Comprehensive Plan

# Chapter 6 Conservation Element

Goals, Objectives, and Polices

City of Edgewater Ordinance No. 2019-O-06

# GOALS, OBJECTIVES AND POLICIES

**GOAL 1:** To conserve, protect, enhance and responsibly manage the environmental resources of the City, in order to maintain or improve their ecological, economic, aesthetic and recreational values.

**Objective 1.1:** *Water Resources.* Conserve, appropriately use and protect the quality and quantity of the City's surface and groundwater resources.

- **Policy 1.1.1:** Wellfield Protection Areas. The City shall continue to enforce wellfield protection regulations around municipal wellfield sites pursuant to FDEP regulation and the Volusia County Wellhead Protection Ordinance.
- **Policy 1.1.2:** Connecting to Wastewater Reuse System. The City will continue encouraging residents to connect to the wastewater reuse system to utilize as much available reclaimed water as possible.
- Policy 1.1.3: Native Species and Xeriscape Technology. The City shall continue to encourage the use of native species and xeriscape technology.
- **Policy 1.1.4:** Potable Water Supply Contamination. The City shall ensure a potable water supply that is protected from contamination and of the highest quality available by continuing to utilize adequate water treatment which meets, at a minimum, all Federal and State drinking water criteria and through the maintenance of distribution systems.
- **Policy 1.1.5:** Collection and Disposal of Hazardous Wastes. The City will support any State efforts to collect and dispose of small quantities of hazardous wastes through such programs as the Amnesty Days Program.
- **Policy 1.1.6:** Water Conservation Practices. The City will continue its program to reduce per capita consumption through conservation measures to provide capacity to serve additional customers. The City's water conservation practices include the following:
  - Building code requirements for low water volume fixtures in new construction;
  - Continuation of City program for public outreach and education;
  - Continuation of an active program to encourage the use of low volume toilets;
  - Meter calibration program for master meters;
  - Maintenance of the distribution system;
  - Performing water audits to identify system losses;
  - Landscape water conservation regulations that provide

- landscape and irrigation standards;
- Adoption of regulations that require installation of watersaving plumbing devices;
- Consideration of regulations that override green lawn deed restrictions;
- Implementation of incentive programs to replace inefficient landscapes, plumbing devices, and appliances;
- Implementation of a program that provides indoor water audits and leak detection and irrigation system audits;
- Promoting and encouraging the use of low impact development (LID) techniques; and
- Continue to implement and promote the City's current Water *Conservation Rate Structure Ordinance.*

### **Policy 1.1.7:**

Emergency Water Conservation Program. The City shall utilize its emergency water conservation program should a water shortage develop as well as determine possible alternative water sources; enforcement shall be implemented in tandem with the St. Johns River Water Management District (SJRWMD). In coordination with Volusia County and the SJRWMD the City shall maintain minimum standards for water conservation during normal times.

### **Policy 1.1.8:**

Promoting Low Impact Development Techniques. The City shall continue to promote the use of LID techniques which mimic a site's pre-development and hydrologic condition. These techniques will address infiltration, attenuation, and treatment needs of each specific site. LID works with nature to manage stormwater as close to its source as possible, with an emphasis on cost-effective strategies at the lot level and employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product. LID practices include, but are not limited to, bioretention facilities, rain gardens, vegetated rooftops, grass swales, rain barrels, permeable pavements or the replication of predevelopment hydrology. By implementing these principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed.

## **Policy 1.1.9:**

Promoting Green Building Techniques. The City shall promote "green building" techniques that reduce and ultimately eliminate the impacts of buildings on the environment and human health, take advantage of renewable resources, and reduce rainwater run-off to protect minerals, soils and vegetation.

### **Policy 1.1.10:**

Water Supply Facilities Work Plan. Edgewater's Water Supply Facilities Work Plan (WSFWP) shall continue to assess existing and projected water sources and needs for at least a 10-year planning

period and consider the Regional Water Supply Plan of the SJRWMD. The WSFWP will also identify traditional and alternative water supply sources, including water conservation efforts, which the City may use to reduce or satisfy existing and projected water demands.

- **Policy 1.1.11: Water Conservation and WSFWP.** The City will continue to implement the water conservation efforts identified in the WSFWP. These efforts will include concentrating on outreach and education as well as irrigation system modifications and indoor plumbing retrofits.
- **Objective 1.2:** *Indian River/Mosquito Lagoon*. The City shall not degrade the environmental quality of the Indian River/Mosquito Lagoon estuary.
  - Policy 1.2.1: Enforcing Stormwater Management and Shoreline Protection Ordinances. The City shall continue to enforce its existing stormwater management and shoreline protection ordinances.
  - **Policy 1.2.2:** Reducing Excess Runoff and Potential Pollutants. The City shall continue to implement the public education program on the use of proper fertilization, pesticide and herbicide application to landscaping (especially for shoreline property owners) to reduce excess runoff of these potential pollutants.
  - Policy 1.2.3: Protection of Rare, Endangered, Threatened Wildlife and Species of Special Concern. The City shall continue to require, as part of the Development Review Process, that prior to development approval, proposed development will be required to coordinate with all appropriate agencies and comply with the U.S. Fish and Wildlife Service and the Florida Fish and Wildlife Conservation Commission rules as well as other applicable Federal and State laws regarding protection of rare, endangered and threatened wildlife.
  - **Policy 1.2.4:** Septic Tank Leachate. The City will continue to encourage and coordinate efforts by the FDEP and Volusia County to vigorously monitor the health and environmental risks associated with septic tank leachate.
  - **Policy 1.2.5:** *Compliance with Effluent Standards.* The City will ensure that its wastewater treatment plant and collection facilities are in good repair and will continue to monitor its wastewater treatment plant effluent to ensure compliance with effluent standards set by the State.
  - Policy 1.2.6: Indian River/Mosquito Lagoon Protection. The City shall encourage and participate in intergovernmental management efforts to protect, enhance and improve the quality of the Indian River/Mosquito Lagoon.
  - Policy 1.2.7: Preserving Natural Scenic Views. The City shall continue to enforce regulations within the Land Development Code to provide,

enhance and preserve natural scenic views of the estuary and its waters.

