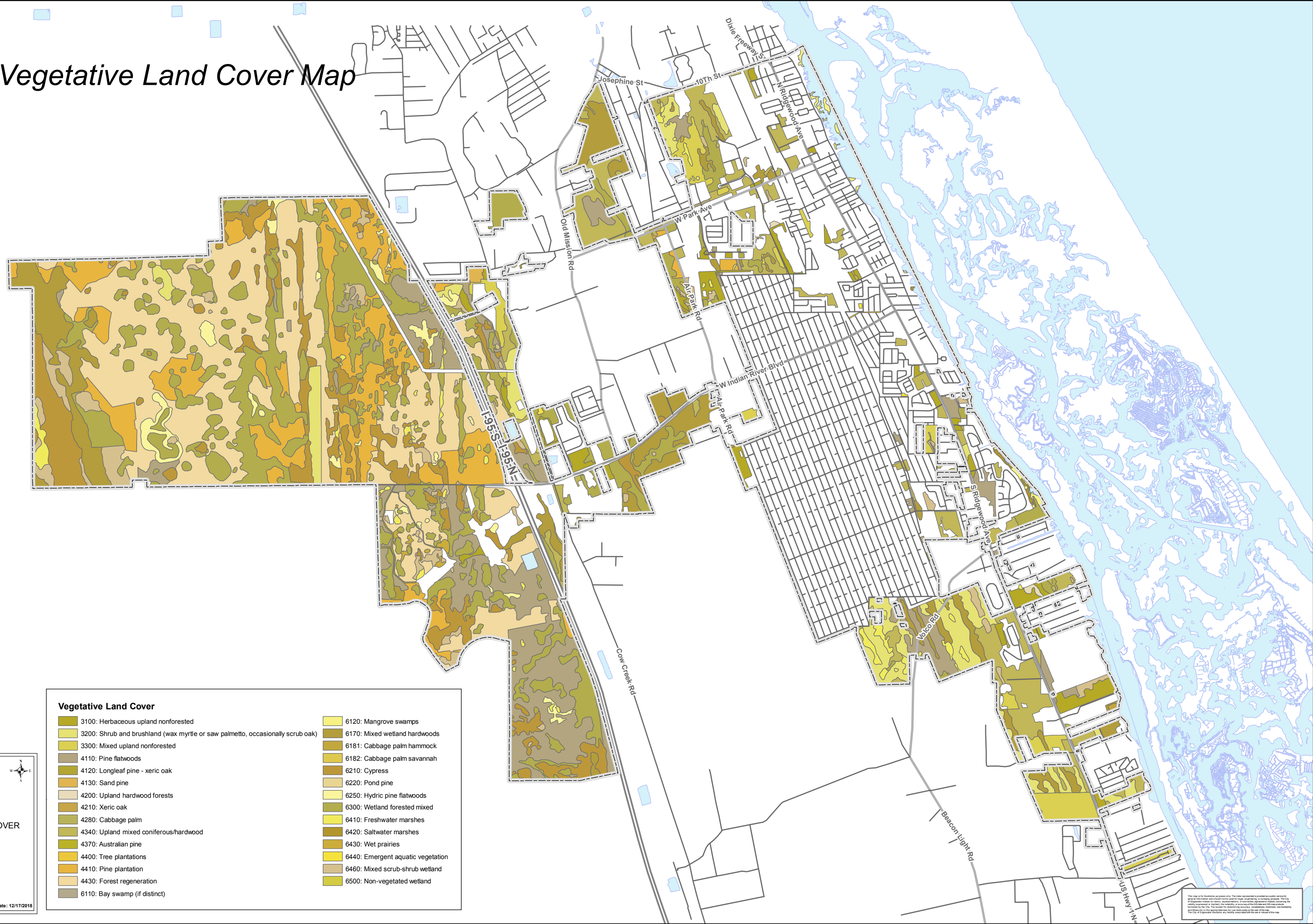
1 inch = 4000 feet
Scale when Printed at 11 X 17

