

**SECTION I**  
**AMENDMENT REPORT**  
**BROWARD COUNTY LAND USE PLAN TEXT**  
**PROPOSED AMENDMENT PCT 15-3**

**“ADAPTATION ACTION AREAS”**

**RECOMMENDATIONS/ACTIONS**

**DATE**

**I. Planning Council Staff Transmittal Recommendation**

**May 19, 2015**

It is recommended that the proposed text amendment be approved. Please see **Attachment 1.**

**II. Planning Council Land Use/Trafficways Committee Recommendation**

**May 28, 2015**

Approval per Planning Council staff transmittal recommendation.

**III. Planning Council Transmittal Recommendation**

**May 28, 2015**

Approval per Planning Council staff transmittal recommendation. (Vote of the board; Unanimous: 16-0; Blattner, Castillo, de Jesus, DiGiorgio, Friedel, Gomez, Graham, Grosso, Kiar, Long, Mack, McColgan, Parness, Ryan, Stermer and Castro)

**IV. County Commission Transmittal Recommendation**

**June 23, 2015**

Approval per Planning Council transmittal recommendation.

**SECTION II**  
**AMENDMENT REPORT**  
**PROPOSED AMENDMENT PCT 15-3**

**BACKGROUND**

On February 12, 2013, the Broward County Board of County Commissioners adopted Broward County Land Use Plan (BCLUP) objectives and policies to adopt, implement and encourage strategies which would increase resiliency and protect property, infrastructure and natural resources from the impacts of climate change, especially sea level rise.

Further, on October 28, 2014, the Broward County Board of County Commissioners directed the Broward County Environmental Planning and Community Resilience Division to initiate an amendment to the BCLUP text to:

- 1) Revise BCLUP Policy A.03.06 to clarify the purpose and intent of Adaptation Action Areas (AAAs), and BCLUP Policy A.03.07 to state that the impacts of climate change and sea level rise on the County's water supplies should be considered;
- 2) Create a process and implementation criteria for designating AAA's in the BCLUP. An applicant seeking this designation must describe the area's vulnerabilities and how they will be exacerbated by climate change and/or sea level rise within a 50-year planning horizon, as well as how the proposed mitigation strategies will reduce this risk and increase the region's resilience to climate impacts; and
- 3) Designate the **Port Everglades Sand Bypass** project area as Broward County's first AAA. This designation will elevate the importance of this project as a critical shoreline resilience strategy, which is reflective of Broward County's commitment to shoreline protection and beach preservation along its extensive coastline. The project is of critical importance as the Port Everglades navigational inlet interrupts the natural southern migration of sand thereby resulting in chronic sand starvation along the shoreline south of the inlet. The Sand Bypass project will mitigate the adverse effects of the inlet and serve to reduce storm surge, protect infrastructure, preserve habitat and nesting areas for threatened and endangered species, and increase the potential for federal permitting and funding support.

**See Attachment 1.**

Per the Broward County Commission's October 28, 2014, action, the "Priority Planning Areas for Sea Level Rise" map is also being amended to include the Port Everglades Sand Bypass project area as an AAA of regional significance (see corresponding amendment **PCNRM 15-2**).

### **BACKGROUND (continued)**

In addition, Broward County is processing companion amendments to the Climate Change, Coastal Management, Capital Improvements, Conservation and Intergovernmental Coordination Elements of the Broward County Comprehensive Plan concurrent with this proposed text amendment. **See Attachment 2.**

### **PUBLIC OUTREACH**

The Planning Council staff sent all municipal mayors, managers and planning directors written notification of the proposed map amendment and solicited comments. Comments have been received from the cities of Lauderdale Lakes and Fort Lauderdale:

- **Lauderdale Lakes** has no objection to the proposed amendment. **See Attachment 3.**
- **Fort Lauderdale** recommends that Policy A.03.06 be revised to read as follows: "Broward County shall, ~~in coordination with its local~~ with the support of all municipalities included within the proposed Adaptation Action Area of Regional Significance's boundary, designate Adaptation Action Areas...." Further, the City objects to the designation of the Port Everglades Sand Bypass project area as an Adaptation Action Area (AAA) of regional significance, as it does not address potential short- and long-term negative effects the project may have on the City's beaches and residents during both the construction and operational phases of the project. **See Attachment 4.**

The Broward County Environmental Planning and Community Resilience Division (EPCRD) states that requiring municipal support for AAA's of regional significance is inconsistent with the County's duties to address regional land use issues, including situations involving multiple jurisdictions, and its social and financial responsibilities of advancing and protecting projects of regional significance. Regarding the designation of the Port Everglades Sand Bypass project as an AAA, the EPCRD states that this project is of critical importance in improving shoreline protection for the cities of Dania Beach, Hollywood and Hallandale Beach, without impacting shoreline protection for Fort Lauderdale. Further, Broward County has worked closely with all affected municipalities and local communities, and has produced a final project design that is sensitive and responsive to community interests, and is formally supported by key stakeholders in the City of Fort Lauderdale. The Port Everglades Sand Bypass project will help to achieve climate resilience and natural systems benefits, as well as provide the potential for additional federal support and resources. **See Attachment 5.**

**SECTION III**  
**AMENDMENT REPORT**  
**PROPOSED AMENDMENT PCT 15-3**

**PLANNING ANALYSIS**

The proposed text amendment provides minor policy revisions regarding climate change and creates implementation criteria for designation of Adaptation Action Areas (AAA's) of regional significance. The amendment also provides for the designation of the Port Everglades Sand Bypass project area as an AAA of regional significance, in accordance with BCLUP Policy A.03.06. **See Attachment 1.**

In the future, the text may be updated and amended for the designation of additional AAA's, or for the de-designation of existing AAA's that have successfully mitigated the effects of sea level rise based on adaptation strategies, or no longer meet the criteria for AAA status due to changes in land use, community priorities, or other such considerations.

Planning Council staff recognizes the City of Fort Lauderdale's objection to this amendment; however, we find that the proposed text amendment is consistent with the County's role and responsibilities for countywide and regional land use planning issues, and specifically furthers BCLUP Policy A.03.06 regarding the utilization of Adaptation Action Areas as a critical shoreline resilience strategy. Therefore, Planning Council staff recommends approval of the proposed amendment.



**SECTION IV**  
**AMENDMENT REPORT**  
**PROPOSED AMENDMENT PCT 15-3**

**ATTACHMENTS**

1. Proposed Amendment PCT 15-3
2. Correspondence from Henry Snizek, Deputy Director, Broward County Environmental Protection and Growth Management Department and Dr. Jennifer Jurado, Director, Broward County Environmental Planning and Community Resilience, to Barbara Blake Boy, Executive Director, Broward County Planning Council, dated February 27, 2015
3. Email correspondence from Fernando Leiva, AICP, Development Services Manager and Principal Planner, City of Lauderdale Lakes, to Deanne Von Stetina, AICP, Director of Planning, Broward County Planning Council, dated March 31, 2015
4. Correspondence from Jim Koeth, LEED AP BD+C, Principal Planner, Public Works Sustainability Division, City of Fort Lauderdale, to Barbara Blake Boy, Executive Director, Broward County Planning Council, dated April 8, 2015
5. Correspondence from Jennifer L. Jurado, Ph.D., Director, Broward County Environmental Planning and Community Resilience, and Henry Snizek, Deputy Director, Broward County Environmental Protection and Growth Management Department, to Jim Koeth, Principal Planner, Fort Lauderdale Public Works Sustainability Division, dated April 20, 2015

# ATTACHMENT 1

## BROWARD COUNTY LAND USE PLAN AMENDMENT PCT 15-3 REVISIONS TO POLICIES AND IMPLEMENTATION REGULATIONS AND PROCEDURES

### II. GOALS, OBJECTIVES AND POLICIES

"SMART GROWTH," "GREEN"/ENERGY EFFICIENT AND SUSTAINABLE LAND USE PATTERNS

#### GOAL A.00.00

PROMOTE AND COORDINATE A DESIRABLE, SUSTAINABLE AND EFFICIENT LAND USE PATTERN FOR THE BENEFIT AND ENJOYMENT OF ALL BROWARD COUNTY RESIDENTS, VISITORS AND ECONOMIC INTERESTS WHICH MAXIMIZES PRESERVATION AND CONSERVATION OF NATURAL RESOURCES.

#### OBJECTIVE A.03.00 SUSTAINABLE AND CLIMATE RESILIENT LAND USE PATTERN

Adopt, implement and encourage land use planning strategies which increase community resiliency and protect property, infrastructure and cultural and natural resources from the impacts of climate change.

POLICY A.03.01 Broward County shall by 2025, evaluate and address risk from climate change impacts, especially sea level rise, into the planning, siting, design, construction, replacement and maintenance of public infrastructure, and encourage its municipalities and partner agencies to do the same.

POLICY A.03.02 Broward County shall by 2015, adopt model codes, such as the International Green Construction Code (IGCC), which address: green building practices, sustainable site development and land use patterns, energy and water conservation, air and indoor environmental quality, in a manner relevant to Southeast Florida, and encourage its municipalities to do the same.

POLICY A.03.03 Broward County shall promote climate change resilient building design and, by 2015, pursue changes to the Florida Building Code which increase resistance to impacts from more intense storm events.

POLICY A.03.04

Broward County shall include a map of Priority Planning Areas for Sea Level Rise in the Broward County Land Use Plan, effective immediately, illustrating areas that are at increased risk of flooding due to, or exacerbated by, sea level rise over the next 50 years.

POLICY A.03.05

Broward County shall evaluate plan amendments within Priority Planning Areas for Sea Level Rise and strongly discourage those amendments which would place additional residential and non-residential development at risk of flooding from sea level rise. In review of such amendments, the County shall consider:

- a. Sea level rise/flood protection mitigation strategies and requirements included within local comprehensive plans and/or development regulations; or
- b. Flood protection improvements committed to by amendment applicants, which would mitigate or enhance flood protection and adaptation from rising sea levels.

POLICY A.03.06

Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAAs), per Florida State Law, ~~using the Priority Planning Areas for Sea Level Rise Map as a basis for identifying areas especially vulnerable to sea level rise, in order to enhance the funding potential of infrastructure adaptation projects and develop policies for adaptation.~~ in order to:

- a. Identify areas of regional significance that are vulnerable to the impacts of rising sea level;
- b. Identify and implement adaptation policies to increase community resilience; and
- c. Enhance the funding potential of infrastructure adaptation projects.

POLICY A. 03.07

Broward County shall update climate related policies and maps, including the Priority Planning Areas for Sea Level Rise Map, in the Land Use Plan with best available data, every 5 years or as available, including findings of the Broward County and USGS joint Climate Change Inundation Modeling effort, which seeks to achieve a better understanding of the impacts of climate change and rising sea level on the County's water supplies, drainage and flood control systems.