- Policy 1.2.8: Mangrove and Spoil Islands and the Indian River/Mosquito Lagoon. The City shall support designation of the mangrove and spoil islands located within the Indian River/Mosquito Lagoon estuary as conservation areas, with development prohibited on these islands.
- **Objective 1.3:** *Protection of Environmentally Sensitive Areas.* Protect and manage all ecological communities, fisheries, and wildlife especially rare, endangered, threatened species and species of special concern.
  - **Preserving the Turnbull Hammock.** The City shall cooperate with adjoining jurisdictions and the SJRWMD to preserve the portion of the environmentally sensitive Turnbull Hammock immediately adjacent to the western City limit through coordination with the County's land acquisition program.
  - **Policy 1.3.2:** *Threatened, Endangered, and Rare Species.* The City shall assist in the application of and compliance with all State and Federal regulations, which pertain to threatened, endangered, and rare species.
  - Policy 1.3.3: Adverse Impact to any Endangered or Rare Species. The City shall consult with the Florida Fish and Wildlife Conservation Commission prior to the issuance of a development approval that would result in an adverse impact to any endangered or rare species.
  - Policy 1.3.4: Protecting Endangered and Rare Species and Environmentally Sensitive Lands. The City shall continue to protect endangered and rare species and environmentally sensitive lands through the implementation of its Sensitive Habitat Area regulations within the Land Development Code primarily by restrictions in development orders, as well as other measures.
  - **Policy 1.3.5:** Regulating Boating Impacts on the Indian River. The City shall regulate boating impacts on the Indian River pursuant to Phase II, the Boat Facility Siting component of the Manatee Protection Plan for Volusia County as adopted by the City on August 1, 2005.
  - **Policy 1.3.6:** *Motorized Boat Slips.* The City shall implement the "slip aggregation" option referenced in the Volusia County *Manatee Protection Plan.* The aggregated number of motorized boat slips to be constructed within the City is based upon data and research contained in the *Manatee Protection Plan* for Volusia County.
  - Policy 1.3.7: Motorized Boat Slip and Single family Residential Lots. Single-Family residential lots with Indian River frontage shall not be denied their riparian rights to construct a minimum of two (2) motorized

boat slips per lot.

- Policy 1.3.8: Multi-slip Facilities and Aggregation of Slips. The City shall encourage shared, multi-slip facilities and aggregation of slips during development and redevelopment, including single-family lots of record.
- Policy 1.3.9: Marina Development/Redevelopment and the Manatee Protection Plan. Any marina development/redevelopment shall be consistent with the Manatee Protection Plan for Volusia County.
- **Policy 1.3.10:** *Manatee Protection.* The City shall monitor the protection policies pursuant to the *Manatee Protection Plan* for Volusia County.
- Policy 1.3.11: Development in Habitat Areas. Development in habitat areas listed by the State of Florida and the U.S. Fish and Wildlife Service as Endangered, Threatened or Species of Special Concern shall not adversely impact the listed species. The City's Land Development Code shall also encourage secondary linkage to nearby wildlife corridors, even if by any approved artificial means; construction of new corridors should be considered as a form of mitigation where appropriate.
- Policy 1.3.12: Environmental Impact Study Requirement. The City's Land Development Code shall require an environmental impact study to be submitted and reviewed prior to the issuance of a development order for areas that contain listed species or native wetlands as identified by this Element, and for any area within the Conservation Overlay District. The study shall be used to determine compliance with this Objective. The study must indicate the methodology used.
- **Policy 1.3.13:** *Maintaining Existing Natural Reservations.* The City will cooperate with the State of Florida and the Federal Government to maintain the existing natural reservations in the State-owned preservation areas identified in the Recreation and Open Space Element of this Plan.
- Policy 1.3.14: Management of Unique Vegetative Communities. The management of unique vegetative communities that cross Edgewater's borders will be coordinated with adjacent local governments including, but not limited to, Volusia County, the Florida Department of Environmental Protection, the Florida Fish and Wildlife Conservation Commission, the City of New Smyrna Beach and the City of Oak Hill when boundaries warrant. Coordination activities may include, but not necessarily be limited to, interlocal agreements, public meetings, staff interaction, written notifications, and joint committees.

- **Objective 1.4:** *100-Year Floodplain Protection*. Protect the natural function and values of the 100-year floodplain.
  - Policy 1.4.1: *Implementing Floodplain Management Regulations.* The City shall continue to implement its floodplain management regulations contained within the Land Development Code.
  - Policy 1.4.2: 100-year Floodplain and Priority of Conservation Areas. The 100-year floodplain shall be given high priority in the selection of conservation areas within the City and for public acquisition of lands for conservation and recreational purposes.
- **Objective 1.5:** *Air Quality.* Maintain and enhance air quality.
  - Policy 1.5.1: New Commercial and Mixed-use Development and Bicycle Storage Facilities. The City shall continue to determine on a case by case basis whether or not to require new commercial and mixed-use development to install bicycle storage facilities.
  - **Policy 1.5.2:** Enforcing the Tree Protection Ordinance. The City shall continue to enforce its tree protection ordinance to maintain natural vegetative filters for air pollution.
  - Policy 1.5.3: *Minimizing Blowing Dust and Construction Sites.* The City shall maintain in its Land Development Code requirements that construction sites use techniques to minimize blowing dust.
  - **Policy 1.5.4:** *Automobile Emission Pollution.* The City shall continue to reduce the potential for automobile emission pollution by:
    - A. Requiring vegetative buffer strips, walls and/or berms between roadways and new developments;
    - B. Establishing additional bikepaths/walkways so as to promote the reduction in use of automobiles; and
    - C. Promote planned unit development or mixed use type of land use, where feasible.
  - **Policy 1.5.5:** *Open Burning.* The City shall discourage open burning due to its adverse impacts on air quality.
  - **Policy 1.5.6:** Alternative Energy Resources. The City shall encourage the use of alternative energy resources that do not degrade air quality.
- **Objective 1.6:** *Natural Functions of Wetlands.* Protect and conserve the natural functions of wetlands and direct incompatible uses away from wetland areas.
  - Policy 1.6.1: Protecting the Natural Function of Wetlands. The City will continue to protect the natural functions of wetlands through the Conservation Overlay on the Future Land Use Map (FLUM) and the