Date: 12/18/2018

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General Vegetative Land Cover Map

Map V-5



Vegetative Land Cover

- | | |
|--|-----------------------------------|
| 3100: Herbaceous upland nonforested | 6120: Mangrove swamps |
| 3200: Shrub and brushland (wax myrtle or saw palmetto, occasionally scrub oak) | 6170: Mixed wetland hardwoods |
| 3300: Mixed upland nonforested | 6181: Cabbage palm hammock |
| 4110: Pine flatwoods | 6182: Cabbage palm savannah |
| 4120: Longleaf pine - xeric oak | 6210: Cypress |
| 4130: Sand pine | 6220: Pond pine |
| 4200: Upland hardwood forests | 6250: Hydric pine flatwoods |
| 4210: Xeric oak | 6300: Wetland forested mixed |
| 4280: Cabbage palm | 6410: Freshwater marshes |
| 4340: Upland mixed coniferous/hardwood | 6420: Saltwater marshes |
| 4370: Australian pine | 6430: Wet prairies |
| 4400: Tree plantations | 6440: Emergent aquatic vegetation |
| 4410: Pine plantation | 6460: Mixed scrub-shrub wetland |
| 4430: Forest regeneration | 6500: Non-vegetated wetland |
| 6110: Bay swamp (if distinct) | |



