Goal 13.0. Conserve, and protect the beneficial use of the natural resources of Broward County and the County’s use of resources so as to provide and maintain a level of environmental quality that protects and promotes the public health and safety, and sustains environmental quality and energy conservation.

Objective 13.1. Broward County shall work locally and regionally to improve energy conservation, and reduce greenhouse gas (GHG) emissions from government operations and the community, and work to minimize air quality and ecosystem impacts in order to improve overall air quality and enhance economic and community resiliency.

Policy 13.1.1. Broward County shall continue to implement projects that support Resolution 2014-054, which established a 20% renewable energy goal for Broward facilities and operations and an energy efficiency goal of 20% by 2020 (2.5% annually) consistent with goals of the Department of Energy’s Better Buildings Program, as well as other policy initiatives (not limited to buildings). Broward County is committed to reaching these targets with an emphasis on projects that promote the triple bottom line of sustainability: community, economy, and environment.

Policy 13.1.2. Broward County shall mitigate its contribution to global climate change by reducing county-wide greenhouse gas emissions to 17% below 2005 levels by 2020 and 82% below 2010 levels by 2050. The County will continue to implement measures, regularly monitor and track progress of programs and initiatives that contribute to the ultimate reaching of these goals.

Policy 13.1.3. Broward County will continue to work in the identification of potential funding opportunities to support climate mitigation and adaptation efforts.

Policy 13.1.4. Broward County will conduct and/or update efficiency audits of all county buildings and create a prioritized action plan for reducing energy use and integrating renewable energy sources.

Policy 13.1.5. All new county buildings will be built to LEED® standards according to resolution 2008-856 approved by the Board of County Commissioners in October 2008.

Policy 13.1.6. Broward County will work to offer finance strategies supporting energy conservation, energy efficiency and the expansion of renewable energies in the residential and commercial sectors.

Policy 13.1.7. Broward County will continue to pursue efforts to increase the use of alternative fuels, clean technologies and fuel efficient vehicles in the county fleet and the community, for example through its participation as a member of the
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Southeast Florida Clean Cities Coalition, the Southeast Clean Diesel Collaborative and other partnerships.

**Policy 13.1.8.** Broward County shall pursue, as technologically appropriate and financially feasible, increasing the proportion of electricity generated by alternative and renewable energy sources within the County, such as solar, wind, geothermal and ocean energy technologies.

**Policy 13.1.9.** Broward County shall continue to work regionally to develop and advance policies, and programs, which conserve natural resources, mitigate greenhouse gas pollution, and advance general sustainability and climate resiliency in our community.

**Policy 13.1.10.** Broward County shall continue to regionally maintain and improve energy conservation and greenhouse gas emissions program efforts and goals consistent with the Broward County Climate Change Action Plan, Climate Change Element and broader Comprehensive Plan Elements’ Goals, Objectives and Policies.

**Objective 13.2.** To reduce greenhouse gas emissions and protect and improve the air quality throughout Broward County to meet the National Ambient Air Quality Standards (NAAQS) contained in the Clean Air Act.

**Policy 13.2.1.** Broward County shall continue to maintain and operate an improved system of synchronized traffic signals along arterial roads and major collector roads in order to minimize localized Carbon Monoxide (CO) emissions produced by motor vehicles.

**Policy 13.2.2.** Broward County shall promote the reduction of volatile organic compounds by continuing to require Stage I and Stage II gasoline vapor recovery equipment at gasoline stations.

**Policy 13.2.3.** Broward County shall continue to develop transit operations and service plans to decrease the number of automobiles on the highways by increasing ridership on the Broward County Transit System from 36 million trips in 2005 to 40 million trips by 2011.

**Policy 13.2.4.** Broward County shall continue to participate actively in the planning for feeder/shuttle bus services within Broward County.

**Policy 13.2.5.** Broward County will promote the use of electric powered vehicles by continued participation in electric vehicle (EV) programs and will provide assistance to the U.S. Department of Energy Southeast Florida Clean Cities
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Coalition to remove technical, commercial, market and regulatory barriers to advance EV infrastructure and vehicle deployment regionally.

Policy 13.2.6. Broward County should plan for and facilitate the development of infrastructure that provides public access to alternative fuels and electric vehicle charging stations. Actions should include:

a) Planning for deployment and optimal distribution of a regional system;

b) Negotiating inter-local agreements with County, State, municipal and private entities to share existing and proposed infrastructure; and

c) Developing expedited permitting processes for private installation of alternative fuel and electric vehicle charging infrastructure.

Policy 13.2.7. Broward County shall continue to monitor the ambient air quality in Broward County in accordance with State and federal requirements contained in 40 CFR 58.

Policy 13.2.8. Broward County shall continue to implement and verify compliance with federal, state and local air quality regulations.

Policy 13.2.9. Broward County will continue to increase awareness of air quality issues through the development of educational programs and training workshops for the regulated community, residents, schools, local businesses, and municipalities.

Policy 13.2.10. Broward County shall designate non-smoking areas in all County facilities in order to provide a relatively clean and smoke-free indoor environment.

Policy 13.2.11. Broward County shall encourage air quality management issues to be addressed on a regional airshed basis as means of providing effective air quality solutions to specific regional problems through active participation in regional transportation/air quality planning efforts.

