

CHAPTER I

CONSERVATION ELEMENT

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DIRECTIVES

Directives are principles or guidelines that provide the general philosophical outlook of Brevard County with regard to the element of the Plan in which it is stated. Directives do not necessarily require specific actions for implementation. However, they shall guide specific actions wherever possible.

Air Quality

In order to maintain its "attainment" status, Brevard County should develop a complete air monitoring program. More complete baseline data would allow better assessment of large-scale development which could degrade air quality. Areas of localized poor air quality should be identified, and a program for reduction or elimination of the pollution source should be developed in conjunction with FDEP and EPA.

Stationary air pollution sources and new transportation projects listed on the adopted Transportation Improvement Program should be evaluated for their cumulative effects on air quality. These sources should include sources adjacent to, as well as within, the county.

Alternate energy resources that do not degrade air quality should be given preference over resources which do degrade air quality. In addition, Brevard County ordinances or programs concerning clean-up and disposal of hazardous materials, mass burn facilities, and solid waste disposal shall not result in the degradation of air quality or endangerment of human health.

Conversion of power plant to coal should not cause degradation of air quality below minimum standards. Best available technology should be utilized for all new power plants.

Land use should also be compatible with the maintenance of good air quality. Development should be designed in such a way as to minimize traffic congestion. Urban land uses should be buffered from stationary and linear pollution sources (roadways). Vegetation should be utilized whenever possible to buffer air pollution sources and maintain air quality. Multi-use developments, such as Planned Unit Development, or other innovative land uses should be utilized to reduce the need to travel. Facilities that house the elderly, very young or sick should be located away from emission sources or areas of poor air quality.

GOALS, OBJECTIVES AND POLICIES

GOAL

PROTECT, CONSERVE, ENHANCE, MAINTAIN AND APPROPRIATELY USE NATURAL RESOURCES AND ENVIRONMENTAL SYSTEMS, MAINTAINING THEIR QUALITY AND CONTRIBUTION TO THE QUALITY OF LIFE AND ECONOMIC WELL BEING OF BREVARD COUNTY.

Air Quality

Objective 1

Air quality within Brevard County shall meet or exceed the minimum air quality as adopted by the Florida Department of Environmental Protection.

Policy 1.1

Brevard County shall cooperate with the Florida Department of Environmental Protection (FDEP) in monitoring ambient air quality within the county.

Policy 1.2

Developments of Regional Impact, major transportation projects and power generation projects shall be evaluated for their impacts on air quality. Buffer areas adjacent to industrial uses, power generation projects or other stationary air pollution sources shall be utilized as required to maintain air quality within accepted standards.

Policy 1.3

The County shall reduce the potential for mobile source emissions by the following means:

Criteria:

- A. Promote appropriate Planned Unit Development and multi-use developments or use centers.
- B. Vegetative strips along major transportation corridors to buffer residential land uses.
- C. Promote alternative transportation methods such as car pooling, van pooling and mass transit.
- D. Promote bicycle and pedestrian traffic by constructing and maintaining additional bike and pedestrian paths.
- E. Roadways with adopted Levels of Service should be evaluated in order to

maintain acceptable air quality after the development is completed.

Policy 1.4

Brevard County shall continue to enforce the noise regulations in the land development code.

Policy 1.5

Brevard County shall continue to enforce regulations within the land development code that address the location of facilities that potentially generate noxious emissions.

Policy 1.6

Alternate energy resources that do not degrade air quality should be given preference over resources which do degrade air quality. In addition, Brevard County ordinances or programs concerning clean-up and disposal of hazardous materials, mass burn facilities, and solid waste disposal shall not result in the degradation of air quality or endangerment of human health.

Policy 1.7

Conversion of power plant to coal should not cause degradation of air quality below minimum standards. Best available technology should be utilized for all new power plants.

Policy 1.8

Land use should also be compatible with the maintenance of good area quality. Development should be designed in such a way as to minimize traffic congestion. Urban land uses should be buffered from stationary and linear pollution sources (roadways). Vegetation should be utilized whenever possible to buffer air pollution sources and maintain air quality. Multi-use developments, such as Planned Unit Development, or other innovative land uses should be utilized to reduce the need to travel. Facilities that house the elderly, very young or sick should be located away from emission sources or areas of poor air quality.

Energy

Objective 2

Reduce per capita energy consumption within Brevard County.

Policy 2.1

Brevard County shall address various energy saving methods including:

Criteria:

- A. Encouraging appropriate Planned Unit Development and multi-use developments;

- B. Regulating subdivisions to address bicycle and pedestrian pathways; and
- C. Regulating land clearing and landscaping regulations to augment passive cooling by trees.

Policy 2.2

Brevard County shall continue to implement the Florida Energy Efficient Code for new construction and substantially rehabilitated structures.

Policy 2.3

Brevard County should continue to implement waste reduction, reuse, recycling and conversion of waste to energy as part of its waste management strategies.

Policy 2.4

Brevard County shall consider energy conservation in the development and implementation of County ordinances.

Policy 2.5

Brevard County should pursue transportation options that would decrease per capita energy consumption.

Policy 2.6

Brevard County should coordinate with the East Central Florida Regional Planning Council, the Economic Development Commission of Florida's Space Coast, and the State to encourage development and use of energy efficient and renewable technologies to enhance economic development while conserving energy.

Surface Water

Objective 3

Improve the quality of surface waters within Brevard County and protect and enhance the natural functions of these waters.

Policy 3.1

Brevard County shall cooperate with the Florida Department of Environmental Protection (FDEP) to require small package treatment plants adjacent to surface waters to comply with existing federal, state, or regional rules and regulations, and to ensure that the necessary renovations to achieve compliance are completed in a timely manner.

Policy 3.2

Brevard County shall continue to prevent negative impacts of development in and adjacent to Class I waters by implementing and revising, as necessary, the Surface Water Protection Ordinance including the following minimum criteria:

Criteria:

- A. Maintain a two hundred (200) foot surface water protection buffer from the ordinary high water line or mean high water line as determined or approved by the FDEP Bureau of Survey and Mapping. In lieu of an approved ordinary high water line, mean high water line, or safe upland line, an alternative buffer establishment line that approximates the land-water interface may be approved administratively as defined in ordinance. The use of the alternative buffer establishment line shall only be applied to shorelines with a clearly defined land-water interface.
- B. Acceptable uses within the surface water protection buffer are passive recreation, hunting, fish and wildlife management, open space and nature trails, and similar uses.
- C. Require discharges of any substances into Class I waters to meet or exceed applicable receiving water quality standards.
- D. Prohibit dredging and filling, except for permitted utility crossings, publicly owned recreational projects which do not degrade water quality, and necessary maintenance of existing projects.
- E. Regulate development and mining operations within the hydrologic basin of Class I waters. Prohibit mining operations within the 10-year floodplain of Class I waters.
- F. Prohibit alteration within the surface water protection buffer unless it is in the public interest and does not adversely impact water quality and natural habitat.

Policy 3.3

Brevard County shall continue to make efforts to prevent negative impacts of development in and adjacent to the Indian River Lagoon and its tributaries designated as Class II waters, Aquatic Preserves and Outstanding Florida Waters by implementing and revising as necessary, the Surface Water Protection Ordinance, including the following minimum criteria:

Criteria:

- A. Maintain a fifty (50) foot surface water protection buffer from the ordinary high water line, mean high water line, or safe upland line as determined or approved by the FDEP Bureau of Survey and Mapping. In lieu of an

approved ordinary high water line, mean high water line, or safe upland line, an alternative buffer establishment line that approximates the land-water interface may be approved administratively as defined in ordinance. The use of the alternative buffer establishment line shall only be applied to shorelines with a clearly defined land-water interface.

- B. Except as allowable under Policies 3.3.C and 3.3.D, primary structures shall not be permitted within the surface water protection buffer. The County shall establish allowable uses within the surface water protection buffer. Stormwater management for all alterations associated with allowable uses shall be required to protect water quality of the receiving water body. Provisions for the alteration and/or removal of non-native invasive plants, mitigation projects, and the planting of native species shall be established by the County.
- C. For residential lots platted or established by deed on the official record books of Brevard County prior to September 8, 1988, an alternative to the fifty (50) foot surface water protection buffer described above shall be available for those lots which have insufficient lot depth to construct a primary structure. In the case where there is insufficient lot depth to construct a primary structure, this alternative shall allow the surface water protection buffer to be reduced to twenty five (25) feet if additional measures are taken to preserve water quality and natural habitat within the adjacent surface water body. These additional measures shall, at a minimum, prevent the first inch of stormwater runoff from entering surface waters; and may include, but not be limited to, a stormwater retention system or native shoreline revegetation. Where applicable, stormwater management measures shall be consistent with DEP 62-25, as amended and FS 373, as amended.
- D. For residential lots located along areas of the Indian River Lagoon and its tributaries added to the State's designation of Class II Waters as of February 17, 2016, and platted or established by deed on the official record books of Brevard County prior to that date, an alternative to the fifty (50) foot surface water protection buffer described above shall be available for those lots which have insufficient lot depth to construct a primary structure. In the case where there is insufficient lot depth to construct a primary structure, this alternative shall allow the surface water protection buffer to be reduced to twenty five (25) feet if additional measures are taken to preserve water quality and natural habitat within the adjacent surface water body. These additional measures shall, at a minimum, prevent the first inch of stormwater runoff from entering surface waters; and may include, but not be limited to, a stormwater retention system or

native shoreline revegetation. Avoidance and minimization of buffer impacts shall be required. Where applicable, stormwater management measures shall be consistent with DEP 62-25, as amended and FS 373, as amended. Lots located along areas of Aquatic Preserves and Outstanding Florida Waters shall maintain a fifty (50) foot surface water protection buffer in accordance with Policy 3.3.A, B, and C.

- E. Within the surface water protection buffer the maximum amount of impervious surface is thirty (30) percent.
- F. Prohibit shoreline alteration other than that allowed by ordinance, unless the alteration is in the public interest and does not adversely impact water quality, natural habitat, and adjacent shoreline uses.
- G. Prohibit channelization, dredging and filling, and impoundment of natural waters of the State unless the activity is clearly in the public interest and does not adversely impact water quality, natural habitat, and adjacent shoreline uses. Dredging shall not be permitted in or connected to Class II Waters, Outstanding Florida Waters (OFWs), Aquatic Preserves, areas that contain ten percent (10%) seagrass or more, and conditionally approved shellfish harvesting waters unless the activity is a federal navigation project, in the public interest, such as approved maintenance dredging of existing public or private navigational channels, or where dredging may improve water quality by removing accumulated silt or improving circulation, or for maintenance of existing structures and utility structures and utility crossings, or for shoreline hardening as allowed by this element.
- H. Prohibit discharges of any substances below ambient water quality standards.

Policy 3.4

Brevard County shall continue to prevent negative impacts of development in and adjacent to Class III waters (except Outstanding Florida Waters and Aquatic Preserves) along the St. Johns River and Indian River Lagoon and its tributaries by implementing and revising as necessary, the Surface Water Protection Ordinance including the following minimum criteria:

Criteria:

- A. A twenty five (25) foot surface water protection buffer from the ordinary high water line, mean high water line, or the safe upland line as determined or approved by the FDEP Bureau of Survey and Mapping shall be established. In lieu of an approved ordinary high water line, mean high water line, or safe upland line, an alternative buffer establishment

line that approximates the land-water interface may be approved by the director. The use of the alternative buffer establishment line shall only be applied to shorelines with a clearly defined land-water interface.