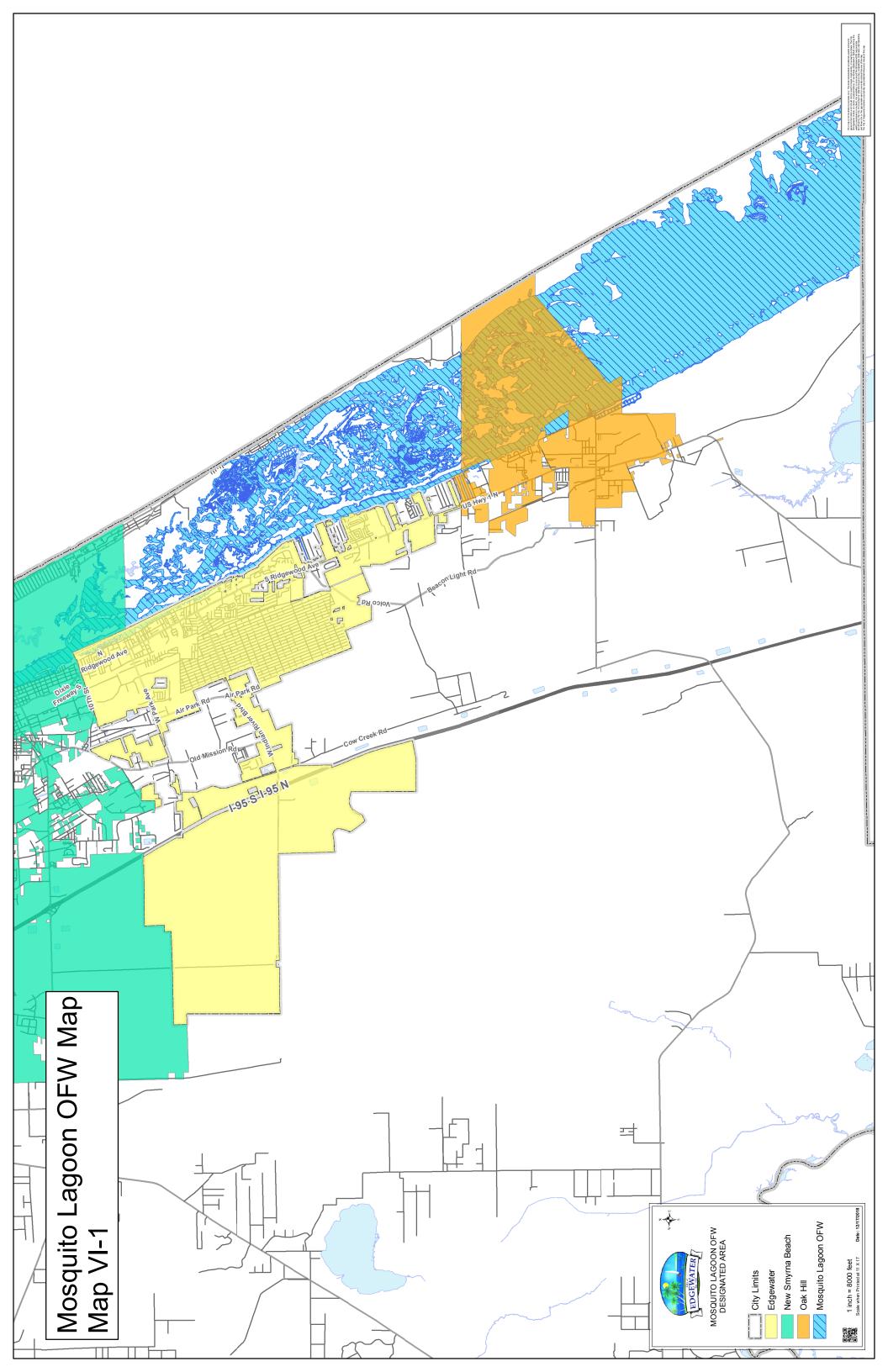
Conservation Land Use Category, as defined in the Future Land Use Element. (FLUE)

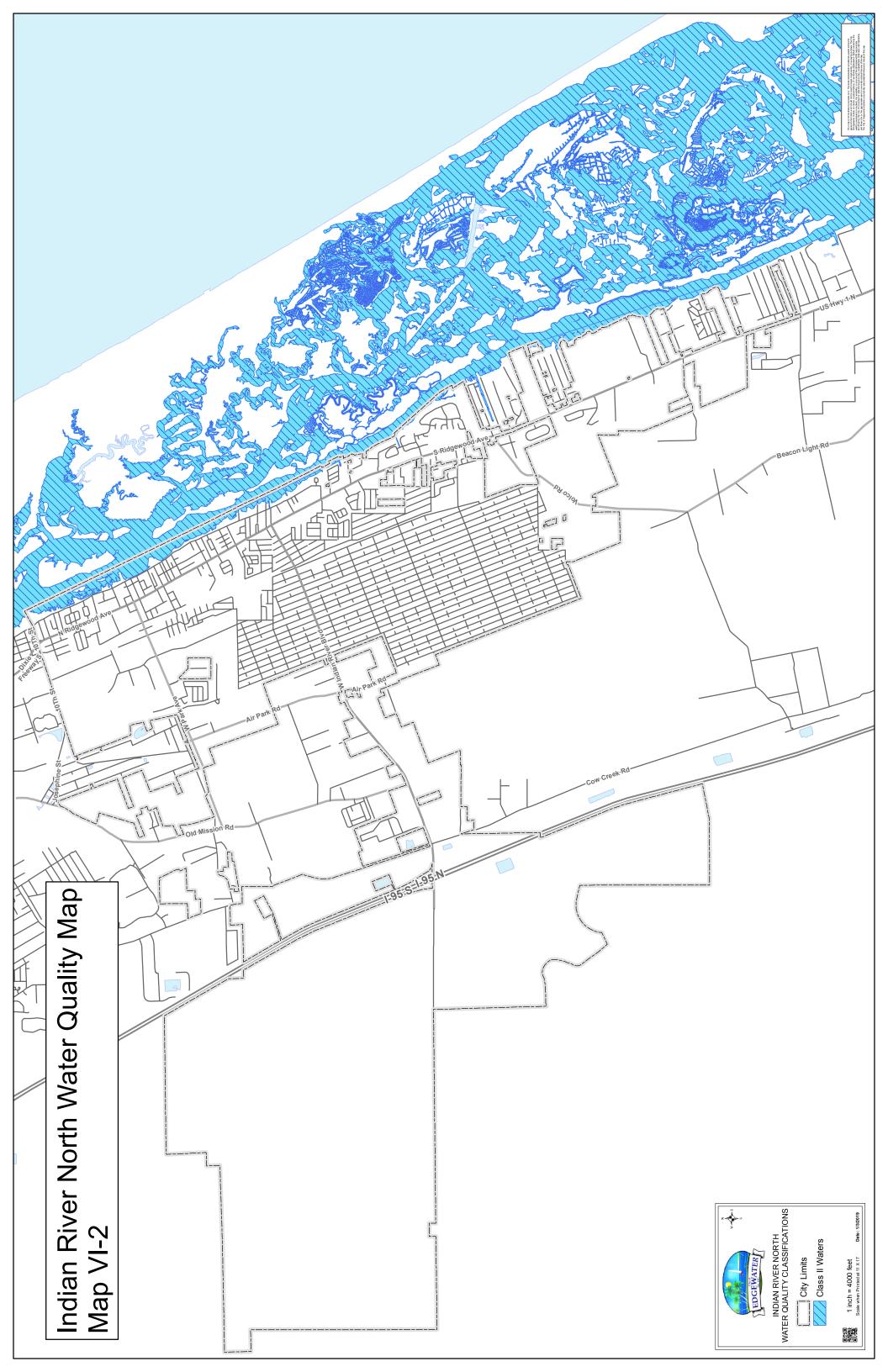
- **Policy 1.6.2:** *Upland Buffer Requirement.* A minimum 25-foot upland buffer will be required from the wetland boundaries in the City.
- **Policy 1.6.3:** Dedication of Conservation Easements. Wetlands and respective buffer areas must be dedicated to the City via a conservation easement.
- Policy 1.6.4: Incorporating Isolated Wetlands into Development Projects.