Policy 13.2.12. Broward County shall periodically update the Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx) emission inventory as required by the State of Florida, State Implementation Plan (SIP) 10-Year Ozone Attainment/Maintenance Plan for Southeast Florida.

Policy 13.2.13. Broward County will promote activities that will result in strengthening the coordination and understanding of the linkage between land use and transportation planning for air quality by participating in planning processes by local and regional planning agencies.

Policy 13.2.14. Broward County will continue to investigate the effects of long-
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Objective 13.3. To protect the groundwater and surface water resources throughout Broward County through effective water management strategies ensuring sustainable water supplies for urban and natural systems water needs.

Policy 13.3.1. Broward County shall continue to lead collaborative intergovernmental practices to advance strategies, programs, and other sustainable initiatives throughout the County and region, that protect the quantity and quality of groundwater and surface water resources.

Policy 13.3.2. Broward County shall continue to implement the County-wide Water Resources Plan to coordinate the water management activities of local drainage districts, utilities and municipalities to optimize the beneficial use of regional water resources and for the improved efficiency of water conservation and protection efforts.

Policy 13.3.3. Broward County shall continue source-water (wellfield) monitoring and protection programs and proactively address potential impacts on the coastal aquifer from increased chlorides due to flooding of coastal and tidally influenced bodies of water that may occur with more intense storms, rising sea levels, increased drought and other impacts of climate change.

Objective 13.4. To protect and improve the water quality throughout Broward County, to maintain a sustainable environment, to maintain or improve the water quality of current and projected water sources, including surface waters, ground waters, and waters that flow into estuarine water or oceanic waters, as measured by the standards of Article V, Chapter 27, Broward County Code of Ordinances, with consideration of impacts of climate change and sea level rise on both the quality and quantity of surface and groundwater.

Policy 13.4.1. Broward County shall continue to protect water quality by maintaining and enforcing a licensing and compliance program for hazardous materials facilities, solid waste facilities, hazardous material and sewage haulers, solid waste transfer stations, filling of surface water bodies, storage tanks and utility electrical equipment; and maintaining an inspection program to abate potential threats to groundwater.

Policy 13.4.2. Broward County shall continue to maintain, implement and enforce the County Wellfield Protection Ordinance (Wellfield Protection, Article XIII, Chapter 27, Broward County Code of Ordinances) and will conduct wellfield inspections to locate possible contamination sources and insure abatement of
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identified sources.

**Policy 13.4.3.** Broward County shall coordinate with Broward County entities, FDEP and EPA in the implementation of the 2008 Leah Schad Memorial Ocean Outfall Program (the Act) that prohibits the construction of new domestic wastewater ocean outfalls, establishes a timeline for the elimination of existing domestic wastewater ocean outfalls by 2025, and requires that a majority of the wastewater previously discharged be beneficially reused.

**Policy 13.4.4.** Broward County shall continue to monitor the quality of waters flowing into the County’s coastal ecosystems and implement strategies to maintain protection or improvement of the system considering potential contamination resulting from inundation, structural failure, or abandonment of residential, industrial, and municipal assets resulting from sea level rise, storm events, or other climate related impacts.

**Policy 13.4.5.** Broward County shall continue to maintain land development regulations allowing the construction, use, maintenance and repair of septic tanks in those areas where a centralized wastewater system is not available provided such meets all legal requirements. Where a centralized wastewater system is available, the land development regulations shall continue to require the property to connect to the wastewater line unless exempted. Exemptions from the connection requirement may be granted where the connection charge is not just and reasonable and for residential uses within areas designated Rural Ranches and Rural Estates, provided such exemption does not endanger the public health, safety, and welfare.

**Policy 13.4.6.** Broward County will maintain a Comprehensive Pollution Prevention Program which emphasizes waste minimization and reduction and focuses on public education programs, and development and implementation of Best Management Practices (BMPs) for licensed facilities that have a high potential for contamination or a history of compliance problems.

**Policy 13.4.7.** Broward County shall maintain an emergency response program with the capacity to rapidly respond to discharges of hazardous materials or solid waste and to investigate environmental complaints Broward County shall also maintain a response network for hurricane emergencies or other declared emergency situations under Broward County Emergency Support Function 10 HAZMAT.

**Policy 13.4.8.** The Board of County Commissioners, through its land use and zoning authority, shall continue to ensure that recreational uses and activities in the water conservation areas as defined in the Future Unincorporated Area Land Use
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Element are compatible with and protect the natural character of the areas.

**Policy 13.4.9.** Broward County shall continue to encourage the South Florida Water Management District’s and other governmental entity’s efforts to acquire private property and mineral rights in the water conservation areas as defined in the Future Unincorporated Area Land Use Element.

**Policy 13.4.10.** No new solid-fill transportation facilities or similar structures, which contradict the efforts of the Federal Water Resources Development Act of 2000 and the Florida Everglades Forever Act, shall be permitted within Broward County’s water conservation areas, as defined in the Future Unincorporated Area Land Use Element, without provisions for maintaining the freshwater sheet flow.

**Objective 13.5.** Broward County shall maintain the average daily per capita water demand as reflected in the South Florida Water Management District’s consumptive use permits. The consumptive use permits provide for the following per capita water demand: 132 gallons per capita per day for District 1 and 140 gallons per day for District 2A.