Note: Underlined words are proposed additions. ~~Struck-through~~ words are proposed deletions.

#### IV. PLAN IMPLEMENTATION REQUIREMENTS

##### D. IMPLEMENTATION REGULATIONS AND PROCEDURES

##### 13. CRITERIA FOR DESIGNATING ADAPTATION ACTION AREAS OF REGIONAL SIGNIFICANCE

As consistent with Policy A.03.06 of the Broward County Land Use Plan, Adaptation Action Areas may be designated by a local government in order to identify areas vulnerable to sea level rise, enhance the funding potential of infrastructure adaptation projects and implement policies for adaptation.

To be eligible for Adaptation Action Area of Regional Significance designation, the applicant must clearly detail how vulnerabilities identified in the proposed Adaptation Action Area will be exacerbated by climate change or sea level rise within a 50-year planning horizon. In addition, the proposed Adaptation Action Area must meet at least one (1) of the following criteria:

- a. Areas which experience tidal or coastal flooding;
- b. Areas which have a hydrologic connection to coastal waters;
- c. Locations which are within areas designated as evacuation zones for storm surge;
- d. Areas vulnerable to flash floods and severe storm water runoff or coastal erosion; or
- e. Areas vulnerable to other predicted impacts of climate change and sea level rise where management strategies, infrastructure investments and planning decisions can help to mitigate the magnitude or severity of future climate impacts.

Local governments may apply for county designation of an Adaptation Action Area of Regional Significance within the Broward County Land Use Plan if the identified problem(s) conform(s) with one or more of the criteria identified above, or additional demonstration of climate vulnerability is provided. In addition, proposed adaptation strategies for the designated area should demonstrate investments and benefits of regional significance. The Unified Sea Level Rise Projection for Southeast Florida and the Broward County Priority Planning Area Map may serve as reference materials in review of the request. Notice submitted to the Planning Council should include:

Note: Underlined words are proposed additions.

- a. The geographical area under consideration;
- b. Documentation of the issue(s) or vulnerability of the area;
- c. A description of strategies, policy and/or infrastructure improvements proposed; and
- d. Explanation of how these solutions will reduce risk and increase the area's resilience to climate impacts.

County staff will review and issue a joint recommendation pertaining to the requested Adaptation Action Area of Regional Significance designation. No fee will be charged for review of the proposed Adaptation Action Area designations. The Broward County Commission or the Broward County Planning Council may also initiate an application for Adaptation Action Area designation. Applications may also be submitted for de-designation by the original applicant, the Broward County Planning Council or the Broward County Commission, based on adaptation investments, reduction of vulnerability, changes in community priorities, cost-benefit considerations, changes in land use, or other environmental, economic or social considerations which support de-designation.

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

<u>Ref No. on SLR Map</u>	<u>AAA Name</u>	<u>Applicant</u>	<u>Qualifying Criteria Met</u>	<u>Strategies Proposed</u>	<u>Expected Benefits</u>
<u>1</u>	<u>Port Everglades Sand Bypass Project Area</u>	<u>Broward County</u>	<u>c) Storm Surge</u> <u>d) Coastal Erosion</u> <u>e) Sea Level Rise</u>	<u>-Sand bypass at Port Everglades</u> <u>-Beach renourishment</u> <u>-Shoreline management</u>	<u>-Protection of critical infrastructure</u> <u>-Protection of public and private property</u> <u>-Preservation of habitat for threatened and endangered species</u> <u>-Reduced shoaling in the navigation channel</u> <u>-Maintenance of recreational opportunities at John U. Lloyd Beach State Park</u> <u>-increased potential of federal permitting and funding support</u>

Note: Underlined words are proposed additions. Double-underlined words are additions proposed by Planning Council staff.



## ATTACHMENT 2

ENVIRONMENTAL PROTECTION and GROWTH MANAGEMENT DEPARTMENT  
**Environmental Planning and Community Resilience Division**  
Mailing Address: 115 S. Andrews Avenue, Room 329H, Fort Lauderdale, FL 33301  
954-519-1270 • FAX 954-519-1496

**RECEIVED**

FEB 27 2015

# MEMO

**TO:** Barbara Blake Boy, Executive Director  
Broward County Planning Council

**FROM:** Henry Sniezek, Deputy Director  
Environmental Protection and Growth Management Department

Dr. Jennifer Jurado, Director  
Environmental Planning and Community Resilience Division

**SUBJECT:** Revisions to the Adaptation Action Area Policies and Priority Planning for Sea Level Rise Map, and Designation of the Port Everglades Sand Bypass Project Area as an Adaptation Action Area.

**BROWARD COUNTY  
PLANNING COUNCIL**

**DATE:** February 27, 2015

The Environmental Planning and Community Resilience Division, per the October 28, 2014 direction from the Broward County Board of County Commissioners, submit for your consideration and advancement the following policy and map amendments to the Broward County Land Use Plan. It is noted that companion amendments to the Broward County Comprehensive Plan are being process separately by County staff, but are attached for your information.

Broward County was the first local government to include Adaptation Action Area (AAA) language in a Comprehensive Plan following enactment of AAAs in Florida Statutes in 2011. We now seek to refine the original policy language and make a first AAA designation. The proposed updates to the County's Comprehensive Plan and Land Use Plan regarding Adaptation Action Areas aim to accomplish three goals:

- Create a process and criteria for the County to designate Adaptation Action Areas of Regional Significance
- Designate the Port Everglades Sand Bypass Project Area
- Update the Priority Planning Area for Sea Level Rise Map

The County is in the unique position to facilitate the coordination AAA designations by local governments to ensure that adaptation strategies and infrastructure investments utilized will create benefits that can be realized throughout the County. The County can provide recognition to a local government AAA designation, by including the AAA on the Priority Planning Area for Sea Level Rise Map as an Adaptation Action Areas of Regional Significance. To achieve this recognition by the County and Planning Council, the applicant will be asked to describe the area's vulnerabilities and how they will be exacerbated by climate change or sea level rise within a 50-year planning horizon, document all secondary criteria met, and describe how the proposed strategies, policy and/or infrastructure improvements will reduce risk and increase the region's resilience to

climate impacts.

Broward County proposes designation of the Port Everglades Entrance Sand Bypass Project area footprint as an Adaptation Action Area (AAA), to elevate the importance of, and federal support for, this project as a critical shoreline resilience strategy for Broward County. Shoreline protection and beach preservation are identified among the most pressing climate resiliency strategies for Broward County as reflected in Board-adopted policies, the Broward County Climate Change Action Plan, the Southeast Florida Regional Climate Action Plan, and Broward County's comprehensive plan. This prominent County Commission priority is reflective of the County's extensive coastline and the recognized importance of beaches to reducing storm surge, protecting infrastructure, and as critical habitat for threatened and endangered species.

Also, it is requested that the Priority Planning Area for Sea Level Rise Map in the Broward County Land Use Plan be updated to include the "Possible" inundation layer from the compact vulnerability analysis (25-74.9% certainty). The current PPA map only includes the "More Likely" inundation 2 foot layer of 75-100% certainty. Both were intended to be included in 2013 LUP map, combined and shown in one color (purple). We are still restricting the projection to the tidally influenced (eastern) portions.

Attached please find:

- Adaptation Action Areas, 2015 Comprehensive Plan and Land Use Plan Policy Updates
- Revised Priority Planning Area for Sea Level Rise Map\*
- Sand Bypass and Coastal Resilience, Proposed Adaptation Action Area Designation Briefing Document

\* The revised Priority Planning Area for Sea Level Rise Map (attached) also includes the proposed Port Everglades Sand Bypass Project Area AAA designation.

## Adaptation Action Area – 2015 Comprehensive Plan and Land Use Plan update

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### **Broward County Land Use Plan**

#### **POLICY A.03.06**

~~Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas, per Florida State Law, using the Priority Planning Areas for Sea Level Rise Map as a basis for identifying areas especially vulnerable to sea level rise, in order to enhance the funding potential of infrastructure adaptation projects and develop policies for adaptation.~~

Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAAs), per Florida State Law, in order to:

- a. Identify areas of regional significance that are vulnerable to the impacts of rising sea level;
- b. Identify and implement adaptation policies to increase community resilience; and,
- c. Enhance the funding potential of infrastructure adaptation projects.

#### **POLICY A. 03.07**

Broward County shall update climate related policies and maps, including the Priority Planning Areas for Sea Level Rise Map, in the Land Use Plan with best available data, every 5 years or as available, including findings of the Broward County and USGS joint Climate Change Inundation Modeling effort, which seeks to achieve a better understanding of the impacts of climate change and rising sea level on the County's water supplies, drainage and flood control systems.

### **IMPLEMENTATION REGULATIONS AND PROCEDURES (section 4, part D)**

#### **13. CRITERIA FOR DESIGNATING ADAPTATION ACTION AREAS OF REGIONAL SIGNIFICANCE**

As consistent with POLICY A.03.06 of the Broward County Land Use Plan, Adaptation Action Areas may be designated by a local government in order to identify areas vulnerable to sea level rise, enhance the funding potential of infrastructure adaptation projects and implement policies for adaptation.

To be eligible for Adaptation Action Area of Regional Significance designation the applicant must clearly detail how vulnerabilities identified in the proposed Adaptation Action Area will be exacerbated by climate change or sea level rise within a 50-year planning horizon. Additionally, the proposed Adaptation Action Area must meet at least one of the following criteria:

- a. Areas which experience tidal or coastal flooding;
- b. Areas which have a hydrologic connection to coastal waters;



- c. Locations which are within areas designated as evacuation zones for storm surge;
- d. Areas vulnerable to flash floods and severe storm water runoff or coastal erosion; or
- e. Areas vulnerable to other predicted impacts of climate change and sea level rise where management strategies, infrastructure investments, and planning decisions can help to mitigate the magnitude or severity of future climate impacts.

Local governments may apply for county designation of an Adaptation Action Area of Regional Significance within the Broward County Land Use Plan if the identified problem(s) conform(s) with one or more of the criteria identified above, or additional demonstration of climate vulnerability is provided. In addition, proposed adaptation strategies for the designated area should demonstrate investments and benefits of regional significance. The Unified Sea Level Rise Projection for Southeast Florida and the Broward County Priority Planning Area Map may serve as reference materials in review of the request. Notice submitted to the Planning Council should include:

- a. The geographical area under consideration;
- b. Documentation of the issue(s) or vulnerability of the area;
- c. A description of strategies, policy and/or infrastructure improvements proposed;
- d. Explanation of how these solutions will reduce risk and increase the area's resilience to climate impacts.

County staff will review and issue a joint recommendation pertaining to the requested Adaptation Action Area of Regional Significance designation. No fee will be charged for review of the proposed Adaptation Action Area designations. The Broward County Commission or the Broward County Planning Council may also initiate an application for Adaptation Action Area designation. Applications may also be submitted for de-designation by the original applicant, the Broward County Planning Council, or the Broward County Commission, based on adaptation investments, reduction of vulnerability, changes in community priorities, cost-benefit considerations, changes in land use, or other environmental, economic, or social considerations which support de-designation.