- B. Except as allowable under Policies 3.4.C and 3.4.D, primary structures shall not be permitted within the surface water protection buffer. The County shall establish allowable uses within the surface water protection buffer. Stormwater management for all alterations associated with allowable uses shall be required to protect water quality of the receiving water body. Provisions for the alteration and/or removal of non-native invasive plants, mitigation projects, and the planting of native species shall be established by the County .
- C. For residential lots platted or established by deed on the official record books of Brevard County prior to September 8, 1988, an alternative to the twenty five (25) foot surface water protection buffer described above along Class III waters shall be available for those lots which have insufficient lot depth to construct a primary structure. In the case where there is insufficient lot depth to construct a primary structure, this alternative shall allow the surface water protection buffer to be reduced to fifteen (15) feet if additional measures are taken to preserve water quality and natural habitat within the adjacent surface water body. These additional measures shall, at a minimum, prevent the first inch of stormwater runoff from entering surface waters; and may include, but not be limited to, a stormwater retention system or native shoreline revegetation. Where applicable, stormwater management measures shall be consistent with DEP 62-25, as amended and FS 373, as amended.
- D. Prohibit shoreline alteration other than that allowed by ordinance, unless it is in the public interest or prevents or repairs erosion; and does not adversely impact water quality, natural habitat and adjacent shoreline uses.
- E. Except for properties on existing residential manmade canals, the maximum amount of impervious surface within the surface water protection buffer is thirty (30) percent.
- F. Prohibit discharges of any substances below ambient water quality standards.

Policy 3.5

All dredging activities must be done with effective turbidity controls. Where turbidity screens or similar devices are used, they should be secured and regularly

monitored to avoid manatee entrapment.

Policy 3.6

Vertical seawalls and bulkheads shall be prohibited along the Indian River Lagoon system, excluding man-made canals. Stabilization of the estuarine shoreline may be allowed to protect structures and real property from erosion. Rip-rap material, pervious interlocking brick systems, filter mats and other similar stabilization methods combined with vegetation shall be used in lieu of vertical seawalls and bulkheads when stabilization of the shoreline is approved. Living shorelines shall be encouraged as a preferred shoreline stabilization method.

Policy 3.7

New man-made canals connected to the Indian River Lagoon system are prohibited. The expansion (widening and/or deepening) of existing ditches, drainage right-of-ways, drainage easements and stormwater facilities connected to the Indian River Lagoon to accommodate navigation shall be prohibited unless the activity is in the best public interest and does not adversely impact the Indian River Lagoon. Maintenance dredging on existing navigational channels, private or public canals, or within existing marinas may be allowed upon review by the County.

Policy 3.8

When deemed necessary to meet State-mandated water quality standards, Brevard County may establish setbacks from the shoreline of the Indian River Lagoon for septic tanks and drainfields. Such setbacks shall at a minimum, be in accordance with F.S. 381.0065(4), as may be amended. In those cases where there is insufficient lot depth to meet County-established setbacks more stringent than those established by State statute, septic tanks and drainfields shall be located in accordance with F.S. 381.0065(4), as may be amended.

Policy 3.9

Brevard County will continue to support spoil island assessment projects to determine which islands are valuable bird rookery areas. These islands should be designated as such, and protected during nesting season. Other islands should be designated as recreational areas. Any study will be coordinated with any spoil island management plans designed and implemented by other agencies, such as the Florida Inland Navigational District.

Policy 3.10

Brevard County shall continue to work with the St. Johns River Water Management District (SJRWMD), FDEP, and Indian River Lagoon Program (IRLP) and other appropriate agencies in developing appropriate water quality standards for estuarine waters within the Indian River Lagoon.

Policy 3.11

Brevard County shall continue to support programs for plugging free-flowing artesian wells, with highest priority being given to those adjacent to the Lagoon.

Policy 3.12

Brevard County should cooperate with the SJRWMD in the District's aquatic weed program for the St. Johns River.

Policy 3.13

Brevard County strongly supports the designation of the Indian River Lagoon from SR 405 north to the County line as an Aquatic Preserve.

Policy 3.14

The creation of new spoil islands should be discouraged. Existing spoil islands should be retained in public ownership and utilized as bird rookeries and recreational areas. In addition, restoration efforts such as wetland vegetation planting, upland vegetation planting, and refuse removal that could foster biological production, control erosion and enhance the habitat, aesthetic and recreational values of the island should be undertaken.

Policy 3.15

By 2013, the County shall establish appropriate protective measures along conveyance systems and tributaries of the St. Johns River and Indian River Lagoon to meet State and Federal water quality standards.

Floodplain Areas

Objective 4

Reduce loss of flood storage capacity and reduce risk to life and property by continuing to apply regulations which minimize the impact of development within flood hazard areas.

Policy 4.1

Brevard County shall continue to protect the riverine floodplain in order to protect infrastructure and human life, conserve flood storage capacities, and to improve, where feasible, the quality of water within the watershed. The preferred land use, density and fill footprint of the riverine floodplain is in the predevelopment natural state and Brevard County supports the use of fee simple acquisition, less than fee acquisition, transfer of development rights, appropriate development standards, and other innovative measures to preserve and restore the predevelopment riverine floodplain. At a minimum, the following criteria shall be the basis for the protection of the riverine floodplain:

Criteria:

- A. Within the 100-year riverine floodplain (that is the area that is below the 100-year flood elevation but above the 25-year flood elevation):
1. Residential density shall be limited to no more than two dwelling units per acre.
 2. Commercial, institutional, and industrial land uses shall be limited to a filled footprint of no more than 15,000 square feet per acre, except for redevelopment as specified in Policy 4.3.
 3. Development shall not adversely impact the drainage of adjoining properties. There shall be no net loss of flood storage capacity of the 100-year riverine floodplain, except undeveloped parcels created prior to the effective date of this policy may fill up to 1/3 acre filled footprint for development without providing compensatory storage.
 4. The following uses are not compatible with the resource requirements of the 100-year riverine floodplain and shall not be permitted. These include, but are not limited to:
 - a. Placing, depositing or dumping of solid waste except for treated municipal solid sludge.
 - b. Processing and storing of threshold amounts of hazardous materials.
 - c. Disposal of hazardous materials.
- B. Within the 25-year riverine floodplain (that is the area that is at or below the 25-year flood elevation but above the 10-year flood elevation):
1. Residential density shall be limited to not more than one dwelling unit per two and one-half acres.
 2. Commercial land uses shall be limited to a filled footprint of no more than 3,000 square feet per acre and commercial uses shall be no greater than one acre, except for redevelopment as specified in Policy 4.3.
 3. Industrial land uses shall be prohibited, unless the activity is in the best public interest, or except for mining where it does not increase the filled footprint within the 25-year floodplain.
 4. Development shall not adversely impact the drainage of adjoining

properties. There shall be no net loss of flood storage capacity of the 25-year riverine floodplain.

- C. Within the 10-year riverine floodplain (that is the area that is at or below the 10-year flood elevation but above the mean annual flood elevation):
 - 1. The 10-year riverine floodplain should be maintained in its natural state unless a project has a special reason or need to be located there. These special reasons and needs are further defined in the land development regulations. These needs may include but are not limited to agriculture and passive recreation.
 - 2. Residential density shall be limited to not more than one dwelling unit per ten acres; and
 - 3. Commercial, institutional, and industrial land uses shall be prohibited unless they are in the public interest and the location of the use is integral to its operation.
 - 4. Development shall not adversely impact the drainage of adjoining properties. There shall be no net loss of flood storage capacity of the 10-year riverine floodplain.
- D. Within the mean annual riverine floodplain (that is the area that is at or below the annual flood elevation) residential, commercial, institutional, and industrial land uses shall be prohibited unless the project has a special reason or need to locate within the annual floodplain and it is in the best public interest. The annual riverine floodplains within Brevard County should be left in their natural state, and re-established where feasible.
- E. The best available data shall be utilized to determine appropriate floodplain elevations.

Policy 4.2

The following criteria shall apply to all riverine floodplains:

Criteria:

- A. There shall be no net change in the rate and volume of floodwater discharged from the pre-development 100-year, 25-year, 10-year, or mean annual riverine floodplain.
- B. Practices shall be encouraged in development of property within the riverine floodplain in order to minimize total imperviousness and runoff within the floodplain and preserve the flood storage capacity in order to

minimize cost to life and property. Practices may include clustering of developed area, provisions for open space, low impact design features, and flood proofing.

- C. The County shall provide incentives for transfer of densities and filled footprints within the riverine floodplain to reduce risk.
- D. Brevard County will coordinate with the SJRWMD or other appropriate agencies in determining the appropriate first floor building elevation within the 25- to 100-year floodplain and shall ensure that habitable structures are constructed above base flood elevation.

Policy 4.3

To facilitate redevelopment of commercial and industrial land uses, the filled footprint restrictions may be modified if compensatory storage is provided. Non-contiguous compensatory storage, hydrologically connected to the impacted floodplain may be considered. Redevelopment means the renovation of a previously developed obsolete commercial or industrial parcel of land or building site which suffers from structural vacancy due to the expiration of its former use and requires intervention to achieve a subsequent useful function and come into compliance with all other current environmental and land development regulations.

Policy 4.4

New dikes, levees or other such structures should not be permitted below the 100-year riverine flood elevation except for temporary earthen structures that have a maximum height of less than the 10-year flood elevation and which will not restrict the flow of the 100-year storm floodwaters. The only potential exceptions to this provision are such structures which are shown to have over-riding public benefit. Replacement or repair of dikes, levees and other such structures are permitted as long as such replacement or repair does not change the status of the floodplain and will maintain the existing ability to utilize the property. Non-structural methods of floodplain management are given priority over structural methods.

Policy 4.5

Brevard County shall continue to protect the estuarine floodplains by implementing the following minimum criteria:

Criteria:

- A. Development within the one-hundred year estuarine floodplain shall not adversely impact the drainage of adjacent properties or the quality of the receiving surface water body.
- B. The following specific uses are not compatible with the resource requirements of the one-hundred year estuarine floodplain and shall not

be permitted. These include, but are not limited to:

1. Placing, depositing, or dumping of solid wastes.
2. Processing and storing of threshold amounts of hazardous materials.
3. Disposal of hazardous materials.

- C. The annual estuarine floodplains within Brevard County should be left in their natural state, and re-established where feasible.

Policy 4.6

Brevard County shall continue to ensure that alterations of isolated one-hundred year floodplains do not adversely impact the drainage of adjacent properties or public drainage facilities.

Policy 4.7

Brevard County shall continue to protect the coastal floodplain through the implementation of the following minimum criteria:

Criteria:

- A. Prohibit development within the annual coastal floodplain.
- B. Limit development water-ward of the Brevard County Coastal Construction Setback Line to those structures necessary to protect the natural dune system and to provide beach access.
- C. Brevard County shall continue to maintain construction standards for all development within the one-hundred year storm surge zone as established by the Florida Department of Environmental Protection, the U.S. Southern Building Code, or other applicable regulations.

Policy 4.8

Brevard County shall identify structural controls within the floodplain which degrade natural systems and make recommendations for alternatives to re-establish the natural floodplain, where feasible.

Policy 4.9

Brevard County shall continue to participate in the National Flood Insurance Program administered by the Federal Emergency Management Administration (FEMA). Amendments to the County's flood ordinance shall be adopted as necessitated by changes in FEMA regulations.

Policy 4.10

Public facilities should not be located within the 100-year riverine or estuarine floodplain unless the following apply:

Criteria:

- A. The facilities are water-dependent, such as mosquito control facilities; or,
- B. The facilities are water-related, such as boat ramps, docks or surface water management facilities; or,
- C. The facilities are not adversely affected by periodic flooding or standing water, such as highway bridges and some recreational facilities; or,
- D. The building structures are flood-proofed and located above the 100-year flood elevation, or removed from the floodplain by appropriately constructed dikes or levees; or,
- E. The facilities are found to be in the public interest and there is no feasible alternative.

Wetlands**Objective 5**

Preserve, protect, restore, and replace wetlands to achieve no net loss of functional wetlands in Brevard County after September, 1990. The County shall ensure the protection of wetlands and wetland functional values by prioritizing protective activities with avoidance of impacts as the first priority, minimization of impacts as the second priority, and mitigation for impacts as the third priority.

Policy 5.1

Brevard County shall utilize the same methodology, soil types, hydrological requirements and vegetation types as the FDEP and the SJRWMD in delineating wetlands.