**Policy 13.5.1.** Broward County shall support and promote collaborative regional water supply strategies, water resource development, conservation and reuse projects that provide economies of scale and regional benefits, with special emphasis on those areas that currently contribute to the volume of wastewater being discharged through open ocean outfalls, and with the goal of achieving 60% reuse of water currently discharged via outfalls by the year 2025, as required by State legislation.

**Policy 13.5.2.** Broward County shall encourage increased wastewater reuse from North Regional Waste Water Treatment Plant and support regional projects where feasible.

**Policy 13.5.3.** Broward County shall pursue the establishment of mandatory reuse zones in order to require the use of reclaimed water for irrigation, when source water is available, with the goal of reducing demands on the Biscayne Aquifer.

**Policy 13.5.4.** Broward County shall work to protect existing wellfields and water supplies, and plan for infrastructure replacement and wellfield relocation as needed in accordance with state rules, water policy, and in consideration of potential increased coastal flooding, sea level rise, saltwater intrusion, and other potential future climate change impacts.

**Policy 13.5.5.** Broward County shall continue to implement the Water Conservation Plans within the WWS service area as required in their consumptive
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use permits from the South Florida Water Management District which includes five (5) required conservation elements: a water conservation public education program, an outdoor water use reduction program, the selection of a rate structure designed to promote the efficient use of water, a water loss reduction program, if water losses > 10%, and an indoor water conservation program.

Policy 13.5.6. Broward County shall continue to develop and implement programming for County-wide water conservation and initiatives, in partnership with local municipalities and water and wastewater entities, including, the Water Conservation Incentives Program, Water Matters education and outreach programs, the NatureScape Broward, and NatureScape Irrigation Services (NIS) to promote water and energy conservation while creating a climate resilient landscape.

Policy 13.5.7. Broward County shall maintain and seek regional compliance with year-round water conservation measures consistent with Chapter 36, "Water Resources and Management," Article II, "Water Emergencies," Section 36-55, “Year-round landscape irrigation measures;” variances of the Broward County Code of Ordinances, which imposes year round, County-wide landscape irrigation restrictions independent of declaration of an emergency water shortage by the South Florida Water Management District (SFWMD) and shall implement all water use restrictions applicable to Broward County in accordance with Chapter 40E-21, Florida Administrative Code (FAC).

Policy 13.5.8. Broward County shall continue to enforce Chapter 39, "Zoning," Article VIII, "Functional landscaping and Xeriscaping for Protection of Water Quality and Quantity," of the Broward County Code of Ordinances, which reflects the NatureScape Broward program principles that promote the use of native and drought tolerant plants, landscaping best management practices and the preservation of native habitats in support of sustainable urban landscapes and the conservation of resources.

Policy 13.5.9 The Broward County Environmental Licensing and Building Permitting Division shall enforce Florida Building Code Chapter 6, Section 604.4, which contains standards for ultra low volume plumbing fixtures to be used in all new construction and Chapter 9, Section 908.5, which contains water supply efficiencies for new or replaced cooling towers.

Policy 13.5.10. Broward County will continue to require a minimum 8 cycles of concentration for cooling towers and the reuse of concentrate from air handlers with a 4-ton BTU capacity or greater as cooling tower make-up water as required by the Florida Building Code as a condition for the receipt of Certificates of Occupancy.
**Policy 13.5.11.** Broward County shall pursue the use of reclaimed water as an integral part of regional water development strategies, inclusive of projects outlined in the Broward County-wide Reuse Master Plan with applications that include landscape irrigation, aquifer recharge, and environmental enhancement where technically, environmentally, and economically feasible.

**Policy 13.5.12.** Broward County, in cooperation with the United States Geological Survey (USGS) and the SFWMD, shall continue source-water (wellfield) monitoring and protection programs to mitigate water supply loss due to saltwater intrusion. Specifically, Broward County will work regionally to assess the current and future effects of sea level rise on chloride concentrations in the surficial aquifer and to identify adaptation strategies.

**Policy 13.5.13.** Broward County shall work with the SFWMD, municipalities, independent drainage districts, and neighboring counties to plan and develop additional surface water storage including the C-51 Reservoir in Palm Beach County and the water preserve areas in western Broward County.

**Policy 13.5.14.** In order to protect and conserve the Biscayne Aquifer, support Everglades restoration, and protect against sea level rise, and future climate change impacts, Broward County shall pursue projects that enhance aquifer recharge and investigate utilization of alternative water resources to supplement and broaden the County’s future water supply sources. These potential sources include the Floridian Aquifer, Aquifer Storage and Recovery (ASR), desalination, capture and storage of excess storm water, appropriately treated reclaimed water, and other technologies addressed in the 2013 Lower East Coast Water Supply Plan Update of the SFWMD.

**Policy 13.5.15.** Broward County shall ensure conservation initiatives consider sea level projections of 9 to 24 inches additional rise by 2060, as adopted by the southeast Florida Regional Climate Change Compact.

**Policy 13.5.16.** Broward County will support on-going and enhanced development of regional hydrologic models, the integration of down-scaled climate data and continuous data collection to help predict and track the impacts of sea level rise on groundwater levels, saltwater intrusion, and drainage infrastructure to support local planning and projects.

