



Conservation Element



Adoption

The BrowardNEXT2.0 Comprehensive Plan was adopted on March 28, 2019 (Ordinance No. 2019-11).

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BROWARD COUNTY COMPREHENSIVE PLAN

At a Glance



Conservation Element



The Broward County Conservation Element provides a framework for the conservation, use, and protection of natural resources, including air, water, water recharge areas, wetlands, water wells, estuarine marshes, soils, beaches, shores, flood plains, rivers, bays, lakes, harbors, fisheries and wildlife, marine habitat, and other natural and environmental resources, and the factors that affect energy conservation. The purpose of the Conservation Element is to promote the conservation, wise use, and protection of Broward County's natural resources. The Conservation Element is a required element of the comprehensive plan as per Section 163.3177, Florida Statutes. Issues concerning conservation of natural resources are also addressed throughout the Comprehensive Plan. The Broward Municipal Services District (BMSD) Future Land Use provides implementation tools to preserve lands for conservation and promote appropriate land uses to minimize the impacts of development on the environment. The Water Management, Climate Change, and Coastal Management Elements also contain policies that support the protection of the County's natural resources.



2017 NatureScape Emerald Award Winner

Awards are given to participants who have created and maintained model Florida-friendly landscapes or completed exceptional projects in support of Policy C6.8.

Policy History

1989 Conservation Element is part of the first Broward County Comprehensive Plan. 2007 Broward County develops the Manatee Protection Plan (MPP) to reduce the number of boat-related manatee mortalities, achieve an optimal sustainable manatee population, protect manatee habitat, and increase public awareness of the need to protect manatees and their environment. 2008 The Broward County Board of County Commissioners (Board) passes a resolution creating the County Green Building Policy, which states that all new County-owned and operated buildings must achieve a minimum Leadership in Energy and Environmental Design (LEED) rating of "LEED Certified." 2009 Broward County initiates the Land Stewardship Program, a five-year capital improvement program to fund the ecological restoration of natural lands within Broward County. 2013 Broward County Go SOLAR Florida Agreement is executed with the Department of Energy to catalyze the development of rooftop solar panel installations. The partners included: Alachua, Miami-Dade, Monroe, Orange and St. Lucie counties and the City of Venice, Florida Solar Energy Center, Florida Atlantic University, and nine Broward cities. Fourteen additional Broward Cities worked with the County on the earlier Go SOLAR Broward grant. 2014 Broward County becomes the first Certified 4-STAR County in the nation for outstanding sustainability accomplishments in environment, climate and energy, infrastructure, economy and jobs, education, arts, community, equity and empowerment, health and safety, and natural systems. 2016 The Board approves a Countywide Property Assessed Clean Energy (PACE) Program to allow property owners to receive up-front financing for qualifying improvements such as rooftop solar panels, solar water heaters, energy efficient air conditioning units, cool roofs, impact windows, insulation, and more.

Focus Areas

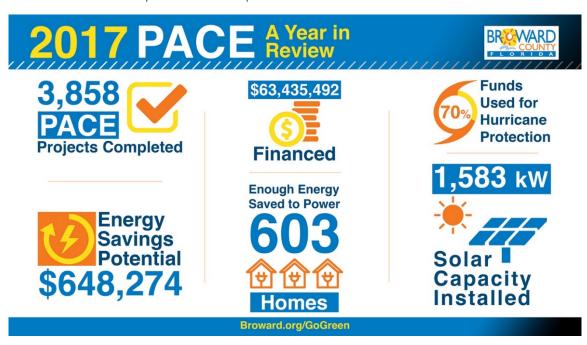
- → Improve energy conservation, reduce greenhouse gas (GHG) emissions
- → Protect and improve air quality
- → Increase the quality of wetland resources
- Protect manatees and promote boating safety

Legal Authority



Section163.3177 (6)(d), Florida Statues: A conservation element for the conservation, use, and protection of natural resources in the area, including air, water, water recharge areas, wetlands, water wells, estuarine marshes, soils, beaches, shores, flood plains, rivers, bays, lakes, harbors, forests, fisheries and wildlife, marine habitat, minerals, and other natural and environmental resources, including factors that affect energy conservation.