GENERAL VEGETATIVE COVER

City Limits

1 inch = 4000 feet

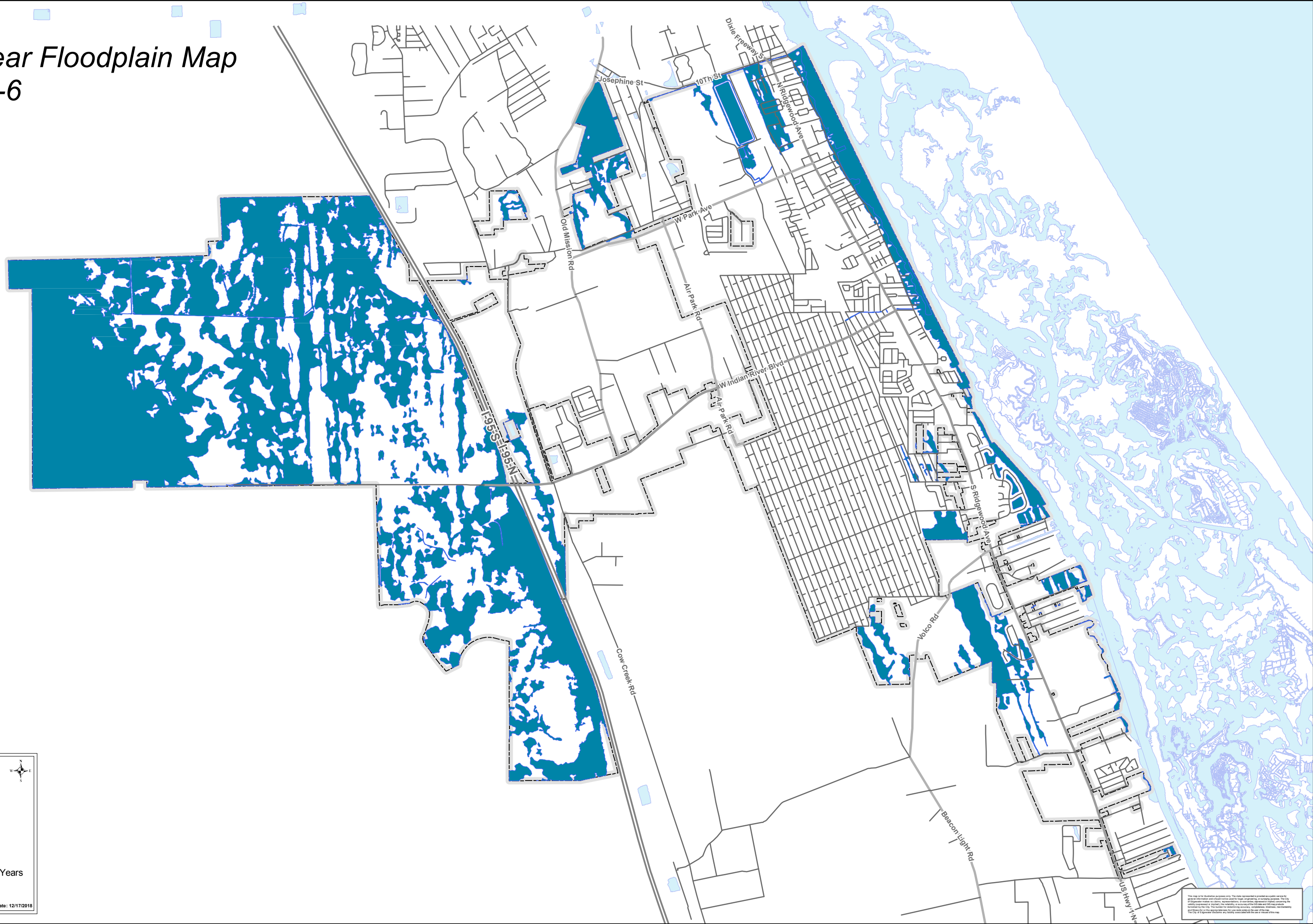
Scale when Printed at 11 X 17

Date: 12/17/2018