**Policy 13.5.17.** Broward County will collaborate with local governments, water managers, drainage/water control districts and state and regional agencies to apply the County-wide integrated Water Resources Plan principles focused on water resources assessments, coordinated water management strategies, policy coordination, and outreach and education.
Policy 13.5.18. Broward County shall continue to support a geotechnical analysis of the upper Floridan Aquifer with the USGS, local municipalities and the SFWMD to identify layers of permeability and enhanced hydraulic conductivity to help guide regional Aquifer Storage and Recovery projects and development of the Floridan Aquifer as an alternative water supply.

Policy 13.5.19. Broward County shall work with water managers to create, develop and implement a suite of planning tools for development of alternative water resources, including desalination, Floridan wells, Aquifer Storage and Recovery and reuse to provide for sustainable water supplies and climate resiliency.

Objective 13.6. Broward County shall conserve and protect its mineral resources by maintaining and enforcing land development and environmental regulations on mining and excavation activities.

Policy 13.6.1. The Planning and Redevelopment Division shall review the future land use designation of existing commercial mining operations. Those operations that are inappropriately designated shall be redesignated to an appropriate future land use category on the Future Unincorporated Area Land Use Element Map Series.

Policy 13.6.2. Broward County shall continue to regulate lake excavation through existing ordinances that address safety, water quality, reclamation of inactive mining excavations, and the lake's compatibility with the surrounding land uses.

Objective 13.7. Broward County shall conserve and protect its soils resources by maintaining land development regulations governing soil erosion and shall appropriately use its soils by enforcing existing land development regulations limiting the use of septic tanks to those soil associations suitable for such usage.

Policy 13.7.1. To minimize soil erosion on new construction sites, land development regulations shall be maintained which require measures consistent with Chapter 27, Broward County Natural Resource Protection Code and the Best Management Practices of the United States Natural Resources Conservation Service.

Policy 13.7.2. Plans for the construction or expansion of arterial and collector roadways with steep embankments shall include appropriate landscaping and design to minimize soil erosion.

Policy 13.7.3. Broward County shall evaluate opportunities to protect coastal investments and infrastructure, as necessary and feasible, from the impacts of
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climate change. Specifically, the County will maintain shoreline protection and erosion control by:

a) Continuing the appropriate use of beach nourishment and sand bypassing;
b) Facilitating the installation and maintenance of native beach dune vegetation along appropriate areas of beach;
c) Revisiting redevelopment policies with the objective of providing additional coastal buffer area between developed areas and the shoreline; and
d) Considering hard structures, such as seawalls, only when alternative options are unavailable.

Objective 13.8. Broward County shall conserve and protect native vegetative communities as depicted on the computerized geographic information system (GIS) maps of County Commission designated properties of ecological concern.

Policy 13.8.1. Broward County shall continue to maintain a computerized map of County Commission designated properties of ecological concern to include those areas designated as Local Areas of Particular Concern, Natural Resource Areas, Environmentally Sensitive Lands, Urban Wilderness Areas and those lands on the Urban Wilderness Inventory.


Policy 13.8.3. Broward County shall continue to implement the Broward County Land Development Code, Greenspace, as it relates to review of site plans in the Unincorporated Area.

Policy 13.8.4. Broward County shall continue to make recommendations for designation of land as a Local Area of Particular Concern (LAPC) in the Native Vegetation Category. Lands should be recommended for designation if the criteria of the Native Vegetation Category has been met. If any designated LAPCs in this Category no longer meet the criteria for designation as an LAPC, the designation should be removed.

Policy 13.8.5. The County shall pursue opportunities for the conservation and/or preservation of native vegetative communities, including fee simple acquisition, dedication in lieu of park impact fees, provision of greenspace at the time of site plan review, and reduction in property taxes.
Policy 13.8.6. Broward County shall make information from the map of County Commission designated properties of ecological concern of native vegetative communities available to municipalities and other interested parties in order to coordinate natural resource planning and management activities.

Policy 13.8.7. Broward County shall continue to implement regulations pertaining to the clearance of land designated as a Natural Resource Area in the Unincorporated Area.

Policy 13.8.8. Broward County shall continue to implement the Broward County Land Development Code on Natural Resource Areas, as it relates to the review of site plans in the Unincorporated Area.

Policy 13.8.9. The map of County Commission designated properties of ecological concern should be used for selecting properties for designation as Urban Wilderness Areas (UWAs). The UWAs recommended for acquisition should include cost estimates and be financially feasible.

Policy 13.8.10. UWAs, ESLs and other appropriate publicly owned lands should be designated as natural reservations on the Broward County Land Use Plan Map under the Conservation land use category.

Policy 13.8.11. Broward County shall continue to maintain and implement regulations that protect and preserve trees, including those in areas of native vegetative communities, and promote the use of native vegetation.

Policy 13.8.12. Broward County shall continue to implement land clearance regulations within the Unincorporated Area and jurisdictional municipalities consistent with the NatureScape Broward Program requiring the removal of invasive exotics plants and the preservation and reestablishment of native vegetative communities to the greatest extent practicable, considering climate adaption needs and strategies for assisting in natural migration, thereby enhancing wildlife habitat.

Policy 13.8.13. Broward County, in conjunction with its municipalities, shall consider the climate adaption needs of native plants and animal species, and consider strategies for assisting in their natural migration.