The Conservation Element includes Goals, Objectives, and Policies that support the Focus Areas. Once the policies are adopted by the Board, government agencies, partners, and the community work together to advance and implement those policies.



Property Assessed Clean Energy (PACE) project figures for 2017. Source: Broward.org/GoGreen.

Goals, Objectives & Policies

GOAL CONSERVATION

Conserve and protect the County's natural resources to provide and maintain a level of environmental quality that promotes public health and safety and sustains environmental quality and energy conservation.

OBJECTIVE C1 – Improve Energy Conservation and Reduce Greenhouse Gas Emissions

Broward County shall work locally and regionally to improve energy conservation and reduce GHG emissions from government operations and the community and minimize air quality and ecosystem impacts to improve overall air quality and enhance economic and community resiliency.

POLICY C1.1 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 C1.2 Broward County will continue to work in the identification of potential funding opportunities to support climate mitigation and adaptation efforts for County facilities.

POLICY C1.3 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 C1.4 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 C1.5 Broward County shall continue to regionally maintain and improve energy conservation and GHG emissions program efforts and goals consistent with the Broward County Climate Change Action Plan and Element, and broader Comprehensive Plan Elements' Goals, Objectives and Policies.

POLICY C1.6 Broward County shall plan for and facilitate the development of infrastructure that provides public access to alternative fuels and electric vehicle charging stations. Actions should include:

- 1. Planning for deployment and optimal distribution of a regional system;
- 2. Negotiating interlocal agreements with County, State, municipal, and private entities to share existing and proposed infrastructure;

What are alternative fuels as defined by the Energy Policy Act of 1992?

Pure methanol, ethanol, and other alcohols; blends of 85% or more of alcohol with gasoline; natural gas and liquid fuels domestically produced from natural gas; propane; coal-derived liquid fuels; hydrogen; electricity; pure biodiesel (B100); fuels, other than alcohol, derived from biological materials; and P-Series fuels.

- 3. Developing expedited permitting processes for private installation of alternative fuel; and
- 4. Coordinating with municipalities and other regional and State agencies to promote the expansion of electric vehicle charging infrastructure.

OBJECTIVE C2 – Protect and Improve Air Quality

Reduce GHG emissions and protect and improve the air quality throughout Broward County in order to meet the National Ambient Air Quality Standards (NAAQS) contained in the Clean Air Act.



2017 Air Quality Report

Air Quality Level 0 to 50	Good	283 Days
Air Quality Level 51 to 100	Moderate	77 Days
Air Quality Level 101 to 150	Unhealthy for Sensitive Groups	5 Days
Air Quality Level 151 to 200	Unhealthy	0 Days
Air Quality Level 201 to 300	Very Unhealthy	0 Days
Air Quality Level 301 to 500	Hazardous	0 Days

POLICY C2.1 Broward County shall continue to maintain and operate an improved system of synchronized traffic signals along arterial roads and major collector roads to minimize localized exhaust gas emissions produced by motor vehicles.

POLICY C2.2 Broward County shall promote the reduction of volatile organic compounds by continuing to require Stage I Vapor Recovery at gasoline dispensing facilities.

POLICY C2.3 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 as per the Transit Development Plan.

POLICY C2.4. Broward County will continue to assist the Florida Department of Environmental Protection in the investigation of the effects of long-term and short-term Volatile Organic Compounds and/or Nitrogen Oxides controls on ozone formation, specific to Southeast Florida.

POLICY C2.5 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 C2.6 Broward County shall continue to review and act upon air quality license and permit applications for air pollution sources. Compliance with air quality licenses and permits will be verified through routine inspections, witnessing stack tests, and reviewing test and monitoring reports.

POLICY C2.7 Broward County shall continue to manage the asbestos program to help reduce the risk of and protect against exposure to asbestos fibers during building renovations and demolitions.

POLICY C2.8 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 C2.9 Broward County shall encourage air quality management issues to be addressed on a regional airshed basis as a means of providing effective air quality solutions to specific regional problems through active participation in regional transportation/air quality planning efforts.