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

Ref No on SLR Map	AAA Name	Applicant	Qualifying Criteria Met	Strategies Proposed	Expected Benefits
1	Port Everglades Sand Bypass Project Area	Broward County	- Sea Level Rise - Storm Surge - Coastal Erosion	- Sand bypass at Port Everglades - Beach renourishment - Shoreline management	- Protection of critical infrastructure - Protection of public and private property - Preservation of habitat for

					threatened and endangered species - Reduced shoaling in the navigation channel - Maintenance of recreational opportunities at John U. Lloyd Beach State Park - Increased potential of federal permitting and funding support
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## Broward County Comprehensive Plan

### CLIMATE CHANGE ELEMENT

#### Policy 19.3.13.

~~Broward County shall by 2017, work with its local municipalities to designate Adaptation Action Areas, per Florida State Law, using the Priority Planning Areas for Sea Level Rise Map as a basis for identifying areas especially vulnerable to sea level rise, in order to develop policies for adaptation and enhance the funding potential of infrastructure adaptation projects.~~

Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAA), per Florida State Law, in order to:

- 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 19.3.7.

Broward County shall continue to improve analysis and mapping capabilities for identifying areas of the County vulnerable to sea level rise, tidal flooding, and other impacts of climate change. Activities shall include acquisition of ~~Acquire~~ increasingly accurate Light Detection And Ranging (LiDAR) data, or other state-of-the-art elevation data, and other necessary modeling data and programs every 5 years to update the Priority Planning Area for Sea Level Rise Map in the County's Land Use Plan and improve available information needed to make informed decisions regarding adapting to the impacts of climate change.

Policy 19.3.11.

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

- a) Continuing the appropriate use of beach nourishment and pursuit of 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.

COASTAL MANAGEMENT ELEMENT

Policy 10.2.6

~~Broward County shall by 2017, work with its local municipalities to designate Adaptation Action Areas, per Section 163.3164 F.S. using the Priority Planning Areas for Sea Level Rise Map as a basis for identifying areas especially vulnerable to sea level rise, in order to develop policies for adaptation and enhance the funding potential of infrastructure adaptation projects.~~

Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAA), per Florida State Law, in order to:

- 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 10.4.3.

Broward County shall actively pursue sand bypass at the Port Everglades Navigational Inlet as a preferred beach management strategy and a priority community climate resiliency initiative.

CAPITAL IMPROVEMENTS ELEMENT

Policy 14.2.3.

~~Broward County shall by 2017, work with its local municipalities to designate Adaptation Action Areas, per Florida State Law, using the Priority Planning Areas for Sea Level Rise Map as a basis for identifying areas especially vulnerable to sea level rise, in order to develop policies for adaptation and enhance the funding potential of infrastructure adaptation projects.~~

Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAA), per Florida State Law, in order to:

- 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.

#### CONSERVATION ELEMENT

##### Policy 13.8.23.

~~Broward County shall by 2017, work with its local municipalities to designate Adaptation Action Areas, per Section 163.3164(1) F.S., using the Priority Planning Areas for Sea Level Rise Map as a basis for identifying areas especially vulnerable to sea level rise, in order to develop policies for adaptation and enhance the funding potential of infrastructure adaptation projects.~~

Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAA), per Florida State Law, in order to:

- 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.

## INTERGOVERNMENTAL COORDINATION ELEMENT

### Policy 15.3.2a.

~~Broward County shall work with its local municipalities to designate Adaptation Action Areas, per Florida State Law, using the Priority Planning Areas for Sea Level Rise Map of 9 to 24 inches from 2010 to 2060~~ and encourage local municipalities to develop policies to improve resilience to coastal and inland flooding, salt water intrusion, and other related impacts of climate change and sea level rise in their Comprehensive Plans, Sustainability Action Plans, Vision Plans, Stormwater Master Plans, Adaptation Action Areas Plans, Climate Change Plans and other city-wide plans.

### Policy 15.3.2b.

Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAA), per Florida State Law, in order to:

- 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.

**Legend**



Sand Bypass Adaptation Action Area



Priority Planning Areas

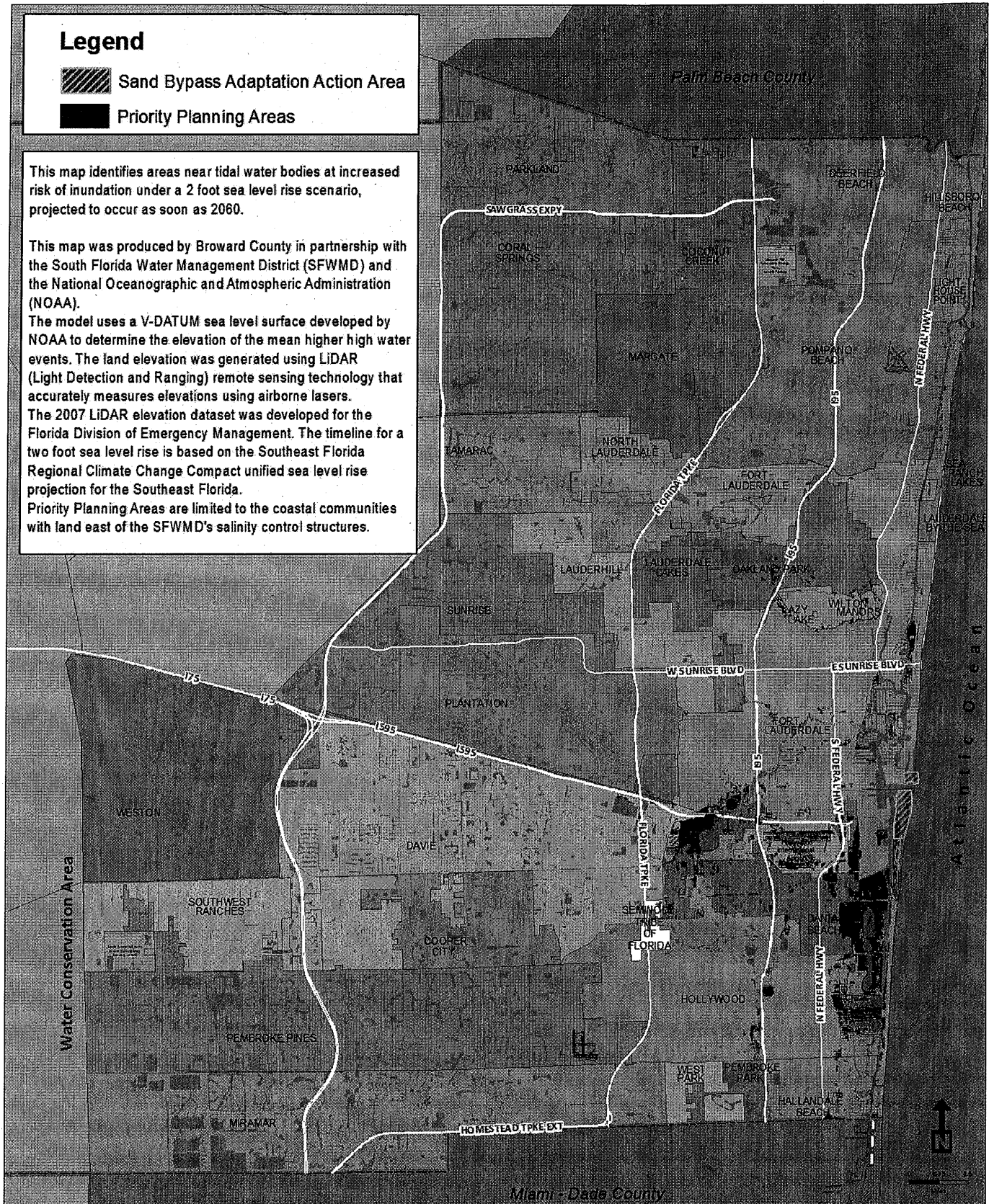
This map identifies areas near tidal water bodies at increased risk of inundation under a 2 foot sea level rise scenario, projected to occur as soon as 2060.

This map was produced by Broward County in partnership with the South Florida Water Management District (SFWMD) and the National Oceanographic and Atmospheric Administration (NOAA).

The model uses a V-DATUM sea level surface developed by NOAA to determine the elevation of the mean higher high water events. The land elevation was generated using LiDAR (Light Detection and Ranging) remote sensing technology that accurately measures elevations using airborne lasers.

The 2007 LiDAR elevation dataset was developed for the Florida Division of Emergency Management. The timeline for a two foot sea level rise is based on the Southeast Florida Regional Climate Change Compact unified sea level rise projection for the Southeast Florida.

Priority Planning Areas are limited to the coastal communities with land east of the SFWMD's salinity control structures.



## **Sand Bypass and Coastal Resilience Proposed Adaptation Action Area Designation Briefing Document**

Prepared by the Environmental Planning and Community Resilience Division  
October 14, 2014

### **Implementation of Sand Bypass Project as Adaptation Action Area**

In 2011, the Florida Legislature passed the Community Planning Act (CPA 2011) providing for the definition and optional designation of Adaptation Action Areas within a Coastal Management Element of a local government comprehensive plan. The intent of such a designation would be to address coastal hazards and potential impacts to sea level rise in a specific location by pursuing adaptation planning within the designated area and prioritizing funding for infrastructure improvements. To elevate the importance of, and federal support for, the Port Everglades Sand Bypass Project as a critical shoreline resilience strategy for Broward County, staff proposes the designation of the Sand Bypass project area as an Adaptation Action Area.

### **Summary of Objectives**

This memorandum recommends the designation of the Port Everglades Entrance Sand Bypass Project area as an Adaptation Action Area (AAA) to achieve the following objectives:

- Increase the resilience of critical natural resources and infrastructure
- Address an erosional hotspot area along the shoreline
- Fortify storm protection for critical infrastructure and valuable property including the US Coast Guard Station, port facilities and over \$345 million in property (within the AAA)
- Reduce shoaling in the navigation channel
- Preserve habitat and nesting areas for three endangered and four threatened species in one of the most highly developed urban areas in the state
- Maintain opportunity for public outdoor recreation at John U. Lloyd Beach State Park, serving over half a million residents and visitors annually
- Advance towards achieving the priority goals set in Broward County's Climate Change Action Plan
- Increase potential federal permitting and funding support based on the federal administration's resiliency objectives.