Policy 13.8.14. Broward County, in conjunction with its municipalities, shall promote species diversity, the planting of native landscapes, and sustainable urban forest landscape practices in order to protect the health and resiliency of our natural
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resources from the impacts of climate change.

Policy 13.8.15. Broward County shall assess the vulnerability of specific species, habitats, landscapes, and ecosystem functions that may be sensitive to climate change and develop coping strategies and contingency plans for their adaptation, such as identifying habitats that may be viable during climate disturbances and could potentially serve to give refuge to and sustain at-risk species.

Policy 13.8.16. If a site is on the map of County Commission designated properties of ecological concern, the proposed site plan should incorporate the natural vegetative community to the greatest extent possible.

Policy 13.8.17. Broward County shall continue to implement regulations which shall preserve and enhance trees and Natural Forest Communities. Broward County shall also ensure that all municipalities have consistent regulations which protect tree resources.

Policy 13.8.18. Broward County shall have street trees in unincorporated county rights-of-way inventoried to provide a database of trees and available planting spaces. This information will be utilized to prepare planting plans for Tree Trust projects and to implement a tree maintenance program.

Policy 13.8.19. Broward County shall continue to implement regulations which shall promote proper pruning and penalize those who conduct improper pruning. Broward County shall also require that all municipalities have consistent regulations regarding Tree Abuse.

Policy 13.8.20. The County shall continue to provide a balance between recreational and municipal needs and natural resource preservation with due respect for the environmental sensitivity of the natural system present.

Policy 13.8.21. The County shall appropriate adequate funds to provide for the enhancement, maintenance and conservation of publicly-owned natural lands, wetland mitigation areas and water recharge areas.

Policy 13.8.22. The County shall pursue opportunities for the restoration and/or enhancement of degraded natural areas, including but not limited to, reforestation, restoration of shorelines or dunes, restoration of natural hydrology, or removal of non-native vegetation and prescribed burning.

Policy 13.8.23. Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAA), per Florida State Law, in order to:
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a) Identify areas that are vulnerable to the impacts of rising sea level;
b) Identify and implement adaptation policies to increase community resilience;
c) Enhance the funding potential of infrastructure adaptation projects.

The Broward County Commission, the Broward County Planning Council or a municipality may apply for Adaptation Action Area of Regional Significance designation, if the problem(s) and proposed solution(s) of the proposed area demonstrate regional significance, and conform with one or more of the criteria listed in Section 4.D.13. of the Broward County Land Use Plan.

Areas designated by the County as Adaptation Action Areas of Regional Significance will be added to the Priority Planning Areas for Sea Level Rise Map as part of the Broward County Land Use Plan.

Policy 13.8.24. Broward County shall seek funds to develop and maintain an urban reforestation program, in order to expand green infrastructure, reduce the heat island effect and encourage local carbon sequestration and storage, with the goal of increasing tree canopy coverage toward the American Society of Foresters’ suggested goal of 40% across the County.

Policy 13.8.25. Broward County, in cooperation with local academic, governmental and non-profit agencies, shall perform a tree canopy study to determine canopy composition and extent, and seek funds to update this coverage at five-year intervals in order to measure progress on the County’s goal of expanding green infrastructure.

Policy 13.8.26. Broward County shall encourage planting of native trees known to sequester and store high levels of carbon on available public and private lands, including vacant or underutilized properties, school and government properties, and conservation lands and shall pursue programs and funding strategies designed to create carbon emission offsets through tree plantings and/or carbon mitigation banks.

Policy 13.8.27. Broward County, in cooperation with local academic and governmental agencies, shall perform a green roof pilot study to evaluate the feasibility of green roofs in Broward County and determine the appropriate plant palette, maintenance requirements, and potential water conservation benefits.

Policy 13.8.28. Broward County shall continue to implement the NatureScape Broward program and encourage the use of native and non-invasive, subtropical,
and rare native plants in the urban landscape in order to promote water and energy conservation while creating a climate resilient landscape. Furthermore, these plants should be salt, wind and drought tolerant, where appropriate, and maintained consistent with NatureScape Broward and Florida-Friendly Landscaping™ Best Management Practices.

**Policy 13.8.29.** Broward County, in cooperation with its municipalities and appropriate local agencies, shall evaluate water and stormwater management operation strategies in the context of sea level rise, in order to lessen negative impacts to open spaces, wetland mitigation areas, and natural systems, improve the ability of these systems to adapt to climate change, and optimize the ability of these systems to create additional benefits to the County’s residents and visitors.

**Policy 13.8.30.** Broward County should consider policies which would allow coastal and water dependent ecosystems to migrate or adapt to maintain healthy wildlife and fish populations consistent with new climate regimes.

**Objective 13.9.** Broward County shall maintain or increase the functions and values of wildlife habitats and marine habitats.

**Policy 13.9.1.** Broward County shall update its site plan design regulations and review management plans of public parks, forests, and wildlife areas every 10 years, conduct a climate change risk assessment for each area, and ensure that adaptation strategies consistent with assessment findings are included in those plans to promote viable habitats for nongame wildlife populations.

**Policy 13.9.2.** The Florida Fish and Wildlife Conservation Commission’s Nongame Wildlife Program should be utilized as a source for the guidelines to promote viable habitats for nongame wildlife populations.