POLICY C2.10 Broward County will promote activities that will result in strengthening the coordination and understanding of the linkage between land use, transportation planning and zoning for air quality by participating in planning processes by local and regional planning agencies. Broward County will continue to work with federal, state and local air quality agencies to improve environmental outcomes and enhance service, when feasible, to the regulated community and the public through the use of advanced monitoring and information technologies, to make permits more effective, to optimize operations and to increase transparency.

OBJECTIVE C3 – Protect and Maintain Water Quality

To improve the water quality and supply throughout Broward County by protecting the County's Water Conservation Areas.

POLICY C3.1 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 Broward Municipal Services District (BMSD) Future Area Land Use Map, are compatible with and protect the natural character of the areas.

POLICY C3.2 Broward County shall continue to encourage the South Florida Water Management District's (SFWMD) and other governmental entity's efforts to acquire private property and mineral rights in the Water Conservation Areas, as defined in the BMSD Future Area Land Use Map.

POLICY C3.3 Broward County shall not permit new solid-fill transportation facilities or similar structures within Broward County's Water Conservation Areas, which contradict the efforts of the federal Water Resources Development Act of 2000 and the Florida Everglades Forever Act, as defined in the BMSD Future Land Use Plan, without provisions for maintaining the freshwater sheet flow.

POLICY C3.4. Oil, gas, and mineral extraction and exploration, through drilling, core testing, fracking, and any other methods, shall be prohibited in areas designated for Conservation future land use on the Broward County Land Use Plan or the BMSD Future Land Use Map Series.

POLICY C3.5 Broward County will support projects within the Water Conservation Areas that reduce seepage losses from the Water Conservation Areas, improve water supply and quality, and establish a buffer between the Everglades and developed areas.

OBJECTIVE C4 – Managing Mineral Resources

Broward County shall manage its mineral resources by maintaining and enforcing land development and environmental regulations on mining and excavation activities.

POLICY C4.1 Broward County 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 BMSD Future Land Use Map.

POLICY C4.2 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 C5 – Preserve and Protect Soil Resources

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

POLICY C5.1 To minimize soil erosion on new construction sites, the Land Development Code shall be maintained which requires measures be consistent with Chapter 27, Broward County Natural Resource Protection Code, and the Best Management Practices of the United States Natural Resources Conservation Service.

POLICY C5.2 Plans for the construction or expansion of arterial and collector roadways with steep embankments shall include appropriate landscaping and design to minimize soil erosion.

OBJECTIVE C6 – Conserve and Protect Environmentally Sensitive Natural Resources

Broward County shall conserve and protect environmentally sensitive lands, vegetative communities and trees in coordination with State, regional, and local agencies.

POLICY C6.1 Broward County shall continue to maintain a <u>Map</u> of County Commission designated properties of ecological concern to include those areas designated as Local Areas of Particular Concern (LAPC), Natural Resource Areas, Environmentally Sensitive Lands (ESLs), Urban Wilderness Areas (UWAs), and those lands on the Urban Wilderness Inventory.

POLICY C6.2 Broward County shall continue to implement the Broward County Land Development Code, as it relates to green spaces, in the review of site plans in the BMSD Area.

POLICY C6.3 Broward County shall continue to make recommendations for designation of land as a LAPC.

POLICY C6.4 Broward 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, and provision of greenspace at the time of site plan review.

POLICY C6.5 Broward County shall continue to implement regulations pertaining to the clearance of land designated as a Natural Resource Area in the BMSD Area.

POLICY C6.6 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 C6.7 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 C6.8. Broward County shall continue to implement land clearance regulations within the BMSD Area and jurisdictional municipalities consistent with the NatureScape Broward Program requiring the removal of invasive exotic plants and the preservation and

reestablishment of native vegetative communities, considering climate adaption needs and strategies for assisting in natural migration, thereby enhancing wildlife habitat.