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100-Year Floodplain Map

Map V-6



COASTAL 100-YEAR
FLOODPLAIN

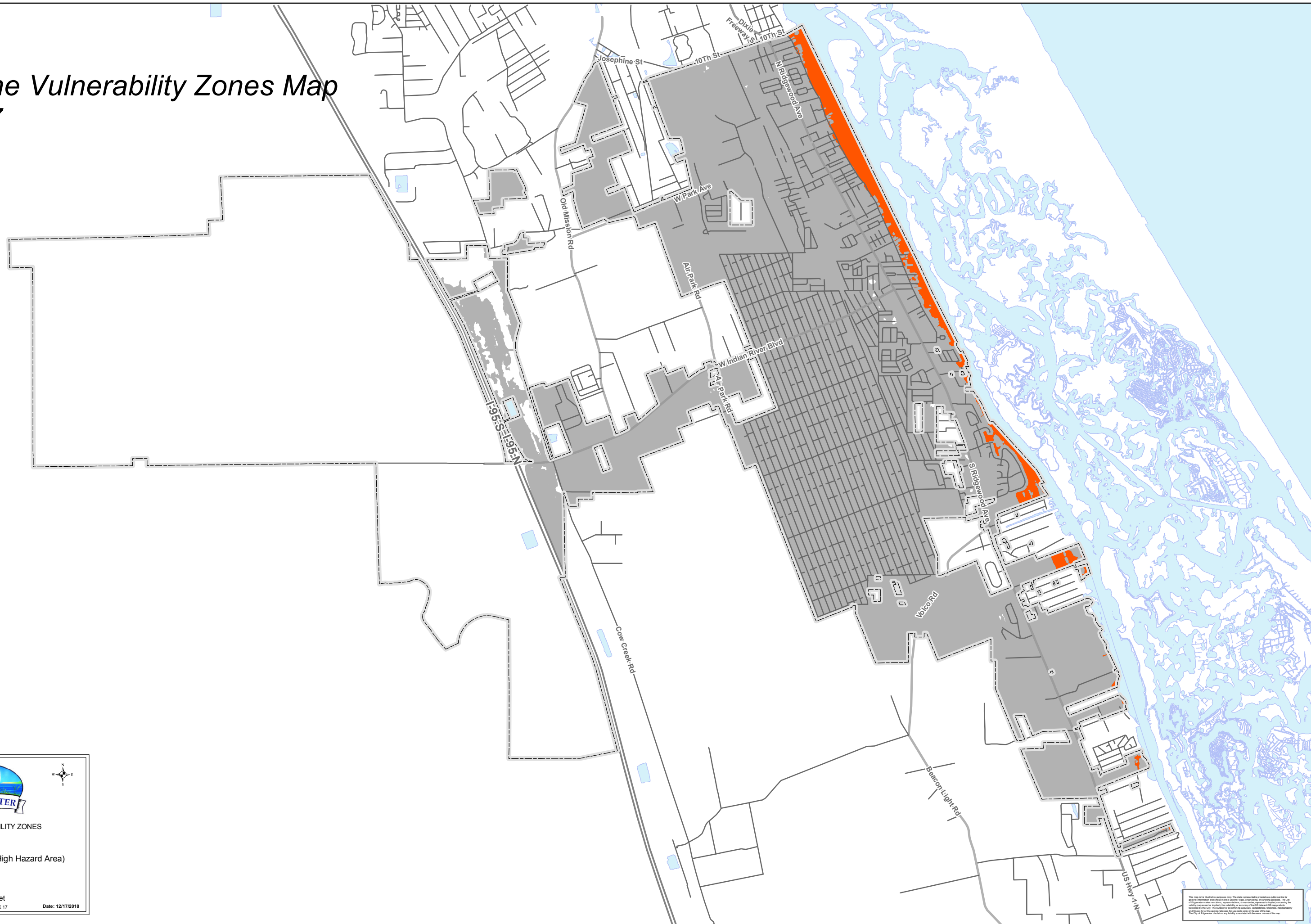
-  City Limits
-  Flood Plain - 100 Years