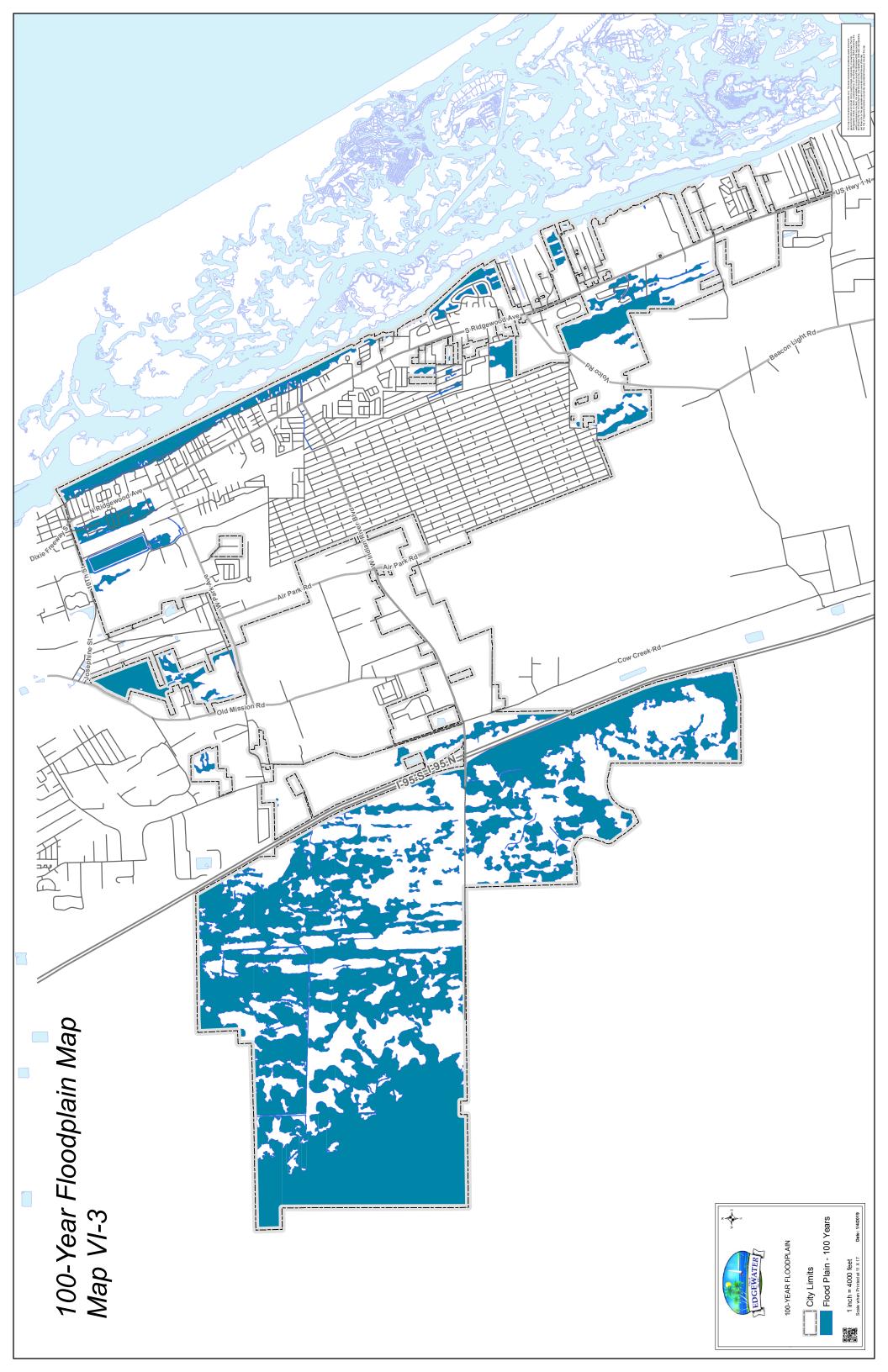
  Existing isolated wetlands may be incorporated into development projects provided the wetlands remain undisturbed and their natural functions are not impaired.
- **Policy 1.6.5:** Wetlands Mitigation Measures. If direct impact upon wetlands by incompatible uses cannot be avoided, the following mitigations measures are applicable:
  - Mitigation will be allowed based upon no net loss of wetlands functions.
  - Comply with the wetland protection standards of Federal, State, Regional and County agencies.
  - Minimize impacts through innovative design layouts.
  - Compensate for the impact by enhancing other degraded wetlands on- site, restore natural functions of other wetlands on-site, create new wetlands on-site, preserve significant upland areas, or off-site mitigation.
  - A Wetland Alteration Permit must be obtained from the City unless Federal, State or County permits eliminate the need to obtain one from the City, as determined by the City.
  - Mitigation through restoration of degraded wetlands on-site or preservation of significant upland areas on-site will be encouraged rather than wetland creation.
- Policy 1.6.6: Incorporating Stormwater Management Systems as Detention Facilities. The City shall encourage the incorporation of natural drainage ways and isolated forested wetlands into stormwater management systems as detention facilities, to avoid the filling and excavation of wetlands.
- **Objective 1.7:** *Hazardous Waste Management.* The City shall continue to reduce its levels of hazardous wastes in accordance with the provisions stipulated by the State's *Solid Waste Management Act* and will coordinate these activities on a City, County and region wide basis.
  - Policy 1.7.1: Treatment and Disposal of Hazardous Wastes. The City will continue to coordinate with the Volusia County Department of Solid Waste and the Volusia County Pollution Prevention Program

concerning the proper storage, recycling, collection and disposal of hazardous wastes.