Policy 5.2

Brevard County shall adopt regulations which promote no net loss of functional wetlands. At a minimum, the following criteria shall be included in the land development regulations:

Criteria:

- A. The basis for no net loss shall be established as of the effective date of the required ordinance.
- B. Wetlands shall be considered functional unless the applicant demonstrates that the water regime has been permanently altered, either artificially or naturally, in a manner to preclude the area from maintaining surface water or hydroperiodicity necessary to sustain wetland functions.

- C. If an activity is undertaken which degrades or destroys a functional wetland, the person performing such an activity shall be responsible for repairing and maintaining the wetland. If it is not feasible or desirable for the responsible person to perform the repair and maintenance of the wetland, then the responsible person shall mitigate for the wetland loss. Mitigation can include, but not be limited to: wetland restoration, wetland replacement, wetland enhancement, monetary compensation or wetland preservation.
- D. Wetland activity conducted by a public agency may not be utilized for wetland mitigation credit by private persons unless approved by Brevard County.
- E. The following land use and density restrictions within wetlands are established as a maximum density or most intense land use that may be considered only if the other criteria established in Conservation Element Policy 5.2 are met:
 - 1. Residential land uses within wetlands, that are a part of a formal subdivision or site plan, on properties containing wetlands shall be limited to the following:
 - a. Residential land uses within wetlands shall be limited to not more than one (1) dwelling unit per five (5) acres unless strict application of this policy renders a legally established parcel as of September 9, 1988, which is less than five (5) acres, as unbuildable. The preceding limitation of one dwelling unit per five (5) acres within wetlands may be applied as a maximum percentage limiting wetland impacts to not more than 1.8% of the total non-commercial and non-industrial acreage on a cumulative basis as set forth in Policy 5.2.E (7), for subdivisions and multi-family parcels greater than five acres in area, New Town Overlays, PUDs, and if applicable, mixed-use land development activities as specified in Policy 5.2.E (6).
 - b. For development activities on property greater than five (5) acres, density may be transferred to an upland portion of the site if consistent with all county land development regulations and compatible with adjacent uses.
 - c. Except as allowable in Policy 5.2.E(1)a, subdivided lots and multi-family parcels shall contain sufficient uplands for the

intended use and for any buffering necessary to maintain the function of the wetland(s), and shall be compatible with adjacent uses.

2. Residential land uses within wetlands and created by metes and bounds, which are not part of a formal subdivision, on properties containing wetlands shall be limited to the following:
 - a. Residential land uses within wetlands shall be limited to not more than one (1) dwelling unit per five (5) acres unless strict application of this policy would render a legally established parcel as of September 9, 1988, which is less than five (5) acres, as unbuildable. The preceding limitation of one dwelling unit per five (5) acres within wetlands may be applied as a maximum percentage limiting wetland impacts as described in Policy 5.2.E (1)a above. Application of the one-unit-per-five-acres limitation shall limit impacts to wetlands for single family residential development on a cumulative basis, to not more than 1.8% of the total property as defined in Policy 5.2.E (7).
 - b. Except as allowable in Policy 5.2.E (2)a, properties shall contain sufficient uplands for the intended use and for any buffering necessary to maintain the function of the wetland(s), and shall be compatible with adjacent uses.
 - c. In addition to impacts allowable in Policy 5.2.E (2)a, on properties where sufficient uplands for the intended use and for any buffering necessary to maintain the function of the wetland(s) exist except for access, wetland impacts may be permitted for single access to the uplands.
3. Commercial and industrial land development activities shall be prohibited in wetlands contained in properties designated on the Future Land Use Map as commercial or industrial, and in surrounding upland buffers for such wetlands, except as provided below for I-95 interchanges, mitigation qualified roadways, abutting properties, and access to uplands. In no instance shall a proposed land development activity result in increased flooding on adjacent properties. Where the State does not require a buffer, wetland buffers specifications shall be established in land development regulations and be based on peer-reviewed

publications to include, but not be limited to, Buffer Zones for Water, Wetlands, and Wildlife in the East Central Florida Region, (1990, Brown, M.T., Schaefer, and K. Brandt, published by the Center for Wetlands, University of Florida). Where impacts are permitted, the applicant is encouraged to propose innovative wetland preservation alternatives.

- a. Impacts to wetlands are permissible for commercial or industrial land development activities on a property that is designated as commercial or industrial on the Future Land Use map, and is located within one-half mile of the intersection of the off-ramp of the I-95 interchange with the connecting roadway. The one-half mile radius shall extend from the end of the limited access boundary of I-95. This shall not include those interchanges where I-95 intersects a limited access highway as defined by Florida Statute. Where the State does not require mitigation for any wetland impact, mitigation shall be provided to meet the County's no net loss policy as defined in Objective 5.
- b. In mitigation qualified roadways, commercial or industrial land development activities may be permitted in wetlands contained in properties designated for commercial or industrial land uses on the Future Land Use Map. Mitigation qualified roadways are depicted and identified in a table on Map 8.

An amendment to the Comprehensive Plan shall be required to add a mitigation qualified roadway to Map 8 and the associated table. Impacts to high functioning and landscape level wetlands shall be prohibited unless the proposed impacts are found to be in the public interest, or overriding public benefit. Where the State does not require mitigation for any wetland impact, mitigation shall be provided to meet the County's no net loss policy as defined in Objective 5.

- c. Commercial or industrial land development activities may be permitted in wetlands contained in properties designated for commercial or industrial land uses on the Future Land Use Map prior to February 23, 1996, if the property abuts land(s) developed as commercial or industrial as of December 31, 2010, and has sufficient infrastructure available to serve the commercial or industrial use. This shall not apply to

properties that are addressed under Policies 5.2.E.3.a, b, and d. Impacts to high functioning and landscape level wetlands shall be prohibited unless the proposed impacts are found to be in the public interest, or overriding public benefit. Where the State does not require mitigation for any wetland impact, mitigation shall be provided to meet the County's no net loss policy as defined in Objective 5.

- d. Impacts to wetlands for commercial or industrial land development activities limited solely to providing access to uplands, and for no other purpose than providing access as required by Brevard County land development regulations may be permitted in wetlands contained in properties designated on the Future Land Use Map as commercial or industrial of February 23, 1996, only if all of the following criteria are met:
 - (i) Sufficient uplands exist for the intended use except for access to uplands.
 - (ii) The property was not subdivided from a larger property after December 31, 2010. This shall not preclude a single shared access through wetlands for properties subdivided after December 31, 2010.
 - (iii) Where the State does not require mitigation for any wetland impact, mitigation shall be provided to meet the County's no net loss policy as defined in Objective 5.
- 4. Institutional and Residential Professional development activities within wetlands shall be limited to the following:
 - a. Institutional or Residential Professional land development on properties which contain wetlands and which are designated on the Future Land Use Map as Neighborhood Commercial or Community Commercial shall be considered commercial as set forth in Policy 5.2.E.3. The property shall have sufficient infrastructure available to serve the use.
 - b. Institutional or Residential Professional land development on properties which contain wetlands and which are designated on the Future Land Use Map as residential shall be limited to properties of at least 5 acres unless strict application of this

policy renders a legally established parcel as of September 9, 1988, which is less than 5 acres, as unbuildable.

5. In the event that the denial of commercial or industrial development activities in wetlands results in an inordinate burden under the Bert Harris Property Rights Act or a taking under state or federal law, an affected property owner may appeal such denial to the Board of County Commissioners in the manner provided in Section 62-507(b)(2), Code of Ordinances of Brevard County, Florida.
6. Beginning on January 1, 2010, mixed-use land development activities may be permitted in wetlands only if all of the following are met:
 - a. The land development activities that impact wetlands must be part of a mixed use development that includes a minimum of three of the following land uses: residential, commercial (retail services and/or office), recreation/open space and institutional uses. Industrial land uses shall be prohibited in mixed use land development activities within wetlands. For purposes of this policy mixed use land development activities shall be consistent with the following criteria:
 - (i) The mixed use land development activity includes a variety of densities, intensities and types designed to promote walking between uses and utilizes a variety of transportation modes such as bicycles, transit and automobiles; and
 - (ii) The residential component of the land development activity is an integrated part of the project and comprises not less than 30% of the gross square footage of land uses within the development as shown on a site plan or a Sketch Plan complying with the standards set forth in Chapter 11, Policy 9.9.2.
 - (iii) The development is in conformance with an integrated site plan or commercial subdivision which includes both vertical and horizontal mix of uses within a defined area.
 - b. Impacts to wetlands from mixed-use development activities (including without limitation impacts resulting from

associated improvements such as sidewalks, parking areas and driveways) do not exceed the limitation set forth in Policy 5.2 E(7); and

- c. To the extent direct impacts to wetlands are caused by a particular building or buildings within a mixed-use development, not less than 30% of the gross square footage of such building or buildings must be for residential use; or such building or buildings shall be physically attached to a building having not less than 30% of its gross square footage permitted for residential use.
7. Impacts to wetlands from residential and mixed-use land development activities, on a cumulative basis, shall not exceed 1.8% of the non-commercial and non-industrial acreage of a DRI, PUD, parcel acreage or, if the project is within a New Town Overlay (as defined in Chapter 11, Policy 9.2), 1.8% of the non-commercial and non-industrial acreage within the applicable New Town Overlay.
8. Allowable wetland impacts shall be kept to a minimum and related to structural building area requirements, on-site disposal system requirements, the 100 year flood elevation requirement for first floor elevations, required stormwater management and parking, and required access to the on site structures. Minimization shall include application for available land development regulation waivers that would result in reduced wetland impacts.
9. Dumping of solid or liquid wastes shall be prohibited.
10. Applying or storing pesticides and herbicides should be prohibited unless such application is required for protection of the public health or removal of invasive, exotic, or nuisance plant species for management and mitigation or conservation purposes approved by Brevard County or removal of invasive, exotic, or nuisance plant species for management and mitigation or conservation purposes approved by Brevard County.
11. The County shall develop incentives to minimize impacts to highly functional wetlands.

F. Agricultural Activities

1. An exemption for agricultural pursuits, utilizing best management

practices which do not result in permanent degradation or destruction of wetlands, shall be included within the land development regulation.

2. Wetland impacts for activities listed in agricultural zoning classifications as permitted, permitted with conditions, or approved by the Board of County Commissioners as a Conditional Use on properties designated as bona fide agricultural lands per F.S. 193.461 and 823.14, may be allowed subject to the following criteria:
 - a. The property shall be classified as bona fide agricultural per F.S. 193.461 and 823.14 for not less than ten consecutive years as of the date of the proposed impact;
 - b. The property shall have Agriculture Future Land Use designation or DRI Future Land Use designation and the proposed use is consistent with the defined agricultural uses under an approved DRI Development Order.
 - c. Upon approval of the impact, no less than 50 percent of the property area shall retain bona fide agricultural use pursuant to F.2.a above;
 - d. Impacts to high functioning or landscape level wetlands shall be prohibited unless the proposed impacts are found to be in the public interest, or overriding public benefit; and
 - e. The property shall have an agricultural zoning classification or be zoned PUD and the proposed use is consistent with the defined agricultural uses in the PUD zoning resolution or approved Preliminary Development Plan.

Where the allowable use is residential, residential policies shall apply. Sufficient buffer setbacks of the activity from incompatible land uses shall be provided. Buffer setbacks shall be established through the land development regulations. The property shall meet all other State regulatory criteria.

Policy 5.3

Wetland regulations adopted by Brevard County should avoid duplication of wetland regulation unless regulated activities will result in the destruction and/or degradation of functional wetlands. Where the wetland degradation or destruction has been permitted by FDEP or SJRWMD based on FDEP and SJRWMD professional staff

application of criteria and evaluation the County shall apply the land use and density requirements of Policy 5.2 and the avoidance, minimization of impacts, and mitigation priorities established by Objective 5. Any permitted wetland degradation or destruction shall provide for mitigation as designated in the Conservation Element.

Policy 5.4

Wetlands artificially created for wastewater treatment or disposal or for wetland stock nurseries shall not be subject to these regulations and shall not be used to fulfill the requirements of this objective (Objective 5).