1 inch = 4000 feet
Scale when Printed at 11 X 17 Date: 12/17/2018

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Hurricane Vulnerability Zones Map

Map V-7



HURRICANE VULNERABILITY ZONES

- City Limits
- Threat A (Coastal High Hazard Area)
- Threat B

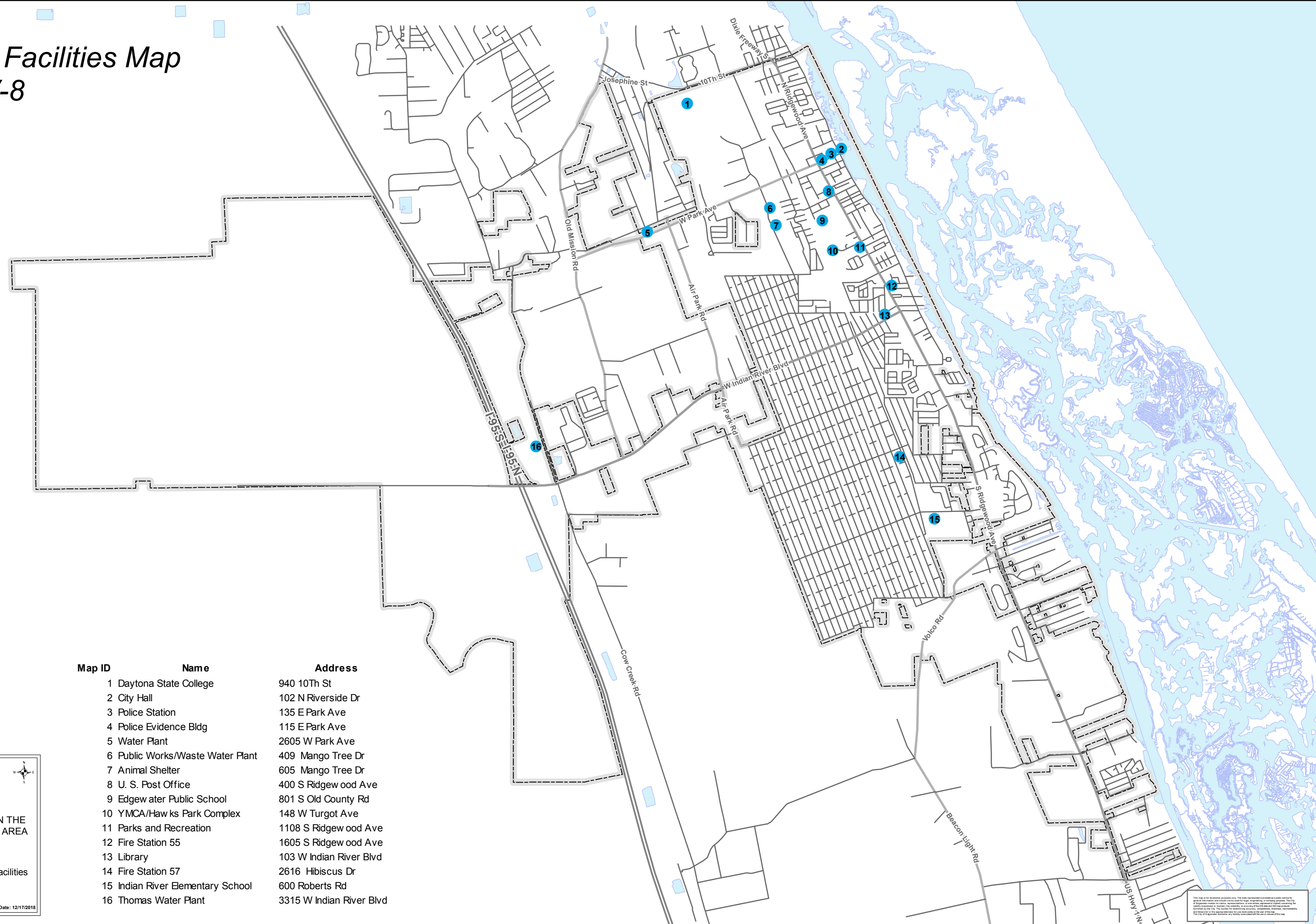
1 inch = 4000 feet
Scale when Printed at 11 X 17

Date: 12/17/2018

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Public Facilities Map

Map V-8



Map ID	Name	Address
1	Daytona State College	940 10Th St
2	City Hall	102 N Riverside Dr
3	Police Station	135 E Park Ave
4	Police Evidence Bldg	115 E Park Ave
5	Water Plant	2605 W Park Ave
6	Public Works/Waste Water Plant	409 Mango Tree Dr
7	Animal Shelter	605 Mango Tree Dr
8	U. S. Post Office	400 S Ridgewood Ave
9	Edgewater Public School	801 S Old County Rd
10	YMCA/Hawks Park Complex	148 W Turgot Ave
11	Parks and Recreation	1108 S Ridgewood Ave
12	Fire Station 55	1605 S Ridgewood Ave
13	Library	103 W Indian River Blvd
14	Fire Station 57	2616 Hibiscus Dr
15	Indian River Elementary School	600 Roberts Rd
16	Thomas Water Plant	3315 W Indian River Blvd