### **Critical Importance of Port Everglades Entrance Sand Bypass Project for Community Resilience**

The navigational inlet at Port Everglades is documented to interrupt the natural alongshoremigration of sand from the north side of the inlet (Segment II) to the south side (Segment III). Sand that would generally be transported south alongshore instead accumulates



within the channel itself and a rubble shoal north of the channel, or is transported offshore. The lack of sand supply to the south side has resulted in significant chronic sand starvation along the length of the segment III beach, thus reducing its storm protection capacity and resilience to surge and wave action. Additionally, shoaling within the Federal navigation channel (buildup of sand on the channel bottom) is approaching problematic levels compared to historical rates of accumulation, thereby increasing maintenance costs to avoid navigation hazards. As a remedy and long-term shoreline resilience strategy, the Port Everglades Sand Bypass Project is proposed as a means for mitigating for the effects of the Channel Inlet on the downstream shoreline. The project is proposed to include a sand trap on the north side where sand will naturally collect and then be excavated every two-to-three years for the purpose of renourishing the beach along the south side of the inlet (Figure 1). This process is known as artificial sand bypassing.

Sand bypassing at Port Everglades Inlet will have both physical and economic benefits to sand management at the inlet. The primary benefit of the project is the reestablishment of north to south sediment transport across the inlet. The project is expected to provide a volume of sand, on average, that is essentially equivalent to the average demand south of the inlet within the area of inlet influence. Bypassing would reduce the need to import sand from remote sand sources for future renourishment of Segment III and reduce and/or eliminate sand shoaling within the Port Everglades Federal navigation channel. Recent studies have demonstrated sand bypassing to be economically feasible compared to importing other sources of beach compatible sediments. It is well documented that offshore sediment sources suitable for beach restoration in Broward County are almost depleted, and the location and economics of alternate sources for future beach project requirements are uncertain. Therefore, sand bypassing at Port Everglades is needed to address the adverse effects of the inlet upon the Segment III shoreline and as a regional sediment management system.

The proposed project and designation are consistent with the regional resilience strategy for Southeast Florida. The proposed project serves to strengthen regional resilience through 1) a reduction in financial and physical losses (Regional Climate Action Plan (RCAP) Goal: Sustainable Communities) through storm protection provided by a regularly nourished beach, 2) implementation of management programs designed to protect natural systems and improve their capacity for climate adaptation (RCAP Goal: Natural Systems) through habitat restoration and preservation 3) a reduction in fuel consumption (RCAP Goal: Energy and Fuel) by nourishing with local bypassed sand rather than truck-hauling or dredging sand from far distance sources 4) providing a more resilient natural and built physical environment in light of climate change (RCAP Goal: Risk and Emergency Management) by mitigating risk of storm damage and vulnerability to sea level rise and mitigating public safety hazards by preventing shoaling in the navigation channel and preserving emergency response access through the channel by the USCG and on the beach by local emergency responders.

This shoreline resilience strategy is also well-aligned with draft recommendations being advanced to the President by the State, Local, and Tribal Leaders Task Force on Climate Resilience and Preparedness which include:



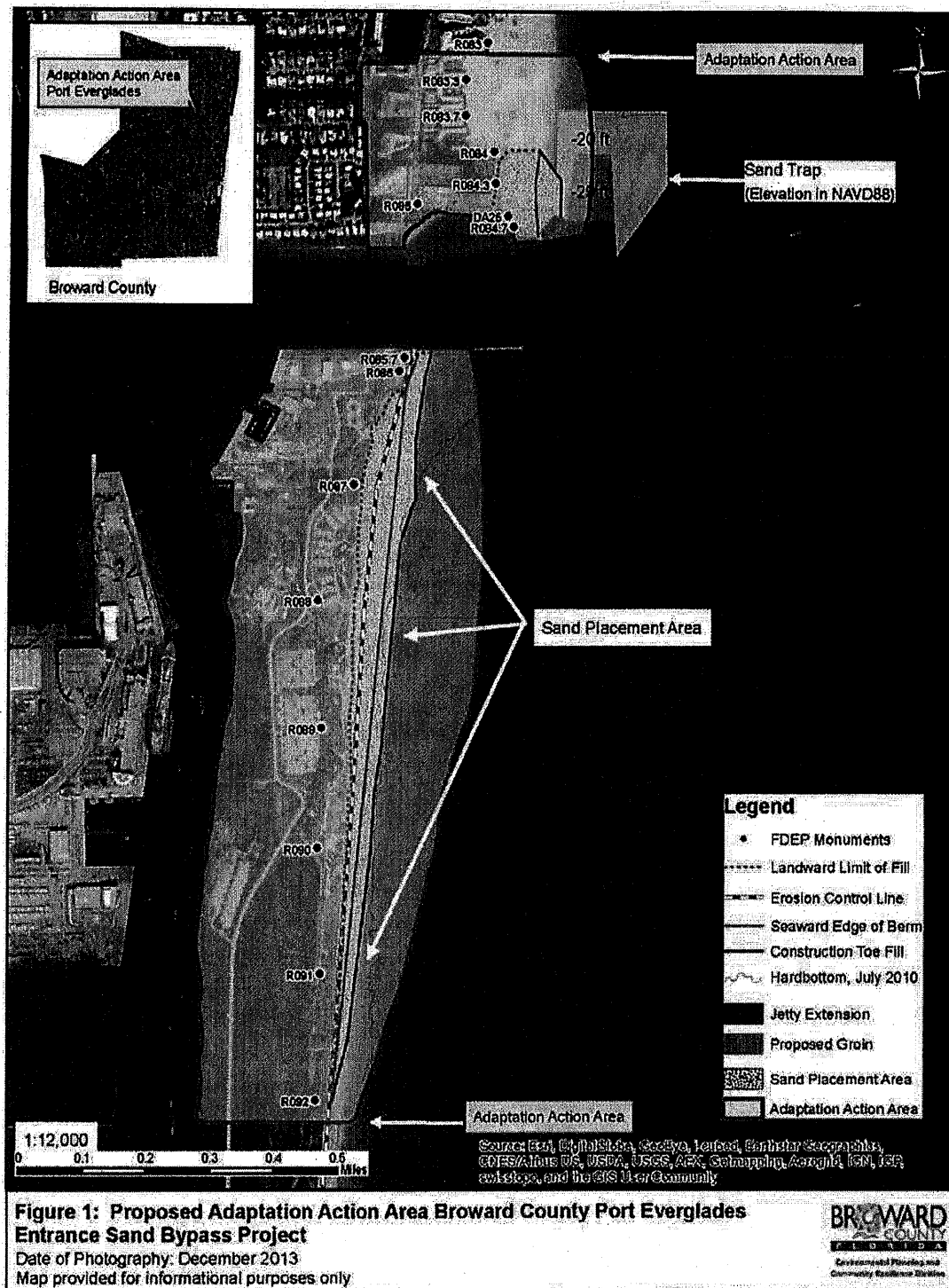
1. Increased support for climate resilience as part of coastal infrastructure planning and investments, especially support for sea-level rise and coastal erosion research and planning and implement response strategies that address both current and future impacts of climate change on coastal ecosystems and communities
2. Promotion and prioritization of green and natural infrastructure, inclusive of beaches
3. Expanded use of regional sediment management (RSM) programs to address coastal erosion threats in a comprehensive and cost-effective manner, focusing on the support of coastal sediment supplies and movement, beneficial reuse of dredged harbor sands, and implementation of innovative beach retention technologies, including nature-based "soft" armoring.

#### Implementation of Sand Bypass Project as Adaptation Action Area

In 2011, the Florida Legislature passed the Community Planning Act (CPA 2011), which made significant changes to the state's growth management laws, including the addition of an optional designation of an Adaptation Action Area within a Coastal Management Element of a local government comprehensive plan. This language was successfully advanced as a regional effort by partners in the 4-County Southeast Florida Regional Climate Change Compact (Compact) with the intent providing local governments with additional planning and policy tools to address coastal hazards and the potential impacts of sea level rise within vulnerable areas, to formally advance the infrastructure improvements and prioritization of funding needed to build community resilience to climate impacts.

In order to integrate adaptation planning into the existing state framework and coordinate adaptation efforts statewide, the Florida Department of Economic Opportunity (DEO) initiated a Section 309 Strategy titled "Community Resiliency: Planning for Sea Level Rise," funded by the National Oceanographic and Atmospheric Administration (NOAA). As a lead author of the enabling language and partner in the Compact, Broward County and the City of Fort Lauderdale were invited to partner in a pilot project in the identification of Adaptation Action Areas within a municipal setting and the development of general guidance to aid local governments interested in employing Adaptation Action Area designations in furtherance of community resilience.

To continue the implementation of adaptation strategies, Broward County included the language for Adaptation Action Area designation in the Climate Change Element of the County's Comprehensive Plan in 2012. Additionally, the Coastal Management Element was recently updated to include policy language specific to Adaptation Action Areas while the County's 10-year water supply plan and other elements of the Comprehensive Plan, including the Land Use Plan, are also being updated to support the County's efforts in support of climate resilience with similar references. Regionally and state-wide there has been increasing interest in the use of Adaptation Action Areas to support diverse climate resilience strategies, ranging from stormwater retrofits to natural area conservation.



In addition to the inclusion of Adaptation Action Areas in the Broward County comprehensive plan, the City of Fort Lauderdale has also adopted Adaptation Action Area policies into the City's 2014 Comprehensive Plan and the City of Satellite Beach is undertaking a similar process. A summary of these and other local efforts was presented at a widely-attended Regional Climate Action Plan Implementation workshop hosted by the Compact on August 29, 2014, specifically focusing on Adaptation Action Area planning. This planning approach was also highlighted at the annual meeting of the Florida Shore and Beach Preservation Association in September 2014.

Broward County's participation in furthering Adaptation Action Area planning is well-aligned with the ever-increasing federal emphasis on climate resilience and preparedness. In the absence of new funding streams, it is expected that federal support for local and state projects will increasingly seek to prioritize funding for projects that not only further community resilience to climate impacts, but that are also designed to maximize the conservation and enhancement of natural systems and infrastructure. These priorities are well-established as part of the President's Climate Action Plan and are represented in the diverse program opportunities announced during this last year with increased federal support for initiatives organized around climate resilient communities and investments in green infrastructure. The Port Everglades Sand Bypass Project represents a critical resiliency strengthening measure for the Broward County community. By designating the area within the sand bypass project footprint as an Adaptation Action Area, the County will formally present the sand bypass project at Port Everglades as a keystone climate resilience strategy for Broward County.

#### Stakeholders

Community stakeholders associated with the Port Everglades Sand Bypass project include condominium associations located immediately north of the inlet and those south of John U Lloyd State Park. Agency stakeholders include the Broward County Board of County Commissioners (Port Everglades), U.S. Army Corps of Engineers (Federal navigation channel), the State of Florida (John U. Lloyd State Park), and the cities of Dania Beach and Fort Lauderdale.