Policy 5.5

Natural, isolated wetlands should be incorporated into water management systems where practical and appropriate, as an alternative to destruction of wetlands. Whenever wetlands are utilized within water management systems, quality of the water discharged to the wetlands, hydroperiods and stage elevations should be designed to maintain or enhance the wetland.

Policy 5.6

Wetlands policy should provide allowances to promote redevelopment, and urban and industrial infill.

Minerals

Objective 6

Brevard County shall continue to implement regulations regarding mining, borrow operations and private lakes which protect environmental systems and permit appropriate utilization of the mineral resources.

Policy 6.1

Mining regulations entitled *Land Alteration* shall continue to include, at a minimum, the following provisions to prevent adverse effects on water quality and quantity.

Criteria:

- A. Mining operations are not permitted within Type 1 aquifer recharge areas, as defined by this Comprehensive Plan.
- B. Mining operations are not permitted within Type 2 aquifer recharge areas which are being used for a drinking water supply or where there is potential for private drinking water supply systems.
- C. Mining operations are not permitted within the 10-year floodplain of the St. Johns River or freshwater tributaries of the Indian River Lagoon or

wetlands as protected within this Plan.

- D. Mining operations located within the watersheds of Class I surface waters shall not have adverse impacts on water quality and quantity of potable surface water sources.

Policy 6.2

The County's mining regulations shall continue to include, at a minimum, the following provisions to minimize adverse impacts to environmental resources.

Criteria:

- A. Mining operations should not adversely impact protected wetlands or other water dependent systems, and shall be set back a minimum of 100 feet from such wetlands, except as allowable per Policy 5.2.F.¹
- B. Mining operations shall not cause salt water intrusion. Monitoring by the mining operator shall be required to insure this requirement.

Policy 6.3

The County's mining regulations shall continue to include, at a minimum, the following provisions.

Criteria:

- A. Mining operations within any zoning classification shall require a Conditional Use Permit.
- B. Reclaimed mines shall have a minimum five (5) feet horizontally to one (1) foot vertically (5:1) side slopes to a normal water depth of at least five (5) feet below the water surface; subaqueous side slopes deeper than five (5) feet shall be no steeper than 2:1, and a littoral zone.
- C. When the borrow pit (lake) is to be utilized in conjunction with residential development, stormwater shall not be released directly into lakes with depths greater than eight (8) feet. Pretreatment of stormwater, for example via swales, shall be required.

Policy 6.4

A reclamation plan and proof of financial responsibility must be submitted and approved prior to the commencement of the mining operation. The reclamation plan shall address the following concerns, at a minimum.

Criteria:

- A. Average depth;
- B. Bottom contours and littoral zones;

- C. Revegetation plan, showing plant materials;
- D. Control of stormwater runoff and drainage;
- E. Recreational amenities, if any;
- F. Stocking with fish, if any; and
- G. Maintenance plan.

Policy 6.5

A concept plan to bind the operational scope and other physical features of the operation shall be submitted and approved prior to the commencement of the mining operation. The concept plan shall address the following criteria, at a minimum.

Criteria:

- A. Size and location of operation;
- B. Location of equipment and equipment storage;
- C. Extent of buffering and setbacks;
- D. Side slopes;
- E. Points of ingress and egress; and
- F. A vicinity map depicting removal routes that trucks and other vehicles will use to haul to sites or areas external to the borrow site.
- G. The required reclamation plan shall also be included.

Policy 6.6

Brevard County shall continue to implement regulations for land excavation operations in addition to those for commercial borrow operations. These regulations are titled *Private Lakes* and shall continue to include, at a minimum, the following:

Criteria:

- A. Definition of regulated land excavation operations. The construction of a private lake will not be used or constructed as a commercial borrow operation by virtue of its intended use, and maximum size.
- B. Exemptions, including the construction of swimming pools, and water retention areas required in conjunction with an approved site plan or subdivision plat.

- C. The minimum size to be regulated.
- D. Setbacks shall continue to be established in the private lake regulations from property lines and rights-of-way lines of a publicly owned road, street, highway, drainage, or public or private utility easements, and cable TV easements.
- E. Regulated excavations shall not be permitted within:
 - 1. Type 1 aquifer recharge areas as identified within this Plan or within;
 - 2. Type 2 aquifer recharge areas being utilized as sources for public drinking water supplies.
 - 3. Below the ten-year floodplain of freshwater tributaries of the Indian River Lagoon or the St. Johns River.
- F. Limitations shall be adopted on length of time that excavations may occur and hours of operation.
- G. Requirements for side slopes of the completed excavation.
- H. Maximum permitted depths.
- I. Reclamation requirements.

Soil Erosion

Objective 7

Eliminate inappropriate land use practices causing soil erosion and reduce sediment accumulation in the Indian River Lagoon, St. Johns River and other large surface water bodies.

Policy 7.1

Brevard County shall continue to implement its adopted land clearing, tree protection, and landscaping ordinances to address revegetation and premature land clearing.

Criteria:

- A. Require permitting prior to any land clearing.
- B. Require phased clearing in conjunction with phased construction.

- C. Require permits for the removal of trees or vegetation in conjunction with land surveying along property lines.
- D. Require areas cleared of vegetation to be revegetated with biologically appropriate vegetation, to prevent wind or water erosion, within ninety (90) days of initial land clearing activity where no approved landscape plan exists or no active development order has been issued. Native vegetation should be utilized to the maximum extent possible.
- E. Exempt single-family residential lots of two and one-half (2 1/2) acres or less in size, from the requirement of written notification to clear land, after the issuance of a Certificate of Occupancy for the single-family residential lot.
- F. Exempt land clearing in conjunction with agricultural purposes or normal silviculture utilizing best management practices.

Policy 7.2

Where localized soil erosion is noted by Code Enforcement, the Natural Resources Management Office, or other County agency, the Brevard Soil and Water Conservation District will be contacted and their recommendations shall be incorporated into a program instituted to assist the landowner to renourish and stabilize such areas.

Policy 7.3

In those cases where soil erosion is of concern, especially properties along the Atlantic Ridge, Brevard County shall request review by the Brevard Soil and Water Conservation District. Brevard County shall consider their recommendations in the design, review and development of projects. Projects should minimize impervious surfaces by using pervious surfaces where ever feasible, such as for overflow parking.

Policy 7.4

Brevard County will participate with the Brevard Soil and Water Conservation District to educate the public about the causes of soil erosion, as well as methods for preventing or repairing such erosion.

Policy 7.5

Brevard County should employ Best Management Practices for control of erosion and sedimentation for road construction and other County projects.

Policy 7.6

Brevard County shall utilize techniques in the installation of new facilities or improvement of existing facilities to minimize sediment accumulation within surface

water bodies and wetlands.

Criteria:

- A. Turbidity screens shall be utilized for all projects which have the potential to release sediments.
- B. All runoff shall be detained prior to release to allow pollutants, soil, particulates and organic materials to settle out.
- C. Phased projects should be cleared in conjunction with construction of each phase.
- D. Areas cleared of vegetation should be revegetated with appropriate vegetation, to prevent wind or water erosion, within ninety (90) days of initial land clearing activity where no approved landscape plan exists or no active development order has been issued.

Vegetation

Objective 8

Conserve, appropriately use and protect native vegetative communities, including forests as appropriate, by regulating land clearing and landscaping practices within Brevard County.

Policy 8.1

Brevard County shall continue to implement and improve the land clearing and tree protection ordinance, and the landscaping ordinance, as amended.

Policy 8.2

Brevard County shall continue to utilize information from the East Central Florida Regional Planning Council and other agencies in undertaking a program to inventory and identify vegetative communities within the County, and to determine loss rates and rarity of such communities.

Policy 8.3

Brevard County shall continue to review all development plans for compliance with vegetative protection regulations developed by ordinance and adopted in Chapter 62, Article B, Division 2 of the Land Development Regulations that meet the objectives of 9J-5.006 and 9J-5.013. Brevard County shall continue to encourage the use of community green space and clustering developments through the open space ordinance, and shall coordinate with the Building and Construction Advisory Committee, the Brevard County Home Builders Association and other appropriate groups to continuously improve environmental design incentive program.

Policy 8.4

Brevard County should continue to utilize scientific advisory groups to investigate preservation of vegetation, particularly of upland communities. These groups are ad hoc based upon the Board direction. The Environmentally Endangered Lands Program, Selection and Management Committee (SMC) may also be used to support these investigations when consistent with policy.

Policy 8.5

Brevard County shall conserve, appropriately use and protect vegetative communities, including forests, from inappropriate development through the continued implementation of the Landscaping, Land Clearing and Tree Protection ordinance. using the following minimum criteria:

Criteria:

- A. Heat Island Mitigation.
- B. Vegetative Buffering.
- C. Vegetative Loss Replacement.

Policy 8.6

Brevard County should continue to develop programs for county-wide acquisition of unique vegetative communities which have been identified for protection. This acquisition shall be voluntary, and shall not include the use of eminent domain.

Policy 8.7

Brevard County should contact the municipalities within the county and pursue developing a county-wide vegetation protection ordinance to standardize existing landscaping ordinances.

Policy 8.8 Reserved**Policy 8.9**

Brevard County shall continue to incentivize continued use of agricultural and silvicultural lands which are unique to Brevard County. These programs should include, but not be limited to, regulatory incentives and assistance for agriculture landowners, voluntary agricultural or silvicultural districts, time-certain dedications, purchase or transfer of development rights, and voluntary fee simple purchase of agricultural or silvicultural lands.

Policy 8.10

Brevard County shall develop a county-wide program for invasive exotic removal on public lands and shall educate private property owners on reasons to remove invasive exotics from private lands. This program should emphasize replacement of invasive exotics with native vegetation where feasible.

Wildlife

Objective 9

Protect endangered and threatened wildlife species and species of special concern from adverse impacts due to loss of crucial habitat.

Policy 9.1

Brevard County shall continue to obtain and utilize information from the U.S. Fish and Wildlife Service, Florida Game and Freshwater Fish Commission, Florida Department of Environmental Protection, Florida Natural Areas Inventory, East Central Florida Regional Planning Council and other agencies to inventory and identify crucial habitat for endangered or threatened wildlife species and species of special concern within the County, and to determine loss rates and rarity of such habitat.

Policy 9.2

By 2002, Brevard County shall make available Natural Resources of Regional Significance maps as adopted Florida Department of Environmental Protection in 1998 and revised in 2004, and the Florida Natural Inventory (FNAI) adopted 2000, and revised in 2006 to provide crucial habitat review at the pre-application stage of all projects requiring site-plan or subdivision approval to guide future development away from crucial habitats

Policy 9.3

Brevard County should coordinate a scientific advisory group to investigate preservation of wildlife habitat, particularly of upland communities.

Policy 9.4

Brevard County shall continue the Environmentally Endangered Lands Program (EEL) as authorized by the voter-approved public referendum in September 1990. This program shall remain committed to acquiring, protecting, and maintaining environmentally endangered lands and making improvements as appropriate for passive recreation and environmental education.

Policy 9.5

Development of Brevard County owned conservation areas shall be in accordance with the intent of the original acquisition.

Policy 9.6

Prior to development of any county-owned property, an environmental assessment should be completed which would analyze the impact of the proposed development on the natural resources and wildlife habitat of the property.

Policy 9.7

Brevard County shall continue to rely upon the Environmentally Endangered Lands Program, Selection and Management Committee (SMC) land acquisition analysis and the Florida Fish and Wildlife Conservation Commission (FWCC) adopted in 1994, revised in 2006, wildlife corridor studies to determine the appropriateness of wildlife corridors, how extensive they should be, the location of potential corridors, Brevard County should explore what fiscal resources including the EELs program, are available for implementation and possible economic incentives for property owners to voluntarily participate in formation of a wildlife corridor program.

Policy 9.8

Brevard County shall delineate and protect linkages between natural systems and the open space systems.