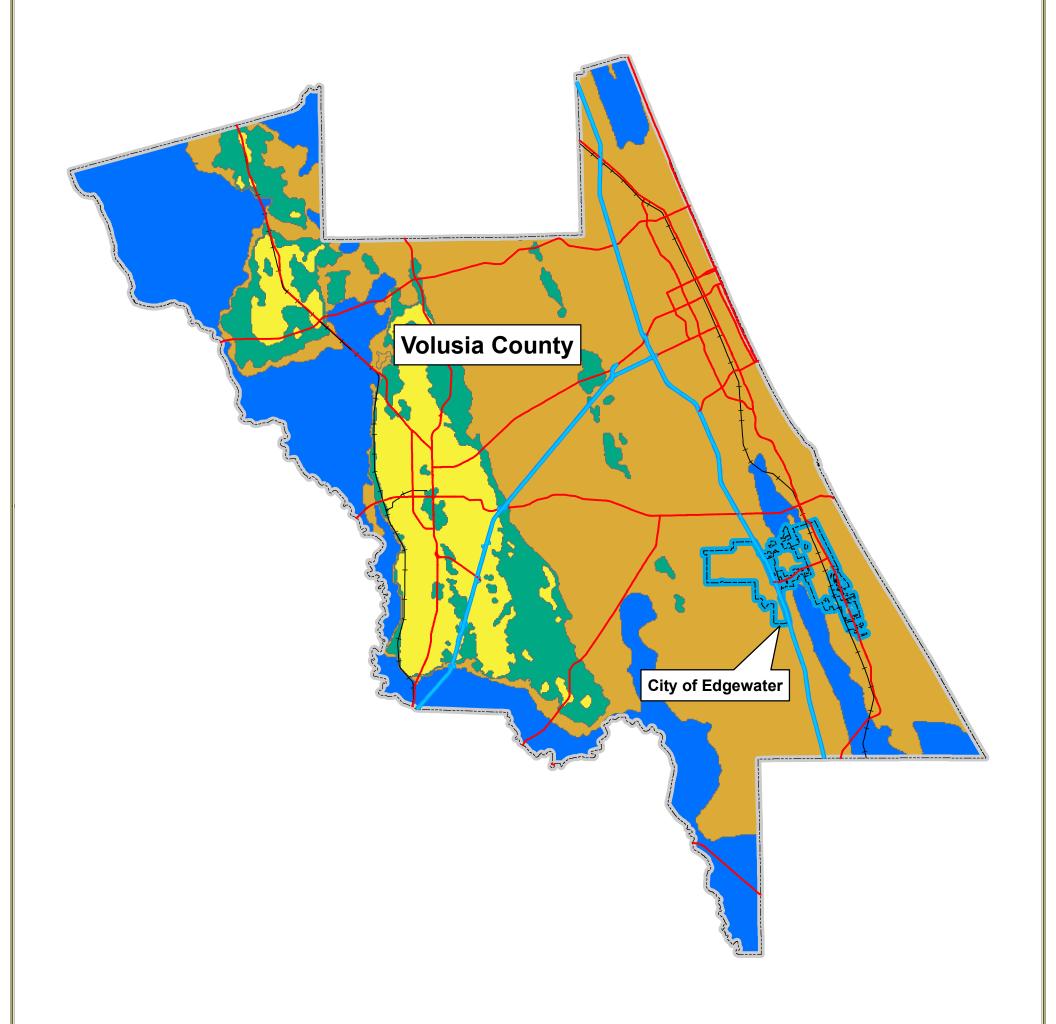
- **Policy 1.7.2:** Educating the Public and Hazardous Wastes. The City shall educate the general public in the planning area about hazardous waste through the use of mail outs in utility bills and public participation programs.
- **Policy 1.7.3:** *Hazardous Waste Generators.* Require all hazardous waste generators within the City limits to participate in recycling and waste disposal programs.
- **Objective 1.8:** *Inventory of Natural Resources*. Inventory and classify, natural resources (including sinkholes, wetlands and floodplains) as properties are annexed to the City.
  - **Policy 1.8.1:** *Natural and Man-made Retention Ponds.* The City will identify natural and man-made retention ponds for possible use as urban ecological nature preserves, passive parks or open spaces.
  - **Policy 1.8.2:** *Conservation Lands and Volusia County.* In cases where land has been designated on the County's FLUM (series) as Conservation, the City will continue to apply development restrictions as the properties are annexed to the City.
  - Policy 1.8.3: Native Vegetative Communities and Conservation Land Use Designation. The City shall designate on the FLUM as Conservation any native vegetative communities that are identified or annexed into the City limits; and shall classify them as "environmentally sensitive lands". Development shall be restricted and minimum setback criteria established and enforced.
- **Objective 1.9:** *Reducing Energy Requirements.* Enhancing conservation and efficiency measures to reduce energy requirements shall be practiced.
  - **Policy 1.9.1:** Energy Conservation Measures. The City shall conduct energy audits, monitor energy use and implement cost-effective energy conservation measures in all public buildings.
  - **Policy 1.9.2: Promote the Use of Energy Saving.** The City shall continue to reduce levels of all air-conditioning, heating and lighting systems during non-business hours, and promote the use of energy saving features in all government buildings.
  - Policy 1.9.3: Energy Efficient Construction and Operation. Local codes and ordinances shall continue to be reviewed to prevent handicapping of implementation of energy efficient construction and operation.