#### Recommendation

Development of Adaptation Action Area designations can be accomplished through a variety of mechanisms within or authorized by a local government's Comprehensive Plan. These can include capital improvement plans, floodplain regulations, zoning and overlay zones, setbacks and buffers, transferable development rights, conservation easements, rebuilding restrictions, by comp plan amendment, resolution or ordinance, or by other planning tools. Staff recommends designation of the Sand Bypass Project Area as an Adaptation Action Area within the Broward County Land Use Plan and the Priority Planning Areas for Sea Level Rise Map.

## ATTACHMENT 3

**Von Stetina, Deanne**

---

**From:** Fernando Leiva <fernandol@lauderdalelakes.org>  
**Sent:** Tuesday, March 31, 2015 11:27 AM  
**To:** Von Stetina, Deanne  
**Cc:** Danny Holmes; Jonathan Allen; Fernando Leiva  
**Subject:** Adaption Action Areas - Proposed County Amendments

Hi Deanne-

Thank you for enlisting local municipalities input in this matter. Please allow this email to serve as the City's statement of no objection to the proposed text amendment to the Broward County Land Use Plan (BCLUP) and an amendment to the Natural Resource Map Series regarding the Priority Planning Area map.

Sincerely,

Fernando Leiva

**Fernando Leiva, AICP, Assoc. AIA**

Development Services Manager and Principal Planner | Development Services



City of Lauderdale Lakes  
4300 NW 36th Street | Lauderdale Lakes, FL 33319  
V: 954-535-2496  
F: 954-731-5309  
[fernandol@lauderdalelakes.org](mailto:fernandol@lauderdalelakes.org)  
[www.lauderdalelakes.org](http://www.lauderdalelakes.org)

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**City Operating Hours**

**City Hall:** Monday - Friday 8:00 a.m. - 5:00 p.m.

**Development Services:** Monday - Friday 8:00 a.m. - 3:30 p.m.

The City of Lauderdale Lakes is a public entity subject to Chapter 119 of the Florida Statutes concerning public records. E-mail messages are covered under such law and thus subject to disclosure. All E-mails sent and received are captured by our servers and kept as public record.



CITY OF  
**FORT LAUDERDALE**

**ATTACHMENT 4**



April 8, 2015

Ms. Barbara Blake Boy, Executive Director  
Broward County Planning Council  
115 South Andrews Avenue, Room 307  
Fort Lauderdale, FL 33301

**RECEIVED**

**APR 10 2015**

**BROWARD COUNTY  
PLANNING COUNCIL**

RE:    **A) Text Amendment PCT 15-3**  
         **B) Natural Resource Map Series Amendment PCNRM 15-2**

Dear Ms. Blake Boy:

Please accept this letter in response to the proposed amendment to the Broward County Land Use Plan Text Amendment PCT 15-3 and the proposed amendment to the Natural Resource Map Series Priority Planning Area for Sea Level Rise map (Natural Resource Map Series Amendment PCNRM 15-2) tentatively scheduled for consideration by the Broward County Planning Council on May 28, 2015. Please see the following comments:

**Text Amendment PCT 15-3**

While the City is a proponent of the designation of Adaptation Action Areas (AAAs) of Regional Significance in concept, the City does not entirely concur with the proposed amendment's suggested criteria. Specifically, the City recommends that the portion of the amendment's new text "Broward County shall, *in coordination with its local municipalities*, designate Adaptation Action Areas..." be modified to read "Broward County shall, *with the support of all municipalities included within the proposed Adaptation Action Area of Regional Significance's boundary*, designate Adaptation Action Areas..." The City recommends additional clarification language be included as a criterion within the Implementation Regulations and Procedures, the proposed amendment table's qualifying criteria column, and all other relevant sections or elements, that defines support. The City recommends, at a minimum, "support" include an approved resolution from all municipalities included within the boundary of a proposed AAA of Regional Significance in support of and agreeing to inclusion within the proposed AAA of Regional Significance. The City recommends this requirement be applicable to any proposed AAA of Regional Significance, whether it is initiated by a local government or Broward County. The City recommends the same protocol for de-designation of an AAA of Regional Significance.

In addition, Text Amendment PCT 15-3 lists the Port Everglades Sand Bypass Project Area as a proposed AAA of Regional Significance. As a municipality with property located within the area of the proposed Port Everglades Sand Bypass Project Area AAA of Regional Significance boundary, please be advised of the City's position on this matter. The City of Fort Lauderdale City Commission passed Resolution No. 09-11 (attached) opposing the Port Everglades Entrance Sand Bypass Project on January 6, 2009.

**PUBLIC WORKS SUSTAINABILITY DIVISION**

101 NE 3RD AVENUE SUITE 1400, FORT LAUDERDALE, FLORIDA 33301

TELEPHONE (954) 828-6137, FAX (954) 828- 4745

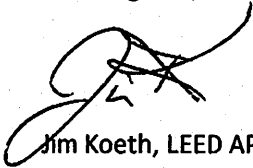
**WWW.FORTLAUDERDALE.GOV**

**Natural Resource Map Series Amendment PCNRM 15-2.**

Consistent with the City's reasoning above in response to Text Amendment PCT 15-3, the City objects to the designation of the Port Everglades Entrance Sand Bypass Project as an AAA of Regional Significance and its inclusion on the Natural Resource Map Series Priority Planning Area for Sea Level Rise map.

As collaborative partners on successful Adaptation Action Area initiatives in the past, the City looks forward to further discussion with Broward County Planning Council staff and all other associated Broward County staff with regard to these comments. Thank you for your consideration of the City's comments. Should you have any questions, please do not hesitate to contact me at (954) 828-5276 or [JKoeth@fortlauderdale.gov](mailto:JKoeth@fortlauderdale.gov).

Kind Regards,



Jim Koeth, LEED AP BD+C  
Principal Planner

Attachment: City of Fort Lauderdale Resolution No. 09-11

cc: Lee R. Feldman, ICMA-CM, City Manager  
Susanne M. Torriente, Assistant City Manager  
Hardeep Anand, Public Works Department Director, City of Fort Lauderdale  
Jenni Morejon, Sustainable Development Department Director, City of Fort Lauderdale  
Nancy Gassman, Ph.D., Assistant Public Works Department Director, City of Fort Lauderdale  
Glen Hadwen, Sustainability Manager, City of Fort Lauderdale  
Todd Okolichany, AICP, LEED Green Assoc., Principal Planner, City of Fort Lauderdale

**PUBLIC WORKS SUSTAINABILITY DIVISION**

101 NE 3<sup>RD</sup> AVENUE SUITE 1400, FORT LAUDERDALE, FLORIDA 33301  
TELEPHONE (954) 828-6137, FAX (954) 828- 4745

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CAM # 15-1028  
Exhibit 1  
26 of 64

**RESOLUTION NO. 09-11**

**A RESOLUTION OF THE CITY COMMISSION OF THE CITY  
OF FORT LAUDERDALE, FLORIDA, STRONGLY OPPOSING  
THE PORT EVERGLADES ENTRANCE SAND BYPASS  
PROJECT.**

---

WHEREAS, the city has received notice of an application made to the Florida Bureau of Beaches & Coastal Systems to obtain a permit to modify the inlet infrastructure by constructing a 7.1 acre sand trap on the north side of the Port Everglades entrance channel sufficient to facilitate the economical collection of sand materials that will be available for future mechanical bypassing to the beaches south of the inlet with sand placement along the John U. Lloyd Beach State Park shoreline; and

WHEREAS, the City has grave concerns regarding this proposed project and the negative impacts that are likely to result to the City's beaches from the creation of this Sand Bypass Project; and

WHEREAS, the project site is bounded by multi-family high-rise condominiums and single family residences to the north and the Atlantic Ocean to the east; and

WHEREAS, the application does not address the short term and long term effects that the project will have on the City's beaches and residents during both the construction and operational phases of the project; and

WHEREAS, the City's beach is an economic and recreational asset to the City and its erosion is of great concern; and

WHEREAS, staff and the City Commission have reviewed the information we have received to date on this proposed project and wish to state that it is strongly opposed to further review of this application for a Florida Bureau of Beaches & Coastal Systems permit;

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE  
CITY OF FORT LAUDERDALE, FLORIDA:**

**SECTION 1.** That the City Commission of the City of Fort Lauderdale, Florida is hereby strongly opposed to the construction of the Port Everglades Entrance Sand Bypass Project.

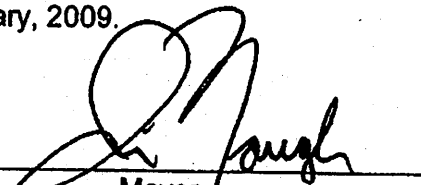
**SECTION 2.** That the City strongly requests that the construction of the Segment II beach renourishment project, which includes the City of Fort Lauderdale beaches, be completed prior to any permit being issued for the construction of the Port Everglades Entrance Sand Bypass Project.

**SECTION 3.** That the City strongly requests that the Florida Bureau of Beaches & Coastal Systems deny the application for the reasons stated herein.

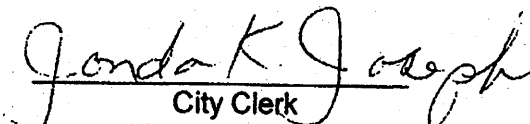
**SECTION 4.** That a copy of this resolution shall be sent to Broward County & the Florida Bureau of Beaches & Coastal Systems in Tallahassee, Florida.

**SECTION 5.** That the office of the City Attorney shall review and approve as to form all documents prior to their execution by City officials.

ADOPTED this the 6th day of January, 2009.

  
\_\_\_\_\_  
Mayor  
JIM NAUGLE

ATTEST:

  
\_\_\_\_\_  
City Clerk  
JONDA K. JOSEPH

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## ATTACHMENT 5



Environmental Protection and Growth Management Department  
**ENVIRONMENTAL PLANNING AND COMMUNITY RESILIENCE DIVISION**

115 S. Andrews Avenue, Room 329H • Fort Lauderdale, Florida 33301 • 954-519-1270 • FAX 954-519-1496

April 20, 2015

**RECEIVED**

APR 21 2015

Jim Koeth, Principal Planner  
Fort Lauderdale Public Works Sustainability Division  
101 NE 3<sup>rd</sup> Avenue, Suite 1400  
Fort Lauderdale, FL 33301

**BROWARD COUNTY  
PLANNING COUNCIL**

**RE: Proposed Broward County Land Use Plan Text Amendment PCT 15-3 and Natural Resource Map Series Amendment PCNRM 15-2**

Dear Mr. Koeth,

This correspondence is provided in response to comments received from the City of Fort Lauderdale dated April 8, 2015 pertaining to the above referenced Broward County Land Use Plan Text and Map Amendments.

County staff appreciates the City's overall support for the designation of Adaptation Action Areas and collaborations to date with the City of Fort Lauderdale to develop guidance for local jurisdictions in employing this important policy and planning tool to support climate resilience and adaptation initiatives.