Policy 9.9

On February 7, 2003, the Florida Fish and Wildlife Conservation Commission approved the Brevard County Manatee Protection Plan (MPP). The MPP includes the following major components: habitat protection, education, boat facility siting, State of Florida manatee protection boat speed zones, manatee mortality, law enforcement, and boating safety. In addition to the criteria established in the MPP and incorporated into the Coastal Element, the following criteria shall also apply:

Criteria:

- A. All existing and new marinas shall erect manatee education and awareness signs, which will be posted and maintained in a prominent location. Each marina operator shall establish and maintain a permanent manatee educational display at a prominent location at their marina. Brevard County shall establish and maintain a display at public boat launch facilities and license tag agencies.
- B. Those involved in the sale of boats and motors should provide manatee information to the buyer at the time of delivery of boats or motors.
- C. Brevard County shall maintain well-marked speed limit signs, in accordance with the uniform waterway marker program, for manatee protection and boating safety speed zones established by local ordinance only.
- D. Brevard County, or other appropriate agencies, shall develop standardized information packet containing information regarding manatees and regulations protecting manatees for distribution by the U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Brevard Marine Association, and other agencies or groups as appropriate. This will include information concerning the existing

manatee slow speed or idle zones, and any additional zones which may be deemed necessary within areas frequented by manatees.

- E. Brevard County shall continue to monitor manatee protection measures to determine their effectiveness.
- F. Brevard County shall identify areas containing significant manatee habitat features. Marinas with powerboat slips should not be sited within these areas.

Policy 9.10

Brevard County should continue to enforce its sea turtle protection ordinance in order to protect sea turtles along the County's beaches. Efforts shall be made to make beachfront lighting ordinances within the County uniform. This may be accomplished through interlocal agreements.

Policy 9.11

Beach renourishment and dune restoration plans shall continue to be designed and implemented so that sea turtle nesting is not disrupted.

Policy 9.12

Brevard County Office of Natural Resources Management shall continue to comply with the county-wide scrub-jay habitat management conservation agreement plan as approved by the US Fish and Wildlife Service on July 10, 2003 and revised in 2007. Management plans shall be developed for other species, as deemed necessary.

Policy 9.13

The Brevard County Office of Natural Resources Management shall make available to the development community, State prepared model management plans for other endangered and threatened species and species of special concern dependent upon habitat rarity and loss rates as described in Policies 9.2, 9.7, and 9.12, in this element.

Policy 9.14

Brevard County shall continue to assist in the application of, and compliance with, all state and federal regulations which pertain to endangered, or threatened species and species of special concern.

Policy 9.15

By 2016, the County shall develop education programs to promote the preservation of endangered and threatened species and species of special concern as well as their habitat, with the assistance of the Florida Department of Environmental Protection, the Florida Game and Fresh Water Fish Commission, and the U.S. Fish and Wildlife Service, and other agencies or groups as appropriate. Brevard County encourages the development of post-development wildlife management plans which

would enhance the wildlife potential of existing developments.

Policy 9.16

Brevard County supports the use of Turtle Excluder Devices (TEDs) or other devices to protect wildlife from shrimp and other fishing nets.

Aquifer Protection

Objective 10

Maintain the surficial and Floridan aquifer systems for reasonable and beneficial uses.

Policy 10.1

By 2016, Brevard County shall undertake a surficial and Floridan aquifer protection study, including modeling of wellfield cones of influence. This study will be coordinated with other appropriate agencies and will become the basis for an aquifer management plan.

Policy 10.2

Until an aquifer management plan is adopted by Brevard, at a minimum the following criteria shall be incorporated into the land development regulations to protect the aquifer.

Criteria:

- A. In Type 1, 2, and 3 aquifer recharge areas, post-development groundwater recharge volume shall equal pre-development recharge volume. The maximum allowable impervious surfaces in these areas shall be: Type 1 - 25%; Type 2 - 35%; and Type 3 - 45% unless the developer can demonstrate that post-development recharge volume shall equal pre-development recharge volume and dependent upon additional regulations and local conditions. Citrus, improved pasture, row crop agricultural operations, and normal silvicultural operations using Best Management Practices shall be exempt.
- B. For water quality purposes, stormwater run-off in Type 1, 2, and 3 aquifer recharge areas should be directed through a vegetated stormwater management system which at a minimum has a soil depth of at least two feet above the seasonal high water table. Citrus, improved pasture, row crop agricultural operations, and normal silvicultural operations using Best Management Practices shall be exempt. If alternative methods can be shown to meet an equal or greater degree of stormwater treatment these methods may be considered.
- C. Within Type 1 aquifer recharge areas, the following are prohibited:

1. New septic tanks.
 2. New underground storage tanks.
 3. Storage of threshold amounts of hazardous materials.
 4. Disposal of hazardous materials.
- D. Within Type 2 aquifer recharge areas, the following are prohibited:
1. Storage of threshold amounts of hazardous materials.
 2. Disposal of hazardous materials.
- E. Within Type 3 aquifer recharge areas, the disposal of hazardous materials is prohibited.
- F. Groundwater withdrawals shall be managed to prevent salt water intrusion and adverse affects to existing wells. Anyone proposing a new public water supply well must own or control all areas within 500 feet of the proposed well.
- G. An applicant can show that the area does not function as a recharge area by providing additional information about hydrogeologic conditions on site which may include vertical permeability as found in the Aquifer Protection ordinance.

Policy 10.3

Brevard County shall support the City of Titusville's efforts to obtain G-1 sole source aquifer designation.

Policy 10.4

Brevard County shall continue cooperation with the City of Titusville ~~in~~ through the existing Interlocal Agreement and development of new pre-annexation agreements for properties within the City's Area of Critical Concern in order to carry out Titusville's aquifer protection policies and the provision of potable water.

Policy 10.5

Brevard County shall develop a public education program concerning the importance and methods of protecting the County's surficial and Floridan aquifers.

Policy 10.6

By 2002, Brevard County shall develop and adopt within its Land Development Regulations to regulate land uses which involve the storage, production, use and disposal of threshold amounts (to be determined) of regulated substances identified as priority pollutants by the Environmental Protection Agency in 40 CFR 122.21 within Type 1, Type 2, and Type 3 aquifer recharge areas. These regulations shall meet the state criteria for protecting wellfields.

Energy Conservation

Objective 11

Brevard County shall develop strategies through transportation decisions and planning to address the reduction of greenhouse gas emissions, energy conservation and energy efficient design.

Policy 11.1

Sites for new public facilities serving large numbers of people shall be close to or within population centers to minimize automobile use.

Policy 11.2

The County shall promote car pooling opportunities for commuters with the same destination.

Policy 11.3

The County shall encourage the use of transit opportunities and other alternate modes of transportation throughout the County.

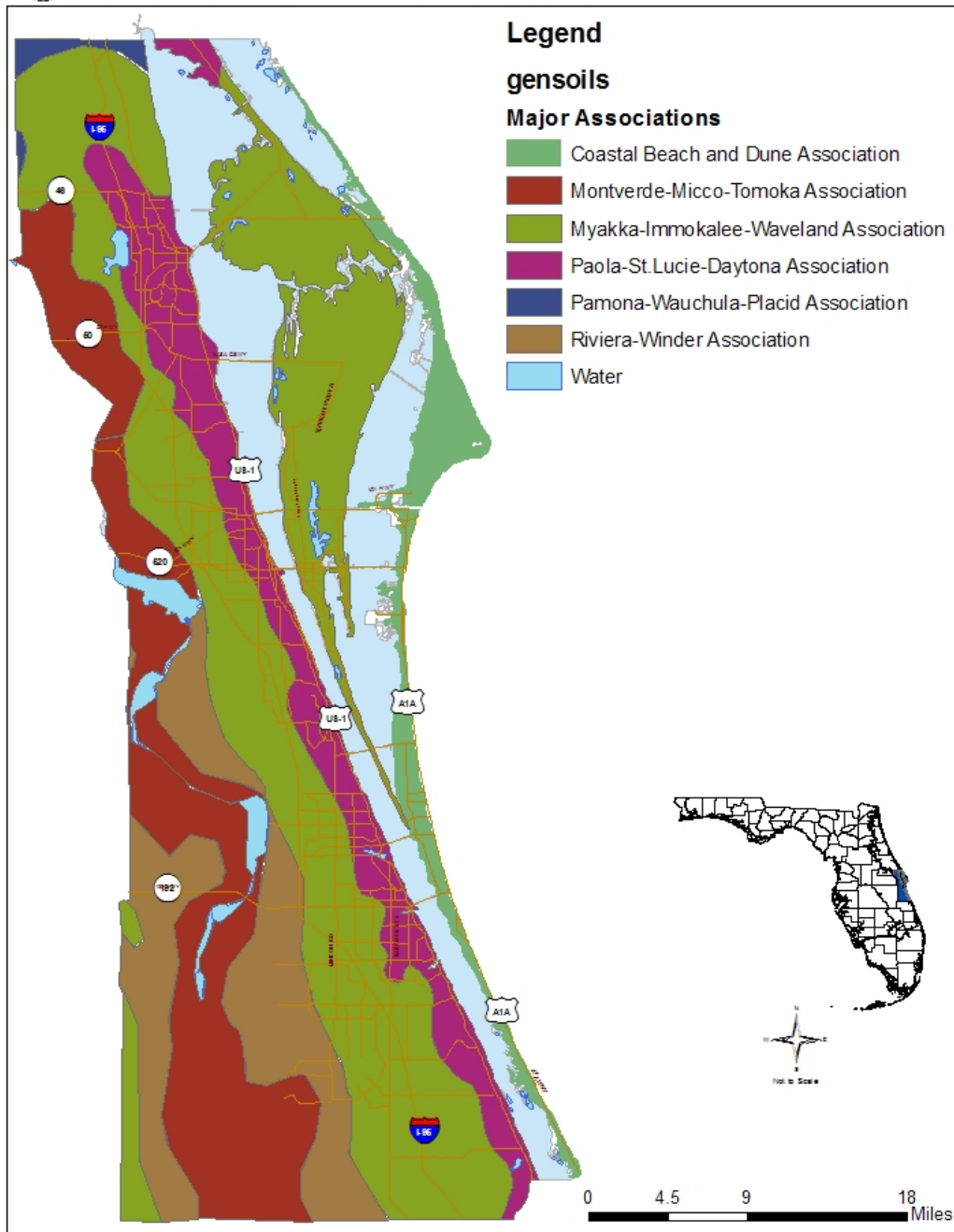
Policy 11.4

The County shall continue its education program to promote bicycle, pedestrian and other non-motorized transportation options to reduce vehicle miles traveled.