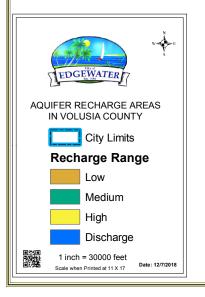




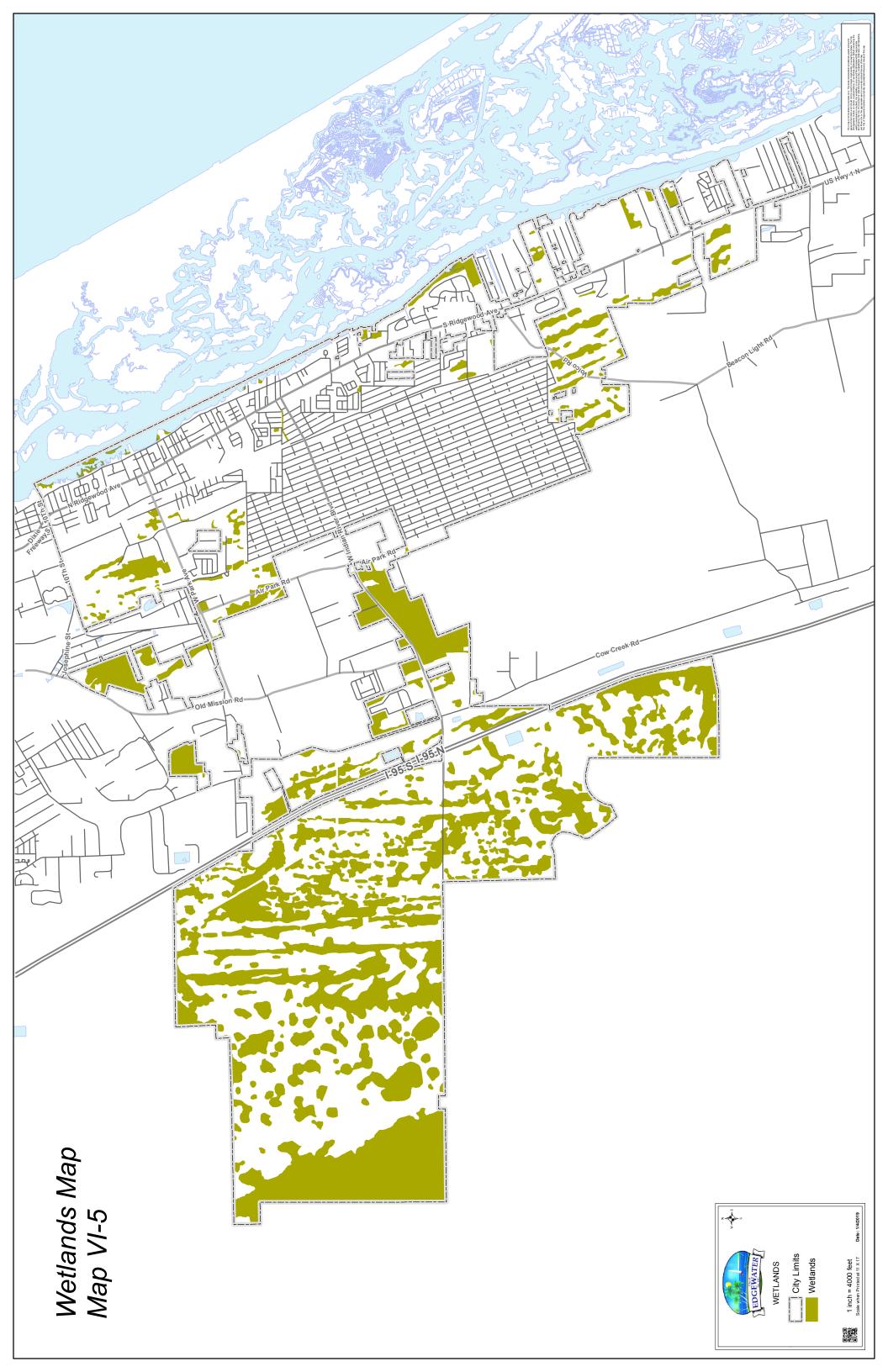


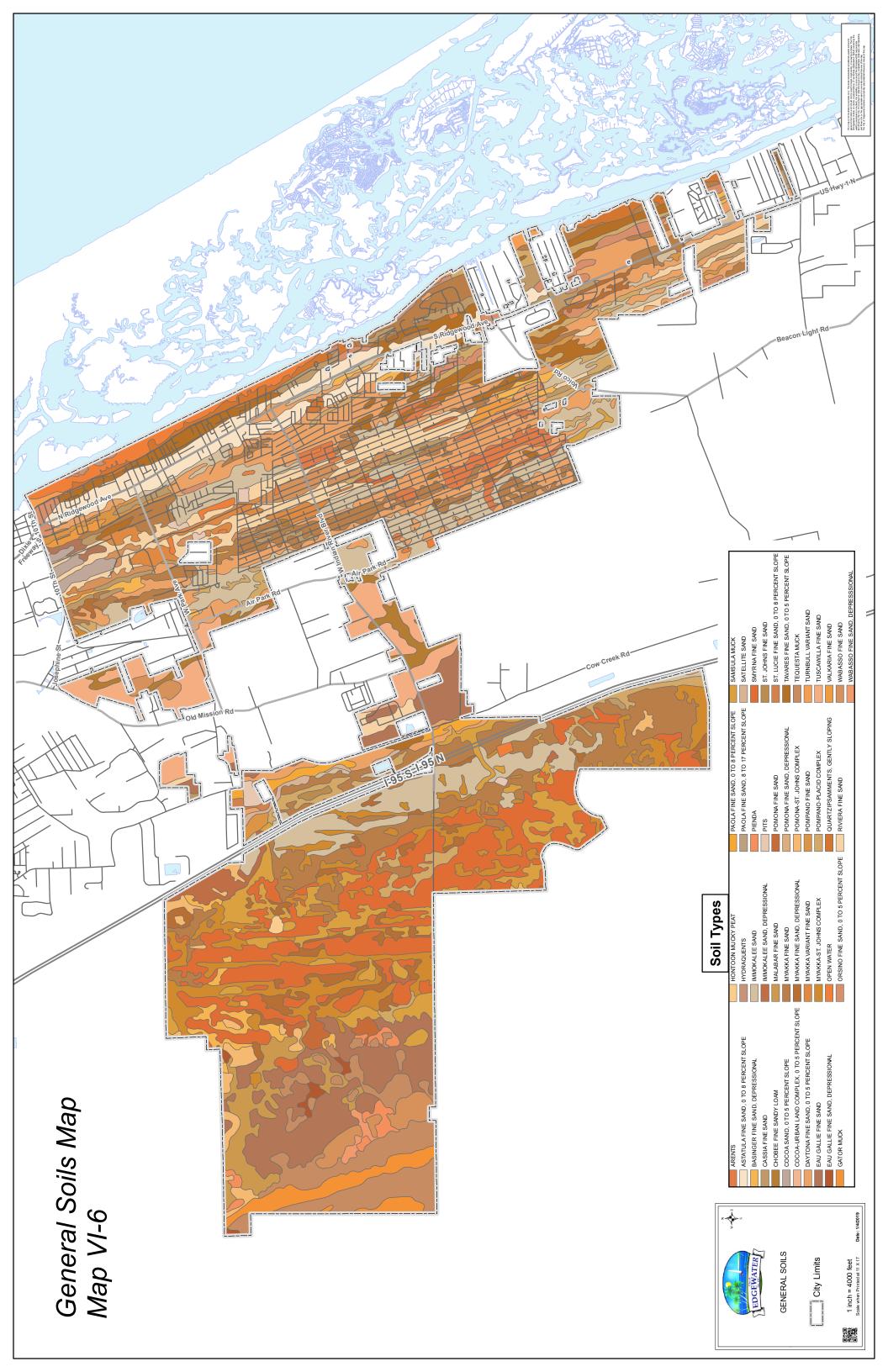
# Aquifer Recharge Areas Map Map VI-4