**Policy 13.9.3.** The County shall protect and conserve, using the LAPC and UWA Programs, those areas known to be reproduction, nesting and feeding areas for endangered and threatened animals.

**Policy 13.9.4.** The EPGMD and Parks and Recreation Division shall apply for state and/or federal grants to fund programs for the conservation of wildlife and/or marine habitat.

**Policy 13.9.5.** Estuarine Areas known to be habitats for juvenile marine fishes shall be recommended for protective status as LAPC’s or UWA’s. These areas shall include, but will not be limited to, mangroves forests, tidal marshes and sea grass beds.
Policy 13.9.6. The EPGMD shall continue to implement the sea turtle conservation programs using, when feasible, less manipulative conservation techniques.

Policy 13.9.7. The Environmental Planning and Community Resilience Division shall continue to work with coastal cities to promote enforcement of their adopted sea turtle lighting ordinances.

Policy 13.9.8. The County will continue to maintain and implement monitoring techniques to protect and conserve beaches and marine resources.

Policy 13.9.9. Broward County will continue to enhance offshore marine habitat through the Artificial Reef Program.

Policy 13.9.10. Broward County shall continue to ensure the protection of natural communities, listed endangered or threatened animal species, rare animal and plant species and their habitats, landscapes, and ecosystem functions that may be sensitive to climate change and develop coping strategies and contingency plans for their adaptation, such as identifying habitats that may be viable during climate disturbances and could potentially serve to give refuge to and sustain at-risk species.

Objective 13.10. Increase the quality and connectivity of regionally significant wetland resources.

Policy 13.10.1. Optimize siting of mitigation projects to enhance their relationships with other wetlands.

Policy 13.10.2. Integrate wetlands into regional stormwater drainage/water management practices to provide necessary hydrology.

Policy 13.10.3. Participate in land acquisition/greenway programs to improve connectivity of effective size of wetland/upland systems.

Policy 13.10.4. In cooperation with the private sector, site entrepreneurial mitigation banks in the most appropriate locations.

Policy 13.10.5. When feasible, lands where activities could impact areas essential to Everglades restoration, as identified by the SFWMD, shall not be designated in future land use categories that would increase density or intensity.

Objective 13.11. Ensure through effective management, the long-term functions of wetlands.
Policy 13.11.1. Provide for adequate hydrology for protected wetlands by establishing minimum water flows and levels for protected wetlands during license application review.

Policy 13.11.2. When feasible the future land use designation for wetlands that are to be preserved should be changed to Conservation, Park, or Open Space.

Policy 13.11.3. Develop, adopt, and fund long-term management plans for publicly-owned or protected wetlands.

Policy 13.11.4. Broward County through the provisions in Broward County Code of Ordinances, Chapter 27, Article XI, Aquatic and Wetland Resource Protection, shall continue to protect and conserve wetlands and the natural functions of wetlands through implementation of the Environmental Resource License Process, seeks to avoid and minimize impacts to wetland function, and where impacts are unavoidable, requires replacement of lost function through mitigation.

Policy 13.11.5. Broward County shall distribute land uses in a manner that avoids or minimizes, to the greatest degree practicable, the effect and impact on wetlands. Those land uses identified in Table 13-A as being incompatible with the protection and conservation of wetlands and wetland functions shall be directed away from wetlands, or when compatible land uses are allowed to occur, shall be mitigated or enhanced, or both, to compensate for loss of wetland functions.

TABLE 13-A
Compatibility of Land Uses Relative to the Wetland Benefit Index

<table>
<thead>
<tr>
<th>WETLAND BENEFIT INDEX</th>
<th>LAND USE COMPATIBILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetlands with a Wetland Benefit Index (WBI) value greater than or equal to 0.80</td>
<td>There is a rebuttable presumption that all land uses, except for conservation uses, are incompatible.</td>
</tr>
<tr>
<td>Wetlands with a WBI value less than 0.80</td>
<td>All land uses are compatible, provided that the wetland impact compensation requirements of Chapter 27, Article XI, are satisfied.</td>
</tr>
</tbody>
</table>


PLEASE SEE THE TABLE IN CONSERVATION ELEMENT LOCATED AT http://www.broward.org/PlanningAndRedevelopment/ComprehensivePlanning/Documen
Objective 13.12. Create/acquire additional wetlands in Broward County.

Policy 13.12.1. Participate in land acquisition initiatives, greenway programs, park expansions, and other programs for increasing acreage of wetlands.

Policy 13.12.2. Develop and implement programs for protecting and expanding existing wetland areas such as Transfer of Development Rights, deed of conservation easements, restrictive covenants, and tax incentives, while incorporating species and habitat vulnerability to climate change into the land use planning or land acquisition.

Policy 13.12.3. Maintain a Wetland Resource Plan that will ensure flexibility over time as to the approaches to wetland protection, enhancement, and creation.

Policy 13.12.4. Broward County shall continue to support local environmental restoration, mitigation and adaptive management initiatives, including those related to Everglades restoration, and coordinate with other state, regional and national strategic planning efforts to improve the resiliency of natural lands and systems to climate variability and change.

Goal 13-A. Maintain or increase levels of protection for the West Indian Manatee and increase boating safety within Broward County’s waterways.