APPENDIX

LIST OF MAPS

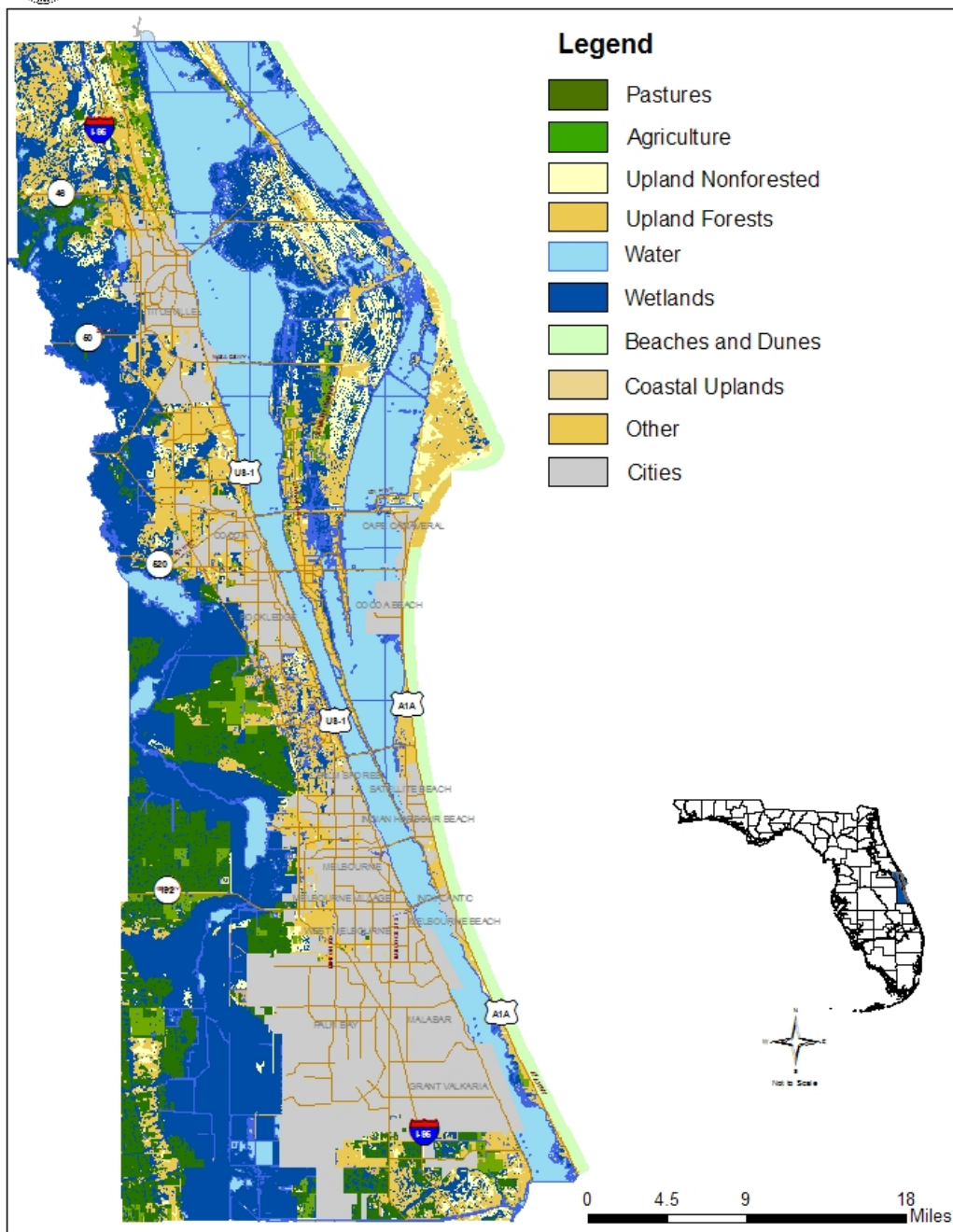
Map	Title
1	General Soils
2	Vegetation
3	Biologically Diverse Habitat
4	Floodplains
5	Surface Water - Classification
6	Wetlands
7	Marine Facilities
8	Mitigation Qualified Roadways
9	Landscape Level Polygon



**Conservation Element
Soils**

Prepared by: Brevard County Natural Resources Management Office
Notes: State Plane 1984, Florida East
Soils by SJRWMD from NRCS soil surveys, which are based on aerial photography.
General soil map produced by mapping soil series by their order classifications.

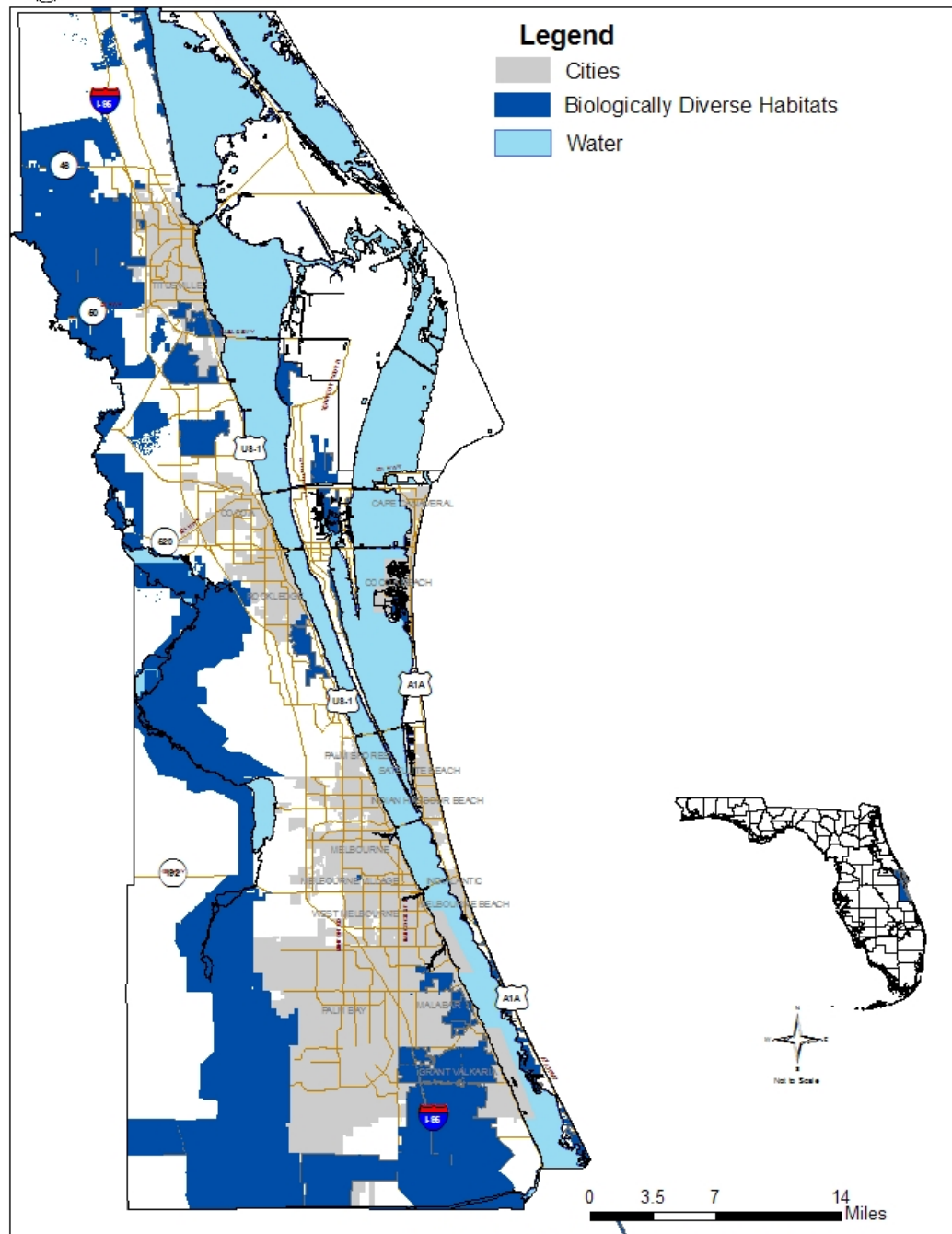
**Map 1
Soils**



**Conservation Element
Vegetation**

Prepared by: Brevard County Natural Resources Management Office
Notes: State Plane 1984, Florida East
Vegetation by SJRWMD based on aerial photography, FLUCFCS codes.
General soil map produced by mapping soil series by their order classifications.

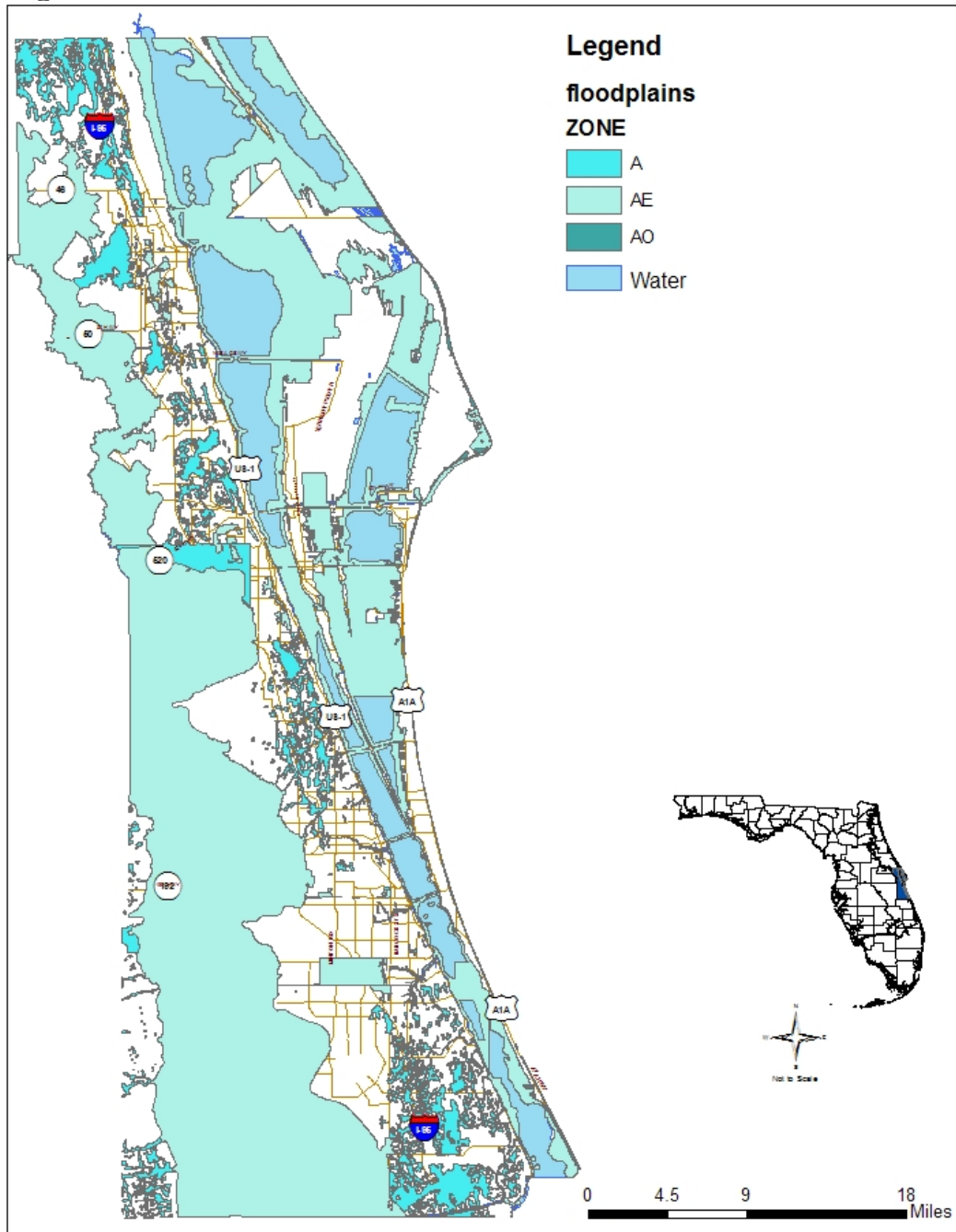
**Map 2
Vegetation Including Wetlands**



**Conservation Element
Biologically Diverse Habitats**

Prepared by: Brevard County Natural Resources Management Office
Notes: State Plane 1984, Florida East
Map data composed of Public Conservation Lands (SJRWMD, EELS, USFWS, FDEP,
Florida Audubon, City of Palm Bay) and Florida Board of Trustees Environmental Land
Acquisition Project, 2009