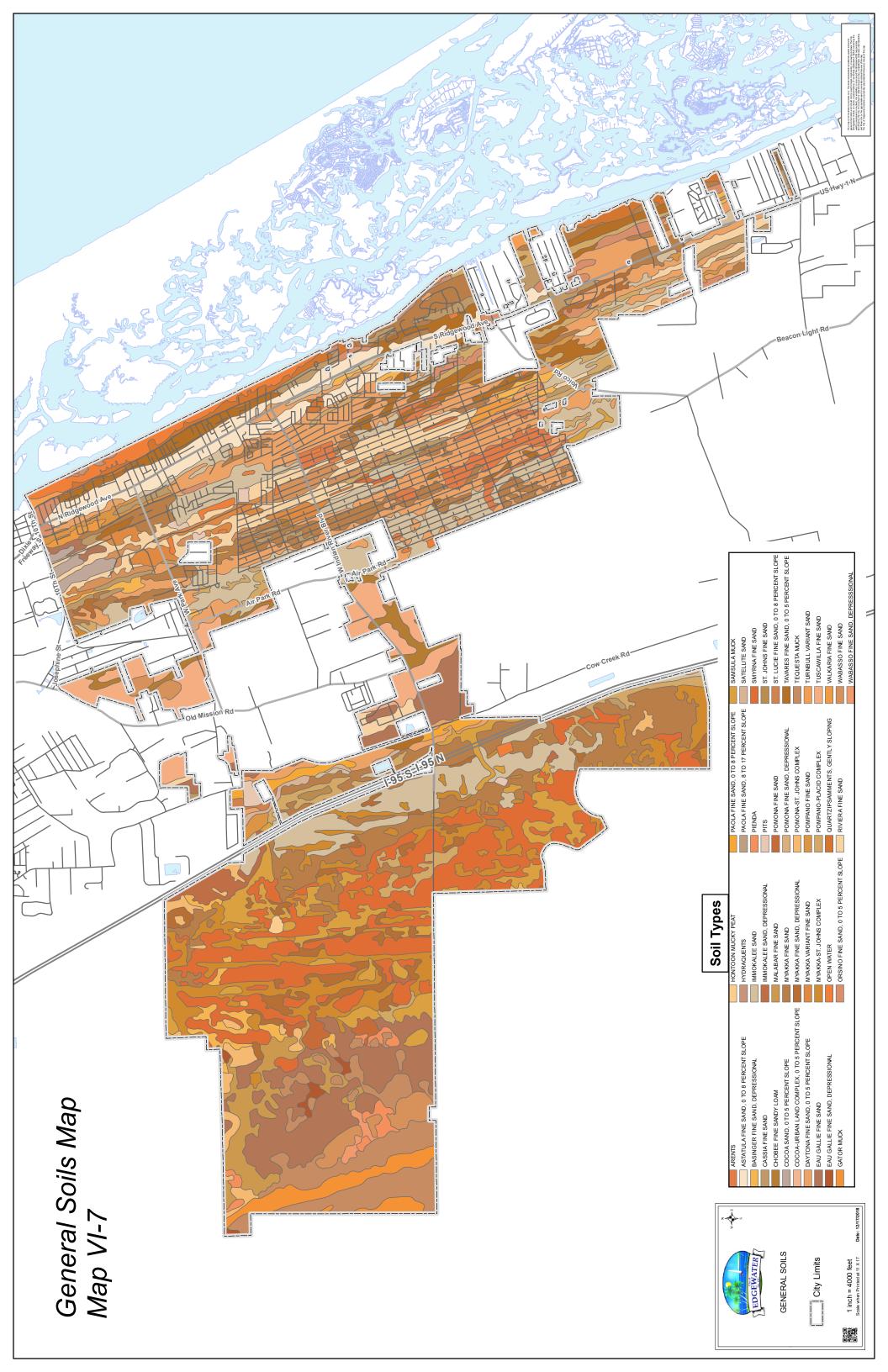


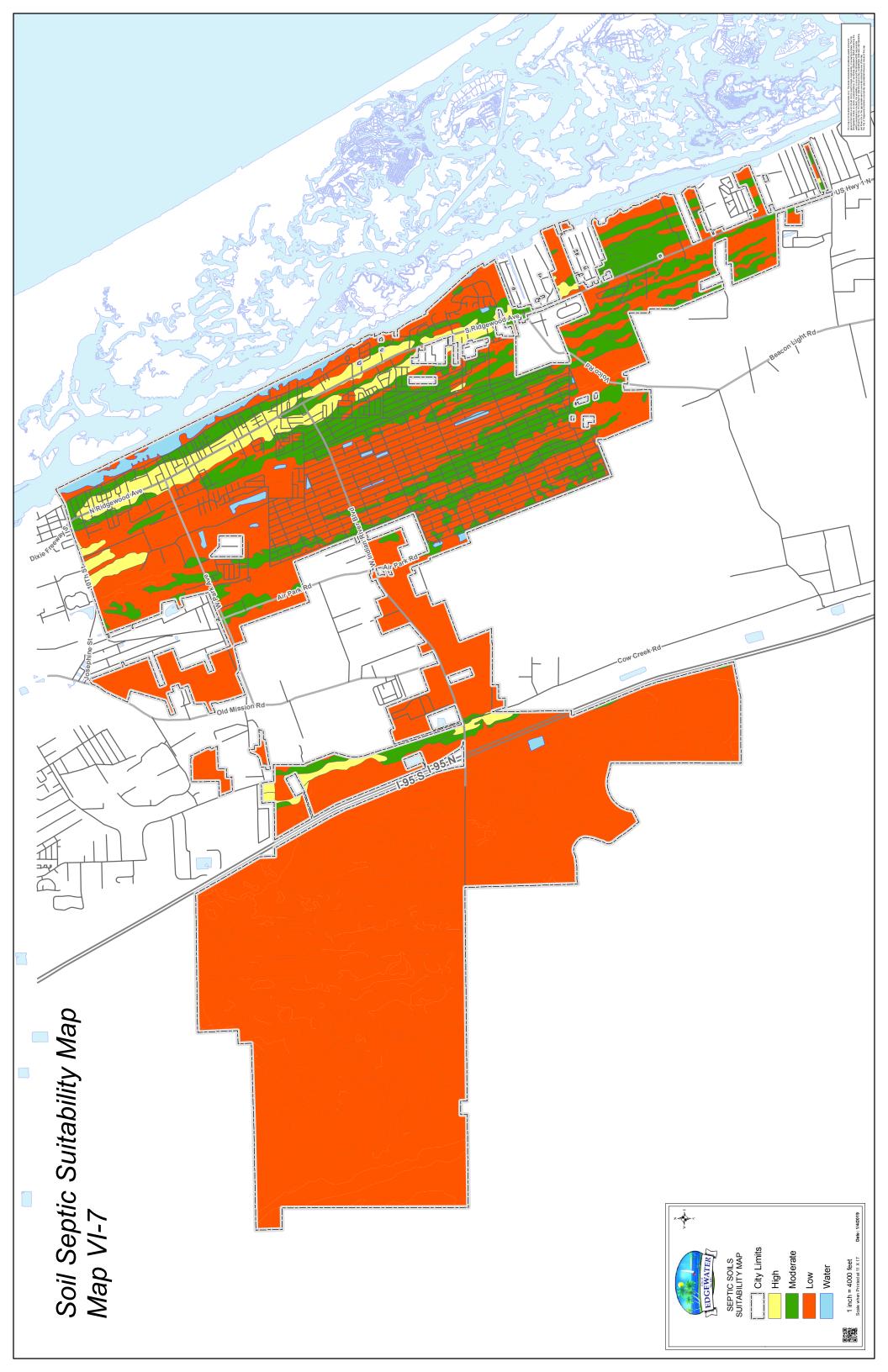


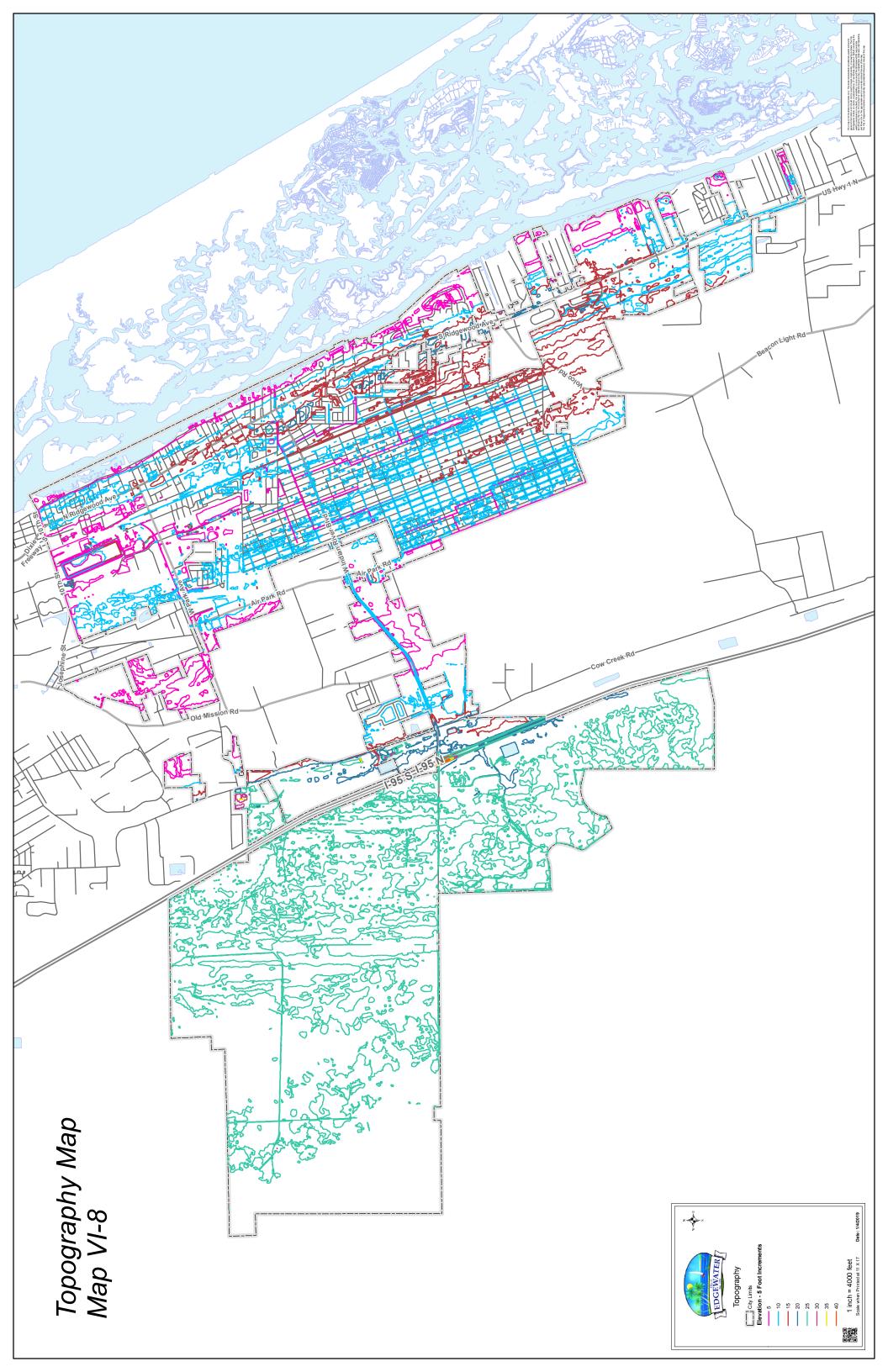
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CURRENT SHELLFISH HARVESTING AREA CLASSIFICATION MAP #82 A (Effective: August 19, 2012)
South Volusia (#82) Shellfish Harvesting Area in Volusia County

Status of this area