Objective 13-A.1. Restrict access and activities in designated Manatee Essential Habitat Areas and support existing speed regulations in and around Manatee Travel Corridors.

Policy 13-A.1.1. Broward County shall continue to support State designation of the FPL Port Everglades and Lauderdale Power Plants’ discharge canal and cooling lakes as No Entry Zones for unauthorized vessels.

Policy 13-A.1.2. Broward County shall continue to support State designated Idle Speed Zones, Low Speed Zones and Slow Speed Buffer Zones in Manatee Travel Corridors.

Policy 13-A.1.3. Broward County shall continue to prohibit land-based fishing in the Port Everglades Jurisdictional Area and fishing, diving and swimming in the State-designated No Entry Zone.

Policy 13-A.1.4. Broward County shall support local restrictions for speed regulations on municipal waterways for manatee protection and boating safety.
Objective 13-A.2. Increase levels of vessel operator compliance with appropriate laws pertaining to manatee protection.

Policy 13-A.2.1. Broward County shall continue to provide funding for marine law enforcement personnel, add an additional law enforcement officer and encourage local law enforcement to participate in the tri-county Manatee Awareness Group (MAG).

Policy 13-A.2.2. The Broward County Marine Advisory Committee, along with the Florida Inland Navigation District, shall annually inspect and maintain all manatee speed zone signs.

Objective 13-A.3. Ensure that new marinas/boat facilities and boat ramps will, through proper facility siting and construction techniques, be located on sites that would minimize potential manatee/boat overlap, injury to manatees and disturbance of manatee habitat.

Policy 13-A.3.1. Broward County shall adopt an ordinance, pursuant to Section 8.04 of the Broward County Charter, to prohibit the construction of new or expansion of existing marinas, docking facilities and boat ramps, except those related to law enforcement, within Manatee Essential Habitat Areas.

Policy 13-A.3.2. Broward County shall adopt an ordinance pursuant to Section 8.04 of the Broward County Charter requiring any new or expanded marina, docking facility or boat ramp to demonstrate that it will not have any significant, adverse environmental impacts on manatee habitat or Manatee Travel and Migration Corridors, and will not adversely affect rare, threatened or endangered flora or fauna and existing sea grass beds.

Policy 13-A.3.3. Beginning in 2009, Broward County shall require benthic surveys for seagrass and natural resources when reviewing an application for an Environmental Resource License.

Policy 13-A.3.4. Marinas, docking facilities or boat ramps shall be located so as to require minimal or no dredging and have good tidal flushing. In instances where dredging is required, both initial and maintenance dredging shall be minimized.

Policy 13-A.3.5. Utilize grates over culverts and other construction methods or standards for all docks, mooring pilings or other structures which do not entrap or injure manatees; and reduce or eliminate their impact on manatees and the resources on which manatees depend.
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Policy 13-A.3.7. The boundary of the FPL Port Everglades Power Plant Discharge Canal Manatee Essential Habitat Area shall be expanded to include the Mangrove Lagoon located north of the turning notch, south of the discharge canal and west of the Atlantic Intracoastal Waterway.

Policy 13-A.3.8. The extension of docks, mooring pilings or other such structures located in a federal navigation project channel, as defined in subsection 253.03 (10), F.S., or in a channel marked by any governmental agency, shall be in compliance with appropriate regulations.

Policy 13-A.3.9. In waterways, other than federal navigation project channels and channels marked by any governmental agency, a sufficient width of the waterway should remain free of docks and other structures to ensure safe navigation.

Policy 13-A.3.10. Ensure that new marine facilities which have 10 or more moorings provide educational signage and ones which have 30 or more moorings provide educational programs.


Policy 13-A.4.1. By 2013, all new and existing public and private marinas, boat ramps, and non-residential boat docks, as well as appropriate public parks are required to have posted manatee signs or educational displays or informational kiosks that raise manatee awareness.

Policy 13-A.4.2. Broward County, with assistance from its local governments, shall identify all areas where manatees have been regularly sighted and post Caution Manatee signs which feature a manatee likeness.

Policy 13-A.4.3. Broward County shall request that all diving certification classes include information regarding manatees with emphasis on their endangered species status and the penalty for manatee harassment and/or injury.

Policy 13-A.4.4. Broward County shall encourage marine business organizations, such as the Marine Industries Association of South Florida, Inc., to continue to publish the *Broward Safe Boating Guide*, a comprehensive booklet outlining Manatee Protection Zones within Broward County’s waterways.
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**Policy 13-A.4.5.** Broward County shall request that the Center for Environmental Education and Research, Inc., include in its Educator’s Guide an insert regarding manatee habitat and distribution.

**Policy 13-A.4.6.** Broward County shall request the Pompano Beach Power Squadron, the U.S. Coast Guard Auxiliary and the publisher of the Waterway Guide to South Florida include information in their various programs and publications addressing manatee habits and protective regulations specific to Broward County.

**Policy 13-A.4.7.** Broward County’s Marine Advisory Committee shall work with volunteer organizations to provide manatee and boating safety information at tourist outlets, public buildings, public parks and through the media.

**Policy 13-A.4.8.** Broward County shall encourage any interested parties to prepare and promote radio, television and newspaper announcements alerting boaters of areas frequented by manatees and advising boaters to avoid and/or operate at idle speed through these areas.