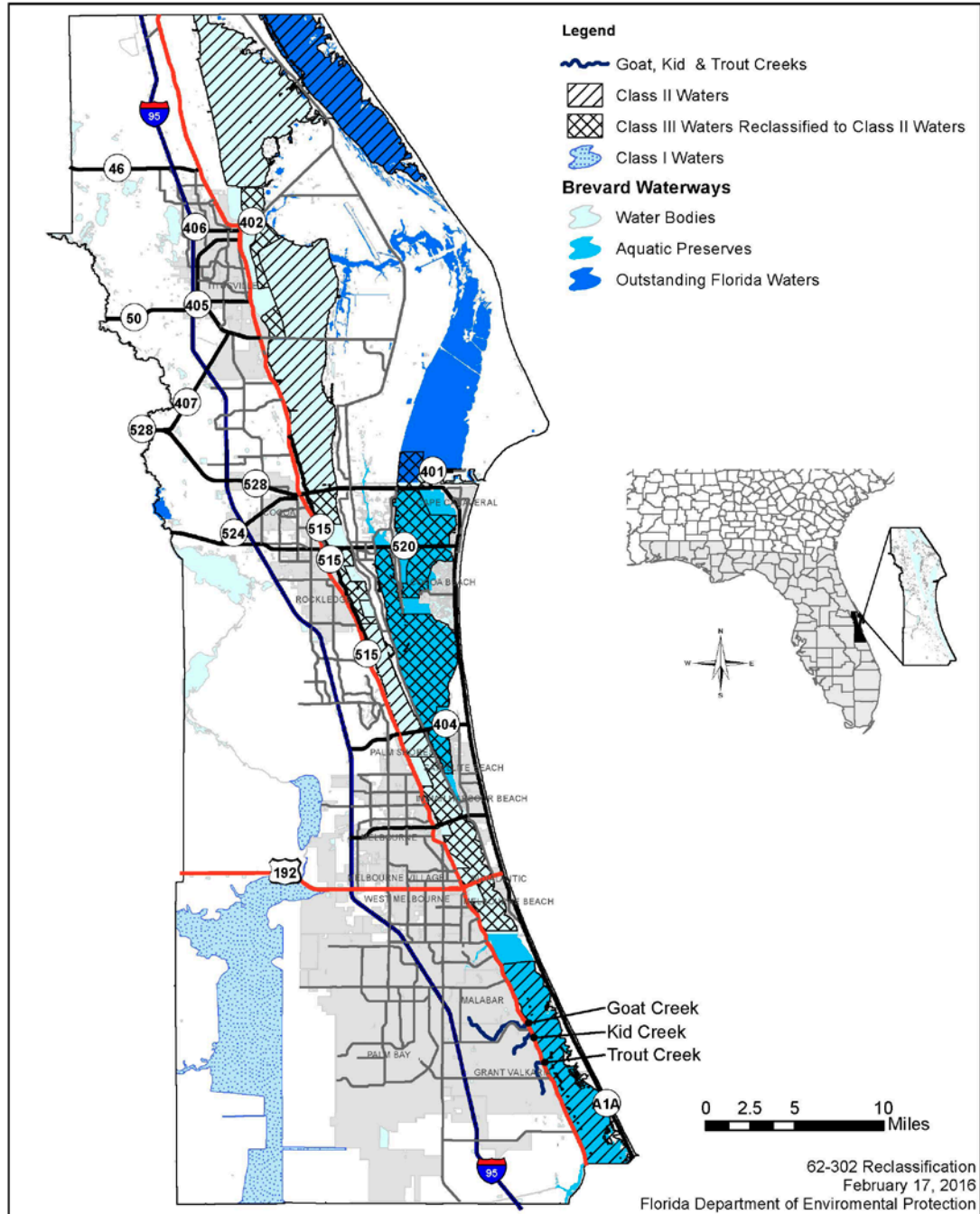
**Map 3
Biologically Diverse Habitats**



**Conservation Element
Regulated Floodplains**

Prepared by: Brevard County Natural Resources Management Office
Notes: State Plane 1984, Florida East
Floodplain Mapping from FEMA, 2008

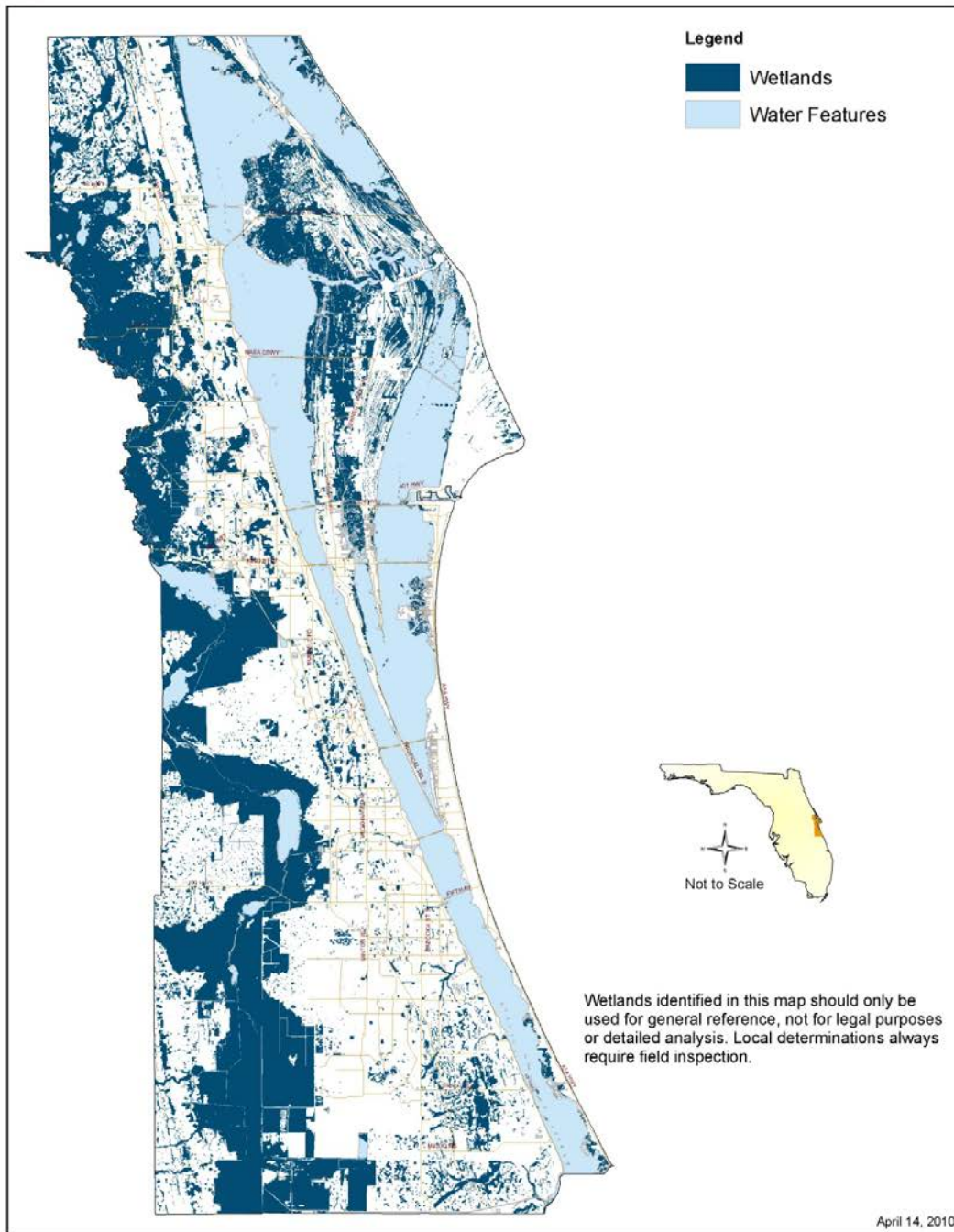
**Map 4
Flood Plains**



Conservation Element
Surface Water - Classification

Map 5

Map 5
Surface Water - Classification

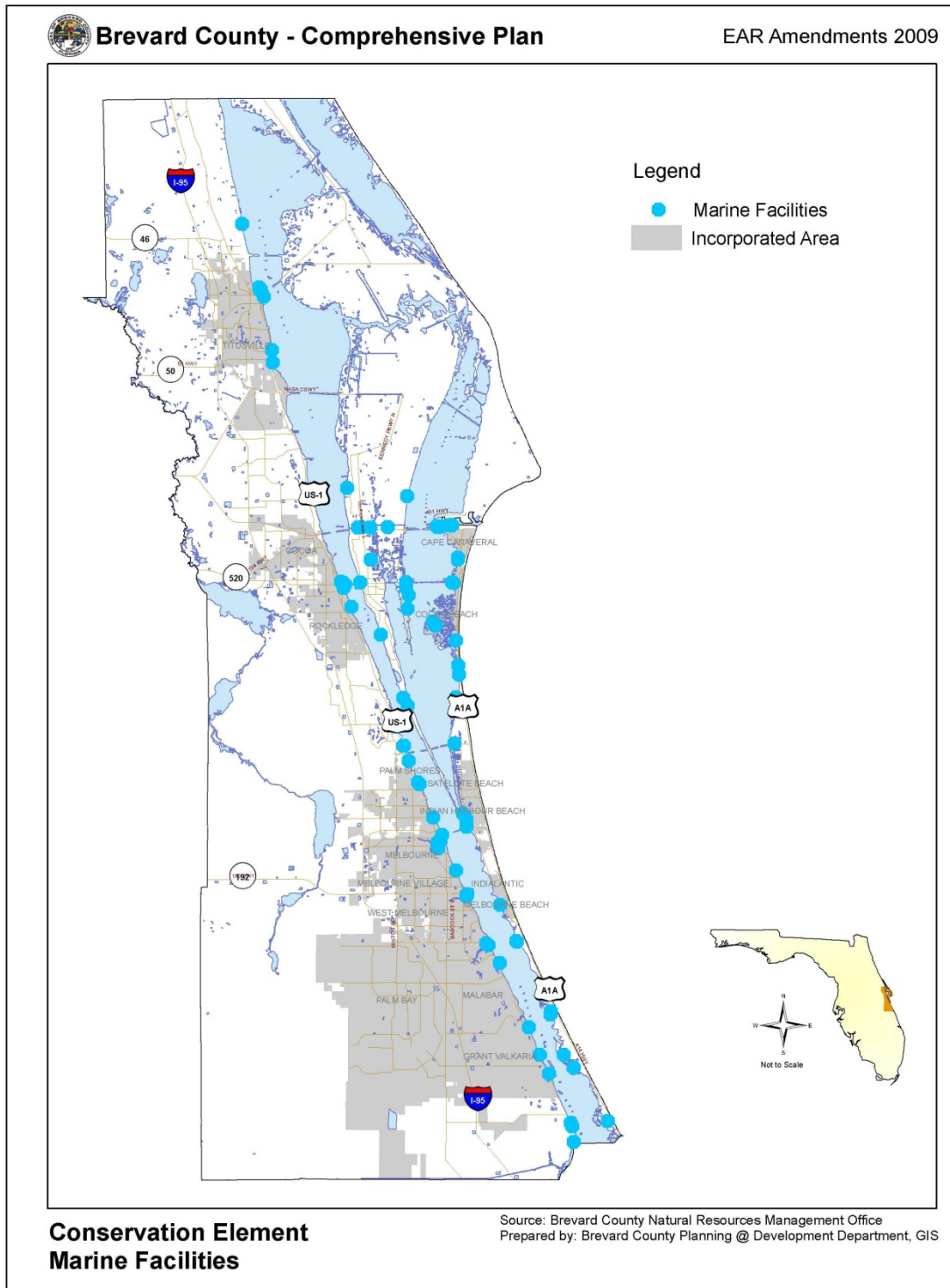


**Conservation Element
Wetlands**

Source: St. Johns River Water Management District
Land Use and Land Cover (2004)