As you know, Broward County has placed great emphasis on working regionally to advance climate resiliency and adaptation planning at both the local and regional scales. Since adoption of authoring language as part of the State's Growth Management Act, the County has amended its comprehensive plan to include reference to the designation of Adaptation Action Areas in the Broward County Land Use Plan, as well as the Climate and Coastal Management Elements, and specifically referenced the importance of working with municipalities in this effort.

As a regional government, the County is also cognizant of its specific responsibilities in advancing and protecting projects of regional consequence, capital infrastructure and services for which the County bears a significant social and financial responsibility, and the County's own responsibilities for regional land use planning. Concerning the city's request that the County add language that would require a resolution of municipal support in order for the County to designate Adaption Action Areas of regional significance, it is felt that such a requirement would be inconsistent with the County's duties to appropriately address land use issues of regional significance, including situations involving multiple jurisdictions. It is noted that the County will still be required to adhere to the same process as all local

Broward County Board of County Commissioners  
Mark Bogen • Beam Furr • Dale V.C. Holness • Martin David Klar • Chip LaMarca • Stacy Ritter • Tim Ryan • Barbara Sharief • Lois Wexler  
[www.broward.org](http://www.broward.org)

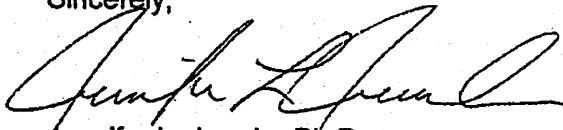
jurisdictions in requesting the designation of Adaptation Action Areas. It will also be incumbent upon the County, as with any applicant, to demonstrate that the designation is one that is in the interest of the broader community with the purpose of improving climate resilience.

Regarding the proposed Text and Map Amendments relating to the specific designation of the Sand Bypass Project Area as an Adaptation Action Area of regional significance, this project is recognized by the County to be of critical importance in improving shoreline protection for the communities of Dania Beach, Hollywood and Hallandale Beach, without impacting shoreline protection for the City of Fort Lauderdale, while also providing diverse natural systems benefits. Planning for this project has spanned decades and Broward County staff has worked closely with all affected municipalities and local communities to refine the project design in a manner that was sensitive and responsive to community interests. The County recognizes the City's opposition to the Sand Bypass Project as expressed via resolution in 2011. However, please note the above described collaborative approach has produced a final project design that has been formally supported by key stakeholders in the City of Fort Lauderdale (see attached letter dated May 2014).

We hope that these responses serve to address the City's concerns with respect to the process and proposal for Adaptation Action Area designations and that City staff may also reconsider its position, and report such to the City Commission, with respect to the Sand Bypass Project given the resilience benefits to be achieved and the potential for additional federal support and resources with its designation as an Adaptation Action Area.

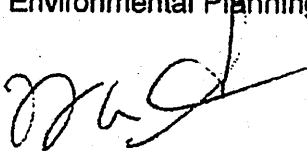
We thank the City staff for its comments and look forward to further coordination in our collective efforts to plan for community climate resilience.

Sincerely,



Jennifer L. Jurado, Ph.D.

Director, Environmental Planning and Community Resilience



Henry Snizek, Deputy Director, Environmental Protection and Growth Management Department

Cc: Lee Feldman, City Manager, City of Fort Lauderdale  
Susanne Torriente, Assistant City Manager, City of Fort Lauderdale  
Cynthia Chambers, Director, Environmental Protection and Growth Management Department  
Barbara Blake Boy, Executive Director, Broward Planning Council



**Point of Americas Condominium Apartments, Inc.**

**Board of Governors  
2100 -2200 S. Ocean Lane  
Fort Lauderdale, FL 33316-3826**

**May 19, 2014**

**Hon. John Seiler, Mayor of Fort Lauderdale, Florida**

**City Hall  
100 N. Andrews Avenue  
Fort Lauderdale, FL 33301**

**Dear Mayor Seiler:**

**RECEIVED**

**APR 21 2015**

**BROWARD COUNTY  
PLANNING COUNCIL**

Since the mid 1990's, Broward County has been proposing plans to capture large quantities of sand from north of the Port Everglades Inlet, periodically harvest that sand, and deliver it to sand deprived and eroding beaches south of the Inlet. Until two (2) years ago, Point of Americas Condominium Apartments, Inc. (POA) together with adjacent homeowners and civic organizations vigorously opposed the County's plan. This was primarily because the plan envisioned use of blasting to break up hard rock formation at depths between forty (40) to fifty (50) feet below sea level in order to create a sand trap. POA's concern centered on the effect the blasting would have on our building's structure and underground foundations, including the integrity of our wells and piping systems. We were extremely grateful that the City Council recognized our concerns and added its opposition to the proposed project.

POA engaged its own coastal engineering consultant organization and held several meetings with the County in 2012. The objective was to see if there might be a way to achieve the County's objective while simultaneously alleviating POA's concerns. A new concept was introduced. The County would abandon the use of blasting and instead would achieve its goal using conventional dredging techniques. The original sand trap area would be expanded and enlarged. It would swing more to the north and would be off shore from the POA beachfront. The depth of the trap would be reduced to between twenty-nine (29) and forty-two (42) feet. So, both sides agreed to recognize the needs of the other. There would be no blasting, but the trap would be located seaward of the POA beachfront. The County agreed to study this alternative. The study resulted in a revised plan.

On March 24, 2014, representatives of the County met with representatives of POA and our neighbor, Everglades House, and presented a new plan. A copy of that plan is attached. At the meeting, the County confirmed that the project would not result in blasting. A large cutter-suction dredge would be employed. If hard rock was encountered, the dredge would either be able to handle it, or would leave the rock in place while working around it. POA was assured that all work in constructing the sand trap would be accomplished using water based equipment and personnel, with land based functions limited to possibly some surveying. The County's expectation is that the revised plan would still capture approximately 60,000 cubic yards (cy) of sand per year, that harvesting of a 200,000 cy sand yield from the trap would take place once

every 3 or 4 years and would be completed in a 30 day time frame. The harvested sand would be loaded onto barges for transport to our neighbors in the south...all within the 30 day window.

If permitted soon, the expectation is that the excavation work will take place in 2016 or 2017 and it will last for four to six months. Unfortunately, because of regard for sea animals, the work must be accomplished during the winter months.


The County assured POA that:

- A. Even if the revised plan does not obtain the desired depth levels for the sand trap, it will not resort to blasting, but will accept the sand yields produced by the use of the conventional rock and sand removal methods.
- B. The existing rock jetty on the north side of the harbor inlet will be reconfigured so that the jetty more effectively captures the migrating sand flow from the north. This will be accomplished by a redesign of the jetty itself and by making the rock formation of the jetty more compact.
- C. The reconfiguration of the rock jetty will not only secure the existing beach dimensions north of the inlet, but the beaches may actually gain width by new sand accretion.
- D. The existing rock shoal debris in the ocean waters near POA's beach front will be cleaned up and/or removed at the County's expense. This also includes such debris or dirt that affects the beaches or oceanfront caused by the County's proposed operations.
- E. The County is also to build a barrier wall further out in the ocean, east of the proposed sand trap. This submerged wall will serve to not only block incoming coral debris, but is intended to serve as a place where rock debris caused by the sand trap operations will be dumped and held from coming ashore.
- F. We have been assured that noise levels from the County's operations will be no greater than the engine noises that currently emanate from ship traffic entering or leaving Port Everglades harbor.
- G. POA and other affected home-owners and residents will be kept informed and will be consulted as the revised Plan moves forward in the permitting process.
- H. The County plans to cooperate with POA and other affected parties in resolving potential impacts to resident use and enjoyment of their property and beaches, including vibrational impacts from dredging equipment, noise levels, debris, dirt and discoloration of the beaches and bathing waters.

Given the above considerations, POA is pleased that the County has addressed our concerns in a thorough and comprehensive manner. Our Board believes that the County has proposed a reasonable Plan which addresses our major concerns. While we are still concerned about the effect these operations will have on our resident's use and enjoyment of their property, the Board believes that the County will work with us to alleviate and/or mitigate issues that may arise.

Accordingly, POA wishes to advise you and the City Council that given the County's assurances as stated above, POA will support the proposed Sand Bypass and Redesigned Sand Trap Project as described in Consultant's Memorandum dated March 10, 2014 and other documents.

Sincerely,



Suzanne Bernard, President Board of Governors Point of Americas Condominium Apartments,  
Inc.

Cc: All Commissioners – City of Fort Lauderdale

Mr. Eric Myers, Natural Resource Administrator, Broward County

Mr. Christopher Creed, PE Olsen Associates, Inc. ✓

Mr. Michael Jenkins, PE Applied Technology and Management

Mr. Steven Weber, Everglades House

End: Memorandum – Olsen Associates, Inc. to Eric Myers dated March 10, 2014

**SECTION I**  
**AMENDMENT REPORT**  
**BROWARD COUNTY LAND USE PLAN**  
**PROPOSED AMENDMENT PCNRM 15-2**

**(NATURAL RESOURCE MAP SERIES -  
PRIORITY PLANNING AREAS FOR SEA LEVEL RISE MAP)**

**RECOMMENDATIONS/ACTIONS**

**DATE**

**I. Planning Council Staff Transmittal Recommendation**

May 19, 2015

It is recommended that the proposed amendment to the Broward County Natural Resource Map Series – Priority Planning Areas for Sea Level Rise Map be approved.

**II. Planning Council Land Use/Trafficways Committee Recommendation**

May 28, 2015

Approval per Planning Council staff transmittal recommendation.

**III. Planning Council Transmittal Recommendation**

May 28, 2015

Approval per Planning Council staff transmittal recommendation. (Vote of the board; Unanimous: 16-0; Blattner, Castillo, de Jesus, DiGiorgio, Friedel, Gomez, Graham, Grosso, Kiar, Long, Mack, McColgan, Parness, Ryan, Stermer and Castro)

**IV. County Commission Transmittal Recommendation**

June 23, 2015

Approval per Planning Council transmittal recommendation.

**SECTION II**  
**AMENDMENT REPORT**  
**PROPOSED AMENDMENT PCNRM 15-2**

**BACKGROUND**

On February 12, 2013, the Broward County Board of County Commissioners adopted the "Priority Planning Areas for Sea Level Rise" map. **See Attachment 1.** This map has been utilized to implement several policies in the Broward County Land Use Plan (BCLUP) related to climate change, including the review of proposed land use plan amendments per Policy A.03.05, which states in part that "Broward County shall evaluate plan amendments within Priority Planning Areas for Sea Level Rise and strongly discourage those amendments which would place additional residential and non-residential development at risk of flooding from sea level rise."

In addition, Policy A.03.06 currently states that "Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas, per Florida State Law, using the Priority Planning Areas for Sea Level Rise map as a basis for identifying areas especially vulnerable to sea level rise, in order to enhance the funding potential of infrastructure adaptation projects and develop policies for adaptation."