**Policy 13-A.4.9.** Broward County will disseminate the results of manatee aerial surveys to marine law enforcement, port pilots, tug operators, and boaters on a monthly basis during the season.

**Policy 13-A.4.10.** The Environmental Protection and Growth Management Department will participate in the tri-county Manatee Awareness Group (MAG).

**Policy 13-A.4.11.** Broward County shall create and maintain a manatee website for the purpose of providing information regarding the projects associated with the MPP by 2009.

**Objective 13-A.5.** Increase knowledge of safe boating operations.

**Policy 13-A.5.1.** Broward County shall continue to support vessel operator education as specified in Section 327.395 F.S.

**Policy 13-A.5.2.** At the time of vessel registration, Broward County shall provide information regarding the legal requirement to report boating accidents and the procedures for filing such reports in compliance with Section 327.30 F.S.

**Objective 13-A.6.** Initiate or support speed restrictions within waterways where hazardous navigational conditions exist.
Policy 13-A.6.1. Broward County shall support existing State and municipal speed designations and encourage continued enforcement of Idle, Slow and 25 MPH Speed Zones on Broward County’s waterways.

Policy 13-A.6.2. Local governments shall designate a year-round Idle Speed Zone within 100 yards of the ocean shoreline, excluding the inlets and the entrance/exit channels therein, and except where more restrictive regulations apply.


Policy 13-A.7.1. Broward County shall encourage the State to develop regulations providing for enforcement actions against the vessel in addition to existing enforcement actions against the operator for non-criminal violations.

Policy 13-A.7.2. Broward County shall encourage law enforcement agencies to establish a multi-agency task force to reduce the number of boaters Operating Under the Influence (OUI) and to ensure that patrolling of regulated areas and zones provides full and efficient coverage.

Policy 13-A.7.3. Broward County’s Marine Advisory Committee shall support increased levels of funding through the Enhanced Marine Law Enforcement Grant (EMLEG) Program for additional marine law enforcement personnel to ensure compliance with boating safety regulations.

Policy 13-A.7.4. Boating safety regulations shall be accompanied by adequate funding for implementation.

Policy 13-A.7.5. Broward County’s Marine Advisory Committee shall continue to implement Broward County’s Enhanced Marine Law Enforcement Grant Program utilizing the Local Option Vessel Registration Fee (Section 327.22, F.S.)

Policy 13-A.7.6. Broward County shall annually collect and analyze statistical information on boating accidents and shall pursue marine-related grants and monitor marine-related policies and legislation.

Policy 13-A.7.7. Broward County shall propose legislation to change the allocation of the salt water fishing license revenues and salt water products license revenues, that are deposited in the Motorboat Revolving Trust Fund, to the Florida Fish and Wildlife Conservation Commission (FWC) from the current up to 30% of such revenues to not less than 30%, and up to 15% of such revenues to not less than 15%, respectively; said revenues to be returned on a pro rata basis to the county from which it was collected.
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Objective 13-A.8. Increase the effectiveness of boating safety signage.

Policy 13-A.8.1. Broward County shall request the placement of State-authorized speed restrictive signage on Federal navigational aids in the Atlantic Intracoastal Waterway to increase visibility and standardize location of signage.

Policy 13-A.8.2. The Broward County Marine Advisory Committee shall develop a plan for illumination of selected speed restrictive signs in the Atlantic Intracoastal Waterway.

Policy 13-A.8.3. Broward County shall request the placement of permanent speed restrictive zones on local navigational charts.

Policy 13-A.8.4. The Broward County Marine Advisory Committee shall annually inspect all non-manatee speed zone signs and maintain same in conjunction with the appropriate local government.

Objective 13-A.9. By 2009, Broward County shall establish a dual-fee program to fund the MPP in order to maintain and increase the protection of the West Indian Manatee in Broward County.

Policy 13-A.9.1. In accordance to Section 6.3.3 of the Manatee Protection Plan Component (MPPC) of the Conservation Element, the dual-fee funding program will consist of a combination of new-slip fees and an annual manatee mitigation slip fee for existing facilities managed by the MPP.

Policy 13-A.9.2. In accordance to Section 6.3.3, of the MPPC, a portion of the funds collected will be used to support an additional EPGMD staff member to implement the MPP licensing fee and perform inspections of existing facilities.

Post Adoption Revisions

1. This Element was amended pursuant to a Stipulated Settlement Agreement with the Florida Department of Community Affairs through Ordinance Number 2000-07 adopted on February 1, 2000.


3. This Element was amended in Cycle 01-2 by Ordinance 2001-53 adopted on November 13, 2001. The amendment added policies 13.6.19 and 13.7.10 to enhance to County’s
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ability to acquire grant monies for the preservation of open spaces and natural areas.

4. This Element was amended in Cycle 2006-2 through Ordinance No. 2006-69 adopted on December 12, 2006.

5. This Element was amended in Cycle 2009-1 through Ordinance No. 2009-6 adopted on September 22, 2009.

6. This Element was amended in Cycle 2014 through Ordinance No. 2015-05 adopted on January 13, 2015.

7. This Element was amended through Ordinance No. 2015-51 on December 8, 2015 (Policy 13.8.23).