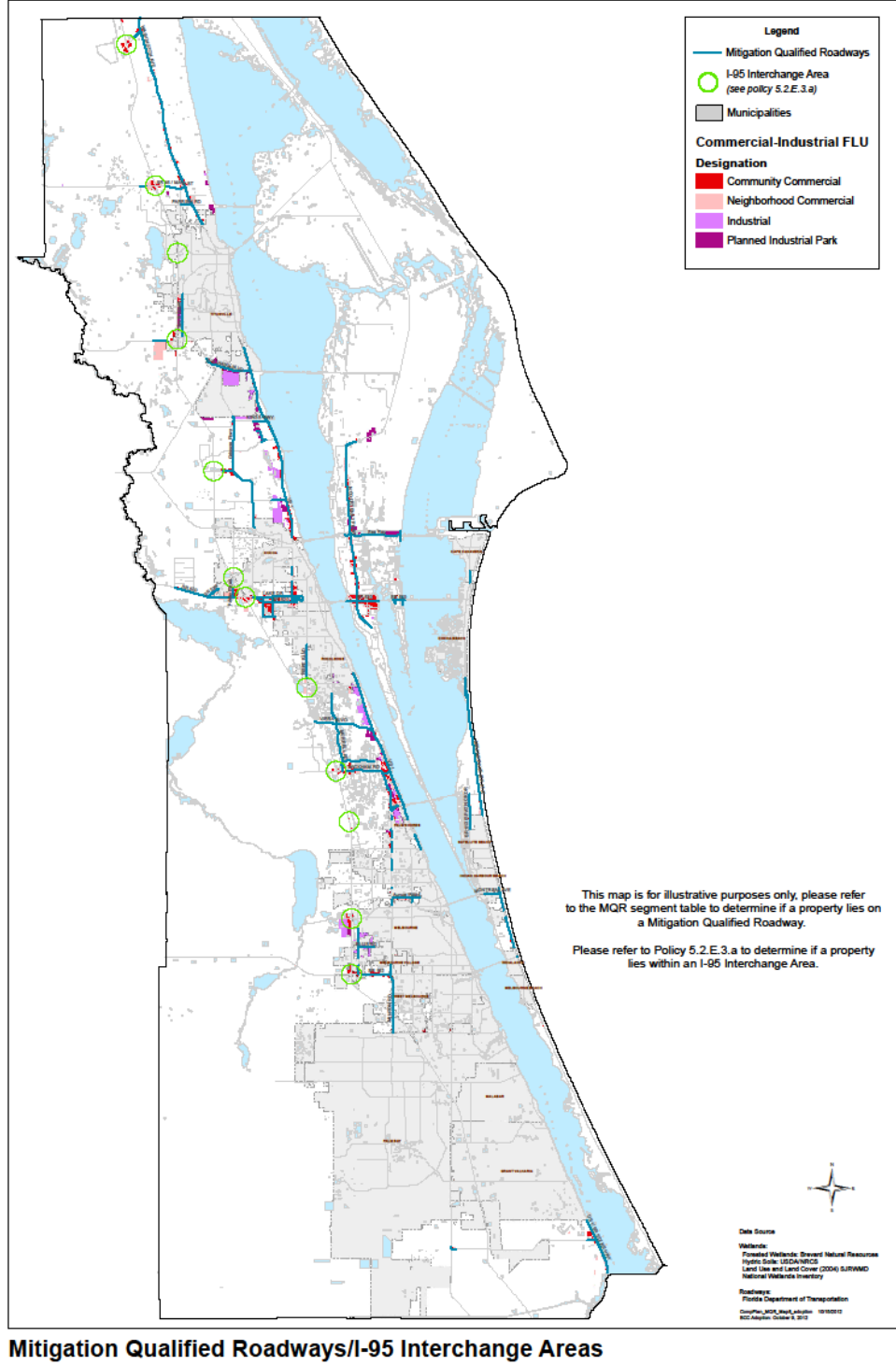
Map 6

Wetlands



Map 7
Marine Facilities

Brevard County - Comprehensive Plan



Map 8
Mitigation Qualified Roadways

MQR SEGMENT NAME (Segments apply ONLY in unincorporated areas of Brevard County)	FROM	TO
Stuck Way Rd (CR 5A)	I-95 interchange area*	U.S. Highway 1
U.S. Highway 1	County Line Rd	Kingman Rd (Titusville City Northern Boundary)
SR 46 / Main St	I-95 interchange area*	Approx. 300' west of Turpentine Rd
SR 46 / Main St	I-95 interchange area*	U.S. Highway 1
Parrish Rd	Singleton Ave	U.S. Highway 1
Cheney Hwy (SR 50)	I-95 interchange area*	Approx. 3,800' west of I-95 interchange area*
South Street	Cheney Hwy (SR 50)	Fox Lake Rd
Columbia Blvd (SR 405)	Woodland Hills Dr	U.S. Highway 1
U.S. Highway 1	Titusville City Boundary	Cocoa City Boundary
Grissom Pkwy	Titusville City Boundary	Cocoa City Boundary
Port St. John Pkwy	I-95 interchange area*	Grissom Pkwy
Kings Hwy	U.S. Highway 1	Approx. 325' west of Koesaw
Curtis Blvd	Fay Blvd	Approx. 210' east of Song Dr
Fay Blvd	Carole Ave	Adobe Ave
Canaveral Groves Blvd	U.S. Highway 1	Approx. 330' west of Morris Ave
SR 520	I-95 interchange area*	Penny Ln
SR 524	SR 520	Cocoa City Boundary
Friday Rd	SR 520	Cocoa City Boundary
Lake Dr	SR 520	Cocoa City Boundary
School St	Clearlake Rd	Pineda St
King St (SR 520)	I-95 interchange area*	Cocoa City Boundary
Peachtree St	Clearlake Rd	Pineda St
Pineda St	Peachtree St	School St
Burnett Rd	Lake Dr	Pluckebaum Rd
Range Rd	Lake Dr	Pluckebaum Rd
Pluckebaum Rd	Burnett Rd	Approx. 700' east of Range Rd
Clearlake Rd	SR 520	Tate St
Piske Blvd	I-95 interchange area*	Byster Blvd
U.S. Highway 1	Rockledge City Boundary	Post Rd (Melbourne City Boundary)
Murrell Rd	Wickham Rd	Rockledge City Boundary
Viera Blvd	Stadium Pkwy	U.S. Highway 1
Spyglass Hill Rd	Murrell Rd	Pinehurst Ave
Wickham Rd	I-95 interchange area*	New Haven Ave (SR 192)
Suntree Blvd	Wickham Rd	U.S. Highway 1
Pineda Cswy	Wickham Rd	RR Crossing
Aurora Rd	Citrus St	Melbourne City Boundary (Approx. 235' east of Alpha Dr)
Croton Rd	Carlton Dr	Melbourne City Boundary (Approx. 100' north of Leewood Blvd)
John Rhodes Blvd	Melbourne City Boundary (N end of Lamplighter Village)	New Haven Ave (SR 192)
Ellis Rd	John Rhodes Blvd	Distribution Dr
New Haven Ave (SR 192)	I-95 interchange area*	Minton Road
Babcock St	Micco Rd	Approx. 680' north of Micco Rd
Micco Rd	Babcock Road	Approx. 1,310' east of Babcock St
US 1/SR 5/Dixie Hwy	Serne St (Grant - Valkaria City Boundary)	Sebastian Inlet Bridge (South Brevard County Line)
Micco Rd	US 1/SR 5/Dixie Hwy	Approx. 340' west of Pine Ridge Trail
N Courtenay Pkwy	Pine Island Rd	SR 520
Courtenay Pkwy	SR 520	Approx. 470' south of Island Beach Blvd.
Sea Ray Dr	N Courtenay Parkway	Banana River Dr
Marine Harbor Dr	N Courtenay Parkway	Tropical Tr
Tropical Tr	Marine Harbor Dr	Barge Canal
N Banana River Dr	Barge Canal	Stafford Ave
Merritt Island Cswy (SR 520)	Indian River Lagoon (east shore)	New Found Harbor (west shore)
Merritt Island Cswy (SR 520)	Newfound Harbor (east shore)	Banana River (west shore)
Milford Point Dr	Merritt Island Cswy	Approx. 625' north of Merritt Island Cswy
Banana River Dr	Merritt Island Cswy	Approx. 1,200' south of Merritt Island Cswy
Newfound Harbor Dr	Merritt Island Cswy	Approx. 175' south of Kessler Dr
Atlantic Ave	Grant	Barlow
Orlando Ave (SR A1A)	11th St (Cocoa Beach City Boundary)	Atlantic Ave (SR A1A)
Atlantic Ave/SR A1A	Indian Village Trail (Cocoa Beach City Boundary)	Grosse Pointe Ave (Indianalantic City Boundary)
SR 513/S Patrick Dr	Pineda Cswy	Satellite Beach City Boundary (Approx. 185' north of Siena Ct)
Eau Gallie Blvd	Harbor City Parkway	SR A1A

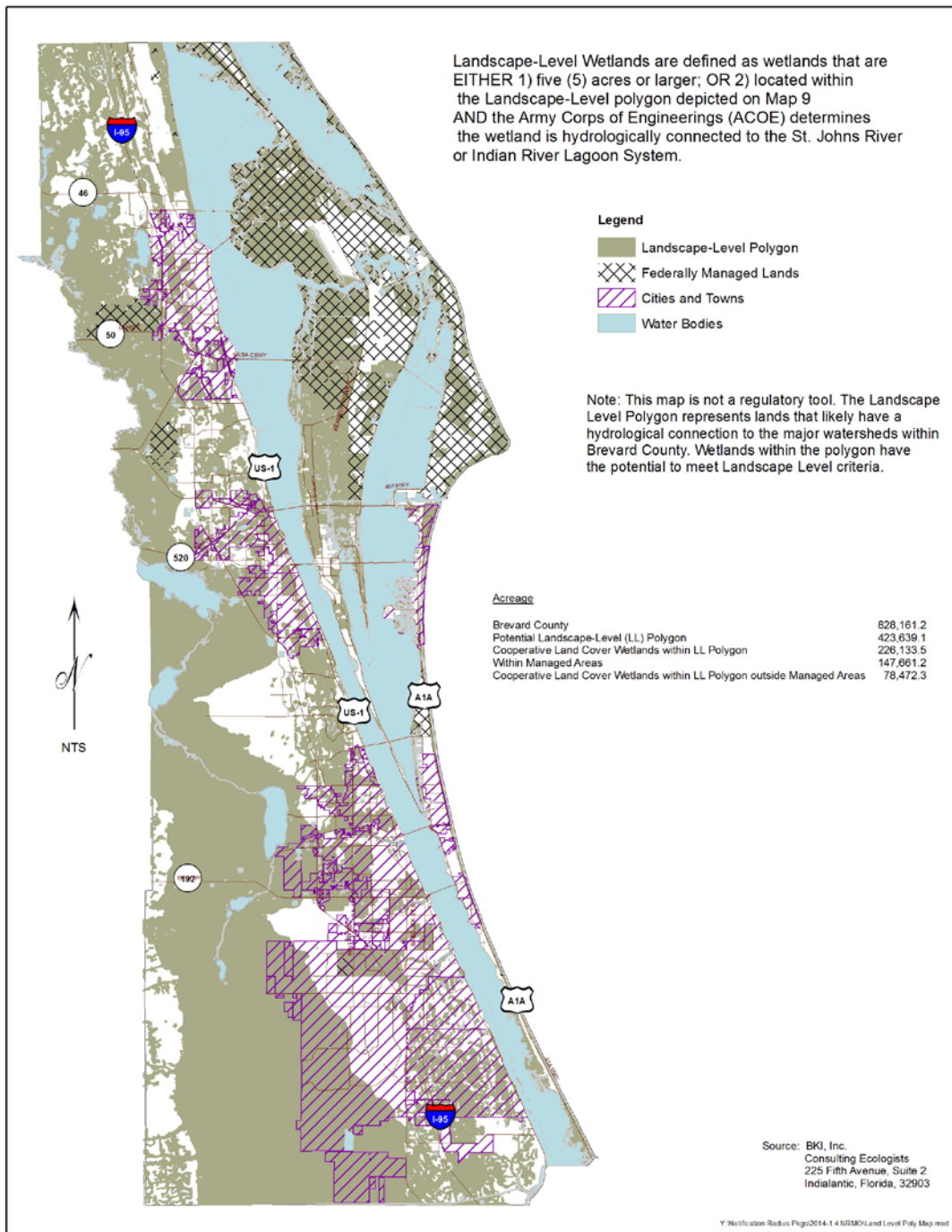
* - Please refer to Policy 5.2.E.3.a

Reverse Side of Map 8

December 2016



Brevard County - Comprehensive Plan



Conservation Element Landscape-Level Polygon Map

Map 9 Landscape Level Polygon

December 2016