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PUBLIC FACILITIES IN THE COASTAL PLANNING AREA

City Limits

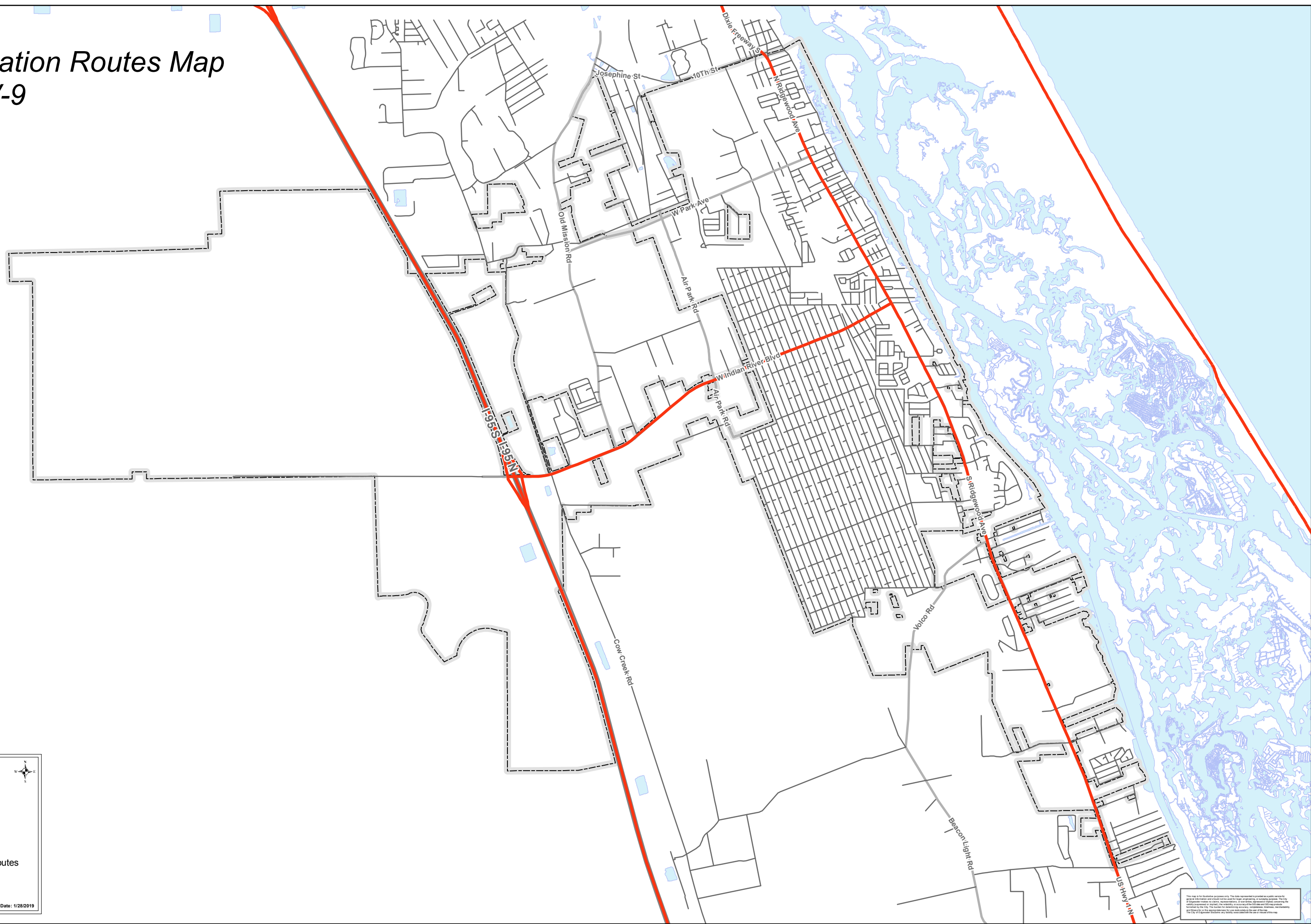
Coastal Public Facilities

1 inch = 4000 feet
Scale when Printed at 11 X 17
Date: 12/17/2018

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Evacuation Routes Map

Map V-9



EDGEWATER

City Limits

Evacuation Routes