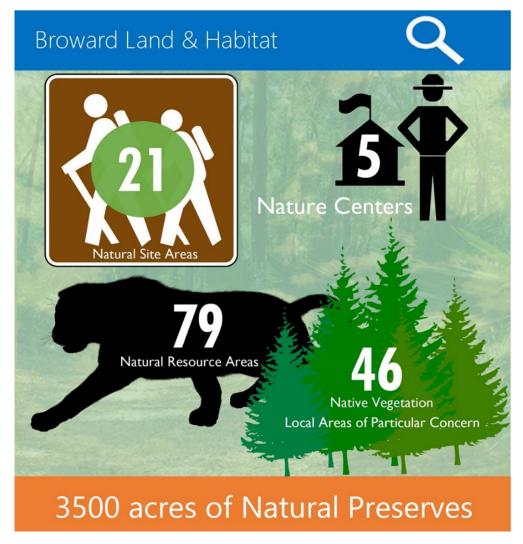
POLICY C6.9 Broward County shall assess the vulnerability of specific species, habitats, landscapes, and ecosystem functions that may be sensitive to climate change and develop coping strategies and contingency plans for their adaptation, such as identifying habitats that may be viable during climate disturbances and could potentially serve to give refuge to and sustain at-risk species.

POLICY C6.10 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 C6.11 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 C6.12 Broward 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 C6.13 Broward 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.



Source: Broward County LAPC's, ESL's, NRA's and Tree Resources. See Broward's <u>Tree Preservation</u> and <u>Land Stewardship</u> Programs.

OBJECTIVE C7 – Sustain or Increase Functions and Values of Wildlife and Marine Habitats

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

POLICY C7.1 The Florida Fish and Wildlife Conservation Commission's Habitat Species Conservation Program should be utilized as a source for the guidelines to promote viable habitats for nongame wildlife populations.

POLICY C7.2 Broward 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 C7.3 Broward County shall apply for State and/or federal grants to fund programs for the conservation of wildlife and marine habitats.

POLICY C7.4 Broward County shall designate Estuarine Areas known to be habitats for juvenile marine fishes for protective status as LAPCs or UWAs. These areas shall include, but will not be limited to, mangroves forests, tidal marshes, and sea grass beds.

POLICY C7.5 Broward County shall continue to implement the sea turtle conservation programs using, when feasible, less manipulative conservation techniques.

POLICY C7.6 Broward County shall continue to work with coastal municipalities to promote enforcement of their adopted sea turtle lighting ordinances.

POLICY C7.7 Broward County will continue to maintain and implement monitoring techniques to protect and conserve beaches and marine resources.

POLICY C7.8 Broward County will continue to enhance offshore marine habitat through the Artificial Reef Program.

OBJECTIVE C8 – Protect Wetland Resources

Increase the quality and connectivity of regionally significant wetland resources and ensure the long-term functions of wetlands through effective management.

POLICY C8.1 Broward County shall optimize siting of mitigation projects to enhance their relationships with other wetlands.

POLICY C8.2 Broward County shall integrate wetlands into regional stormwater drainage/water management practices to provide necessary hydrology.

POLICY C8.3 Broward County shall participate in land acquisition/greenway programs to improve connectivity of appropriate wetland/upland systems.

POLICY C8.4 In cooperation with the private sector, Broward County shall site entrepreneurial mitigation banks in the most appropriate locations.

POLICY C8.5 For lands where activities could impact areas essential to Everglades restoration, as identified by the SFWMD, Broward County shall not designate those lands in future land use categories that would increase density or intensity.

POLICY C8.6 Broward County shall provide for adequate hydrology for protected wetlands by establishing minimum water flows and levels for protected wetlands during license application review.

POLICY C8.7 When feasible, Broward County shall change the future land use designation for wetlands that are to be preserved to Conservation or Recreation and Open Space.

POLICY C8.8 Broward County shall develop, adopt, and fund long-term management plans for publicly-owned or protected wetlands.

POLICY C8.9 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, seek to avoid and minimize impacts to wetland function, and, where impacts are unavoidable, require replacement of lost function through mitigation.

POLICY C8.10 Broward County shall distribute land uses in a manner that avoids or minimizes, to the greatest degree practicable, the effect and impact on wetlands. Land uses 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.