In this regard, on October 28, 2014, the Broward County Board of County Commissioners directed the Broward County Environmental Planning and Community Resilience Division to initiate an amendment to the "Priority Planning Areas for Sea Level Rise" map to designate the Port Everglades Sand Bypass project area as an Adaptation Action Area (AAA) of regional significance. **See Attachments 2 and 3.**

The **Port Everglades Sand Bypass** project area is the first AAA being proposed by Broward County for such designation. Designation as an AAA will elevate the importance of this project as a critical shoreline resilience strategy, which is reflective of Broward County's commitment to shoreline protection and beach preservation along its extensive coastline. The project is of critical importance as the Port Everglades navigational inlet interrupts the natural southern migration of sand thereby resulting in chronic sand starvation along the shoreline south of the inlet. The Sand Bypass project will mitigate the adverse effects of the inlet and serve to reduce storm surge, protect infrastructure, preserve habitat and nesting areas for threatened and endangered species, and increase the potential for federal permitting and funding support.

Per the Broward County Commission's October 28, 2014, action, the BCLUP text is also being amended to create a process and implementation criteria for designating AAA's of regional significance, as well as providing a method for de-designation of areas that have successfully mitigated the effects of sea level rise based on adaptation strategies, or changes in land use, community priorities, or other such considerations have occurred (see corresponding text amendment **PCT 15-3**).

### **BACKGROUND (continued)**

In addition, the current "Priority Planning Areas for Sea Level Rise" map includes the "more likely" inundation layer, which provides a certainty level of between 75% and 100% that the depicted areas would be at risk of inundation under a two (2) foot sea level rise scenario, based on the compact vulnerability analysis, as soon as 2060. **See Attachment 1.** The "Priority Planning Areas for Sea Level Rise" map is proposed to add the "possible" inundation layer to the map, which would also depict those areas within the county with a less likely certainty level of between 25% and 74.9%. Therefore, the map as proposed would include both the "more likely" and the "possible" inundation layers, which would depict those areas within the county with a certainty level of between 25% and 100%. **See Attachment 2.** Planning Council staff notes that the "possible" inundation layer was inadvertently excluded from the current "Priority Planning Areas for Sea Level Rise" map when it was adopted by the Broward County Board of County Commissioners in February of 2013. **See Attachment 3.**

### **PUBLIC OUTREACH**

The Planning Council staff sent all municipal mayors, managers and planning directors written notification of the proposed map amendment and solicited comments. Comments have been received from the cities of Lauderdale Lakes and Fort Lauderdale:

- **Lauderdale Lakes** has no objection to the proposed amendment. **See Attachment 4.**
- **Fort Lauderdale** objects to the designation of the Port Everglades Sand Bypass project area as an Adaptation Action Area (AAA) of regional significance, as it does not address potential short- and long-term negative effects the project may have on the City's beaches and residents during both the construction and operational phases of the project. **See Attachment 5.**

The Broward County Environmental Planning and Community Resilience Division states that this project is of critical importance in improving shoreline protection for the cities of Dania Beach, Hollywood and Hallandale Beach, without impacting shoreline protection for Fort Lauderdale. Further, Broward County has worked closely with all affected municipalities and local communities, and has produced a final project design that is sensitive and responsive to community interests, and is formally supported by key stakeholders in the City of Fort Lauderdale. The Port Everglades Sand Bypass project will help to achieve climate resilience and natural systems benefits, as well as provide the potential for additional federal support and resources. **See Attachment 6.**



**SECTION III**  
**AMENDMENT REPORT**  
**PROPOSED AMENDMENT PCNRM 15-2**

**PLANNING ANALYSIS**

The "Priority Planning Areas for Sea Level Rise" map is intended to begin to focus on areas that are potentially vulnerable to sea level rise, and outlines priority planning locations that may be directly impacted by sea level rise due to their location and tidal influence. Further, the map is utilized to implement several policies in the Broward County Land Use Plan (BCLUP), including the review of proposed BCLUP amendments per Policy A.03.05, to determine if areas proposed for development or redevelopment are at risk of flooding from sea level rise.

The purpose of this amendment is to:

- 1) designate the Port Everglades Sand Bypass project area as an Adaptation Action Area (AAA) of regional significance, in accordance with Policy A.03.06; and
- 2) include both the "possible" (25-74.9%) and "more likely" (75-100%) inundation layers, which will depict a total certainty level of between 25% and 100% that those areas of the county would be at risk of inundation under a two (2) foot sea level rise scenario, as soon as 2060.

For clarification, the matter of implementation of the map in the review of BCLUP goals, objectives and policies is for planning purposes only. Depiction of an area on this map does not preclude or prohibit development vulnerable to sea level rise, however, the County will consider potential mitigation and/or adaptation strategies within the affected area.

A digital version of the map is available and creates the ability for interested parties and municipalities to zoom in on particular areas.

In the future, the map may be updated and amended based on additional data and improved mapping and modeling information, for the designation of additional AAA's, or for the de-designation of existing AAA's that no longer meet the criteria for AAA status.

Planning Council staff recognizes the City of Fort Lauderdale's objection to this amendment; however, staff finds that the proposal is consistent with the County's role and responsibilities for countywide and regional land use planning issues and that the proposed amendment to the "Priority Planning Areas for Sea Level Rise" map specifically furthers BCLUP Policy A.03.06 regarding the utilization of Adaptation Action Areas as a critical shoreline resilience strategy to reduce storm surge, protect infrastructure, preserve habitat and nesting areas for threatened and endangered species, and increase the potential for additional federal support and resources. Therefore, Planning Council staff recommends approval of the proposed amendment.

**SECTION IV**  
**AMENDMENT REPORT**  
**PROPOSED AMENDMENT PCNRM 15-2**

**ATTACHMENTS**



1. Current "Priority Planning Areas for Sea Level Rise" Map
2. Proposed "Priority Planning Areas for Sea Level Rise" Map
3. Correspondence from Henry Sniezek, Deputy Director, Broward County Environmental Protection and Growth Management Department and Dr. Jennifer Jurado, Director, Broward County Environmental Planning and Community Resilience, to Barbara Blake Boy, Executive Director, Broward County Planning Council, dated February 27, 2015
4. Email correspondence from Fernando Leiva, AICP, Development Services Manager and Principal Planner, City of Lauderdale Lakes, to Deanne Von Stetina, AICP, Director of Planning, Broward County Planning Council, dated March 31, 2015
5. Correspondence from Jim Koeth, LEED AP BD+C, Principal Planner, Public Works Sustainability Division, City of Fort Lauderdale, to Barbara Blake Boy, Executive Director, Broward County Planning Council, dated April 8, 2015
6. Correspondence from Jennifer L. Jurado, Ph.D., Director, Broward County Environmental Planning and Community Resilience, and Henry Sniezek, Deputy Director, Broward County Environmental Protection and Growth Management Department, to Jim Koeth, Principal Planner, Fort Lauderdale Public Works Sustainability Division, dated April 20, 2015

(The attached maps are for illustrative purposes and to conserve resources. Digital copies of the maps are available online as part of the agenda materials.)





### Legend

-  Sand Bypass Adaptation Action Area
-  Priority Planning Areas

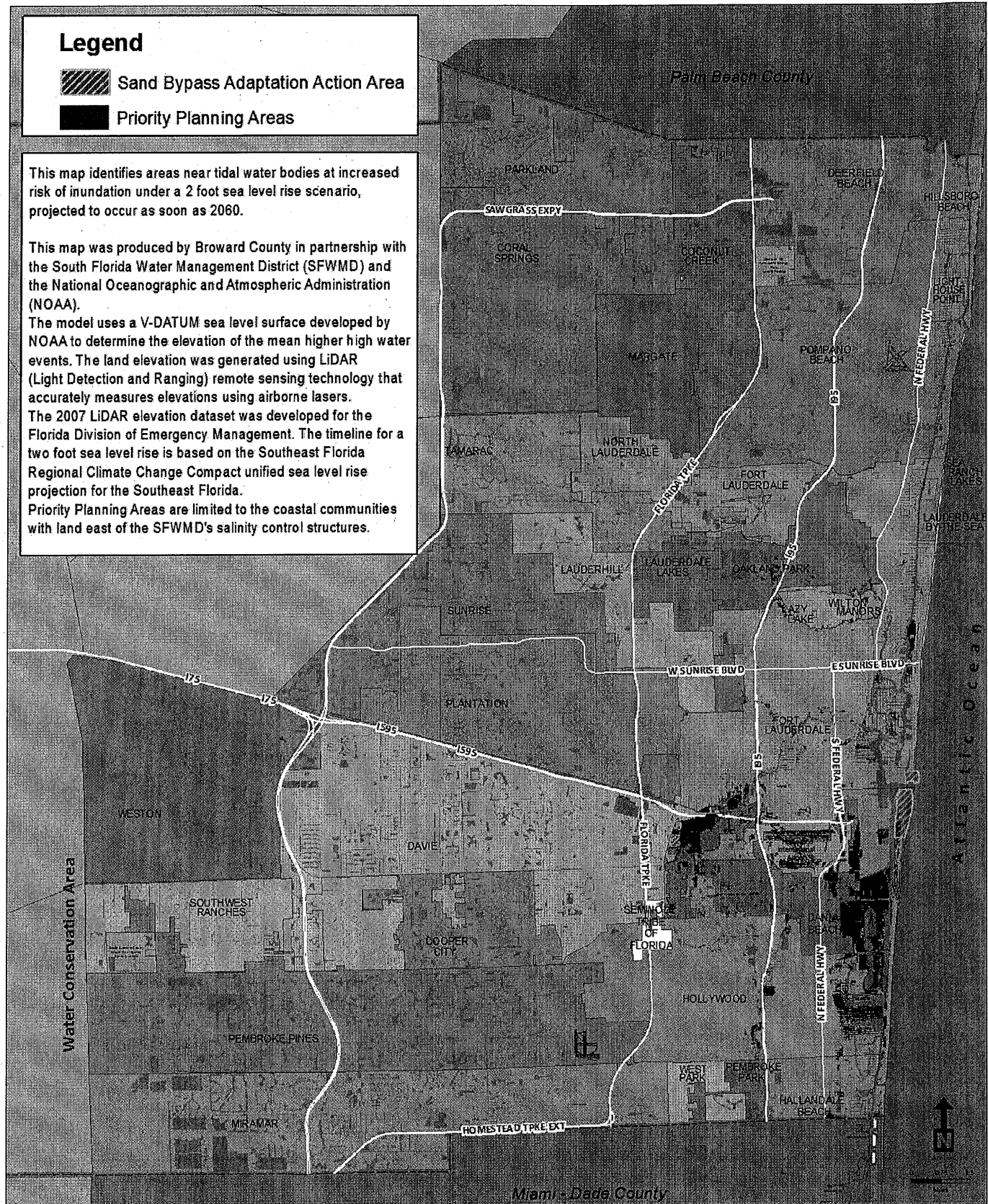
This map identifies areas near tidal water bodies at increased risk of inundation under a 2 foot sea level rise scenario, projected to occur as soon as 2060.