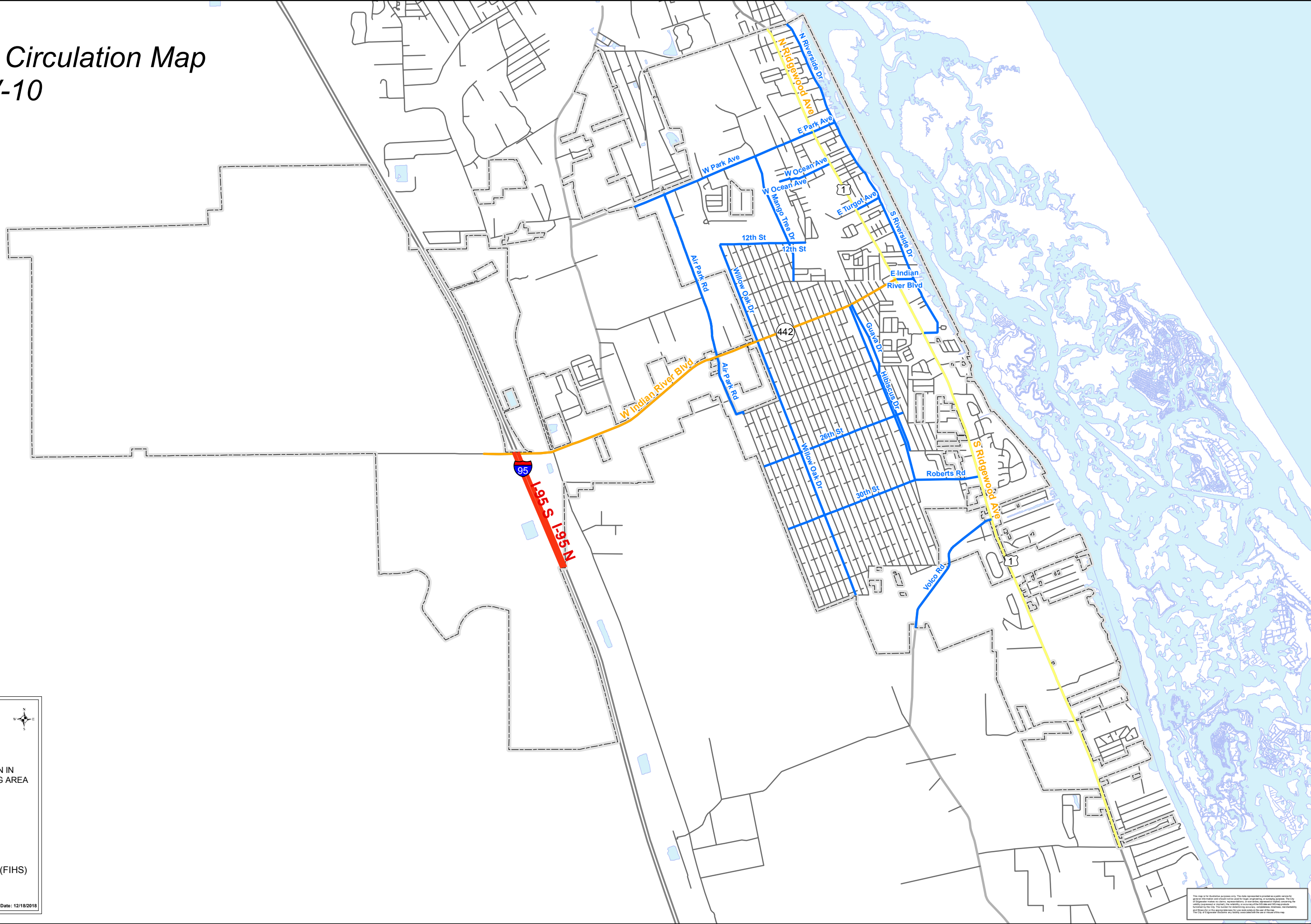
1 inch = 4000 feet

Date: 1/28/2019

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Traffic Circulation Map

Map V-10



TRAFFIC CIRCULATION IN THE COASTAL PLANNING AREA

- City Limits
- Collector
- Arterial I
- Arterial II
- Limited Access (FIHS)

1 inch = 4000 feet
 Scale when Printed at 11 X 17
 Date: 12/18/2018

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