POLICY C8.11 Broward County shall participate in land acquisition initiatives, greenway programs, park expansions, and other programs for increasing acreage of wetlands.

POLICY C8.12 Broward County shall develop and implement programs for protecting and expanding existing wetland areas such as Transfer of Development Rights, deed of conservation easements, and restrictive covenants, while incorporating species and habitat vulnerability to climate change into the land use planning or land acquisition.

POLICY C8.13 Broward County shall update Chapter 27, Article XI, to ensure flexibility over time as to the approaches to wetland protection, enhancement, and creation.

OBJECTIVE C9 – Levels of Protection for the West Indian Manatees

Protect the West Indian Manatees and increase boating safety within Broward County's waterways. Restrict access and activities in designated Manatee Essential Habitat Areas and support existing speed regulations in and around Manatee Travel Corridors.



Source: Broward.org/Manatees

POLICY C9.1 Broward County shall continue to support State designation of the Florida Power and Light (FPL) Port Everglades and Lauderdale Power Plants' discharge canal and cooling lakes as No Entry Zones for unauthorized vessels.

POLICY C9.2 Broward County shall continue to support State designated Idle Speed Zones and Slow Speed Buffer Zones in Manatee Travel Corridors.

POLICY C9.3 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 C9.4 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 C9.5 The Florida Fish and Wildlife Conservation Commission (FWC) shall annually inspect and maintain all manatee speed zone signs.

POLICY C9.6 Broward County shall continue to support regulations 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, as defined in the Manatee Protection Plan.

POLICY C9.7 Broward County shall require benthic surveys for seagrass and natural resources when reviewing an application for an Environmental Resource License.

POLICY C9.8 Broward County shall utilize grates over culverts and other construction methods or standards for all docks, mooring pilings, or other structures that do not entrap or injure manatees and that reduce or eliminate their impact on manatees and the resources upon which manatees depend.

POLICY C9.9 The boundary of the FPL Port Everglades Power Plant Discharge Canal Manatee Essential Habitat Area shall continue to include the Mangrove Lagoon located north of the turning notch, south of the discharge canal, and west of the Atlantic Intracoastal Waterway.

POLICY C9.10 The extension of docks, mooring pilings, or other such structures located in a federal navigation project channel, as defined in Section 253.03(10), Florida Statutes, or in a channel marked by any governmental agency, shall comply with appropriate federal and State regulations.

POLICY C9.11 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 C9.12 Broward County shall ensure that new marine facilities that have 10 or more moorings provide educational signage.

OBJECTIVE C10 – Awareness of Manatee Protection Efforts

Increase public awareness of manatees and manatee protection efforts.

POLICY C10.1 County staff will work with persons and facilities that have new and existing public and private marinas, boat ramps, and non-residential boat docks, as well as appropriate public parks, to post manatee signs, educational displays, or informational kiosks that raise manatee awareness.

POLICY C10.2 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 C10.3 The Environmental Protection and Growth Management Department will participate in the tri-county Manatee Awareness Group whose purpose is to share and discuss issues relevant to manatee protection and conservation in Palm Beach, Broward, and Miami-Dade Counties.

POLICY C10.4 Broward County shall continue to publish the Broward Safe Boating Guide, a comprehensive booklet outlining Manatee Protection Zones within Broward County's waterways.

POLICY C10.5 Broward County shall maintain a manatee website to provide information regarding the projects associated with the MPP.

POLICY C10.6 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.



OBJECTIVE C11 – Knowledge of Safe Boating Operations

Increase knowledge of safe boating operations and speed zones in collaboration with other local, regional and State organizations.

POLICY C11.1 Broward County shall continue to support vessel operator education as specified in Section 327.395, Florida Statutes.

POLICY C11.2 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, Florida Statutes.

POLICY C11.3 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 C11.4 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 C11.5 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, Florida Statutes).

POLICY C11.6 Broward County shall review and analyze statistical information on boating accidents produced by FWC and shall pursue marine-related grants and monitor marine-related policies and legislation.









Manatee Surveys

Conducting aerial surveys is one of the most successful ways to determine where manatees are in Broward County. The County performs annual surveys in support of Policy C10.2.