This map was produced by Broward County in partnership with the South Florida Water Management District (SFWMD) and the National Oceanographic and Atmospheric Administration (NOAA).

The model uses a V-DATUM sea level surface developed by NOAA to determine the elevation of the mean higher high water events. The land elevation was generated using LiDAR (Light Detection and Ranging) remote sensing technology that accurately measures elevations using airborne lasers.

The 2007 LiDAR elevation dataset was developed for the Florida Division of Emergency Management. The timeline for a two foot sea level rise is based on the Southeast Florida Regional Climate Change Compact unified sea level rise projection for the Southeast Florida.

Priority Planning Areas are limited to the coastal communities with land east of the SFWMD's salinity control structures.





## ATTACHMENT 3

ENVIRONMENTAL PROTECTION and GROWTH MANAGEMENT DEPARTMENT  
**Environmental Planning and Community Resilience Division**  
Mailing Address: 115 S. Andrews Avenue, Room 329H, Fort Lauderdale, FL 33301  
954-519-1270 • FAX 954-519-1496

**RECEIVED**

FEB 27 2015

# MEMO

**TO:** Barbara Blake Boy, Executive Director  
Broward County Planning Council

**FROM:** Henry Sniezek, Deputy Director  
Environmental Protection and Growth Management Department

Dr. Jennifer Jurado, Director  
Environmental Planning and Community Resilience Division

**SUBJECT:** Revisions to the Adaptation Action Area Policies and Priority Planning for Sea Level Rise Map, and Designation of the Port Everglades Sand Bypass Project Area as an Adaptation Action Area.

**DATE:** February 27, 2015

**BROWARD COUNTY  
PLANNING COUNCIL**

The Environmental Planning and Community Resilience Division, per the October 28, 2014 direction from the Broward County Board of County Commissioners, submit for your consideration and advancement the following policy and map amendments to the Broward County Land Use Plan. It is noted that companion amendments to the Broward County Comprehensive Plan are being process separately by County staff, but are attached for your information.

Broward County was the first local government to include Adaptation Action Area (AAA) language in a Comprehensive Plan following enactment of AAAs in Florida Statutes in 2011. We now seek to refine the original policy language and make a first AAA designation. The proposed updates to the County's Comprehensive Plan and Land Use Plan regarding Adaptation Action Areas aim to accomplish three goals:

- Create a process and criteria for the County to designate Adaptation Action Areas of Regional Significance
- Designate the Port Everglades Sand Bypass Project Area
- Update the Priority Planning Area for Sea Level Rise Map

The County is in the unique position to facilitate the coordination AAA designations by local governments to ensure that adaptation strategies and infrastructure investments utilized will create benefits that can be realized throughout the County. The County can provide recognition to a local government AAA designation, by including the AAA on the Priority Planning Area for Sea Level Rise Map as an Adaptation Action Areas of Regional Significance. To achieve this recognition by the County and Planning Council, the applicant will be asked to describe the area's vulnerabilities and how they will be exacerbated by climate change or sea level rise within a 50-year planning horizon, document all secondary criteria met, and describe how the proposed strategies, policy and/or infrastructure improvements will reduce risk and increase the region's resilience to

climate impacts.

Broward County proposes designation of the Port Everglades Entrance Sand Bypass Project area footprint as an Adaptation Action Area (AAA), to elevate the importance of, and federal support for, this project as a critical shoreline resilience strategy for Broward County. Shoreline protection and beach preservation are identified among the most pressing climate resiliency strategies for Broward County as reflected in Board-adopted policies, the Broward County Climate Change Action Plan, the Southeast Florida Regional Climate Action Plan, and Broward County's comprehensive plan. This prominent County Commission priority is reflective of the County's extensive coastline and the recognized importance of beaches to reducing storm surge, protecting infrastructure, and as critical habitat for threatened and endangered species.

Also, it is requested that the Priority Planning Area for Sea Level Rise Map in the Broward County Land Use Plan be updated to include the "Possible" inundation layer from the compact vulnerability analysis (25-74.9% certainty). The current PPA map only includes the "More Likely" inundation 2 foot layer of 75-100% certainty. Both were intended to be included in 2013 LUP map, combined and shown in one color (purple). We are still restricting the projection to the tidally influenced (eastern) portions.

Attached please find:

- Adaptation Action Areas, 2015 Comprehensive Plan and Land Use Plan Policy Updates
- Revised Priority Planning Area for Sea Level Rise Map\*
- Sand Bypass and Coastal Resilience, Proposed Adaptation Action Area Designation Briefing Document

\* The revised Priority Planning Area for Sea Level Rise Map (attached) also includes the proposed Port Everglades Sand Bypass Project Area AAA designation.

Adaptation Action Area – 2015  
Comprehensive Plan and Land Use Plan update

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**Broward County Land Use Plan**

**POLICY A.03.06**

~~Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas, per Florida State Law, using the Priority Planning Areas for Sea Level Rise Map as a basis for identifying areas especially vulnerable to sea level rise, in order to enhance the funding potential of infrastructure adaptation projects and develop policies for adaptation.~~

Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAAs), per Florida State Law, in order to:

- a. Identify areas of regional significance that are vulnerable to the impacts of rising sea level;
- b. Identify and implement adaptation policies to increase community resilience; and,
- c. Enhance the funding potential of infrastructure adaptation projects.

**POLICY A. 03.07**

Broward County shall update climate related policies and maps, including the Priority Planning Areas for Sea Level Rise Map, in the Land Use Plan with best available data, every 5 years or as available, including findings of the Broward County and USGS joint Climate Change Inundation Modeling effort, which seeks to achieve a better understanding of the impacts of climate change and rising sea level on the County's water supplies, drainage and flood control systems.

**IMPLEMENTATION REGULATIONS AND PROCEDURES (section 4, part D)**

**13. CRITERIA FOR DESIGNATING ADAPTATION ACTION AREAS OF REGIONAL SIGNIFICANCE**

As consistent with POLICY A.03.06 of the Broward County Land Use Plan, Adaptation Action Areas may be designated by a local government in order to identify areas vulnerable to sea level rise, enhance the funding potential of infrastructure adaptation projects and implement policies for adaptation.

To be eligible for Adaptation Action Area of Regional Significance designation the applicant must clearly detail how vulnerabilities identified in the proposed Adaptation Action Area will be exacerbated by climate change or sea level rise within a 50-year planning horizon. Additionally, the proposed Adaptation Action Area must meet at least one of the following criteria:

- a. Areas which experience tidal or coastal flooding;
- b. Areas which have a hydrologic connection to coastal waters;

- c. Locations which are within areas designated as evacuation zones for storm surge;
- d. Areas vulnerable to flash floods and severe storm water runoff or coastal erosion; or
- e. Areas vulnerable to other predicted impacts of climate change and sea level rise where management strategies, infrastructure investments, and planning decisions can help to mitigate the magnitude or severity of future climate impacts.

Local governments may apply for county designation of an Adaptation Action Area of Regional Significance within the Broward County Land Use Plan if the identified problem(s) conform(s) with one or more of the criteria identified above, or additional demonstration of climate vulnerability is provided. In addition, proposed adaptation strategies for the designated area should demonstrate investments and benefits of regional significance. The Unified Sea Level Rise Projection for Southeast Florida and the Broward County Priority Planning Area Map may serve as reference materials in review of the request. Notice submitted to the Planning Council should include:

- a. The geographical area under consideration;
- b. Documentation of the issue(s) or vulnerability of the area;
- c. A description of strategies, policy and/or infrastructure improvements proposed;
- d. Explanation of how these solutions will reduce risk and increase the area's resilience to climate impacts.

County staff will review and issue a joint recommendation pertaining to the requested Adaptation Action Area of Regional Significance designation. No fee will be charged for review of the proposed Adaptation Action Area designations. The Broward County Commission or the Broward County Planning Council may also initiate an application for Adaptation Action Area designation. Applications may also be submitted for de-designation by the original applicant, the Broward County Planning Council, or the Broward County Commission, based on adaptation investments, reduction of vulnerability, changes in community priorities, cost-benefit considerations, changes in land use, or other environmental, economic, or social considerations which support de-designation.

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

Ref No on SLR Map	AAA Name	Applicant	Qualifying Criteria Met	Strategies Proposed	Expected Benefits
1	Port Everglades Sand Bypass Project Area	Broward County	- Sea Level Rise - Storm Surge - Coastal Erosion	- Sand bypass at Port Everglades - Beach renourishment - Shoreline management	- Protection of critical infrastructure - Protection of public and private property - Preservation of habitat for



					threatened and endangered species - Reduced shoaling in the navigation channel - Maintenance of recreational opportunities at John U. Lloyd Beach State Park - Increased potential of federal permitting and funding support
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## Broward County Comprehensive Plan

### CLIMATE CHANGE ELEMENT

#### Policy 19.3.13.

~~Broward County shall by 2017, work with its local municipalities to designate Adaptation Action Areas, per Florida State Law, using the Priority Planning Areas for Sea Level Rise Map as a basis for identifying areas especially vulnerable to sea level rise, in order to develop policies for adaptation and enhance the funding potential of infrastructure adaptation projects.~~

Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAA), per Florida State Law, in order to:

- 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 19.3.7.

Broward County shall continue to improve analysis and mapping capabilities for identifying areas of the County vulnerable to sea level rise, tidal flooding, and other impacts of climate change. Activities shall include acquisition of ~~Acquire~~ increasingly accurate Light Detection And Ranging (LiDAR) data, or other state-of-the-art elevation data, and other necessary modeling data and programs every 5 years to update the Priority Planning Area for Sea Level Rise Map in the County's Land Use Plan and improve available information needed to make informed decisions regarding adapting to the impacts of climate change.

Policy 19.3.11.

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

- a) Continuing the appropriate use of beach nourishment and pursuit of 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.

COASTAL MANAGEMENT ELEMENT

Policy 10.2.6

~~Broward County shall by 2017, work with its local municipalities to designate Adaptation Action Areas, per Section 163.3164 F.S. using the Priority Planning Areas for Sea Level Rise Map as a basis for identifying areas especially vulnerable to sea level rise, in order to develop policies for adaptation and enhance the funding potential of infrastructure adaptation projects.~~

Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAA), per Florida State Law, in order to:

- 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 10.4.3.

Broward County shall actively pursue sand bypass at the Port Everglades Navigational Inlet as a preferred beach management strategy and a priority community climate resiliency initiative.

CAPITAL IMPROVEMENTS ELEMENT

Policy 14.2.3.

~~Broward County shall by 2017, work with its local municipalities to designate Adaptation Action Areas, per Florida State Law, using the Priority Planning Areas for Sea Level Rise Map as a basis for identifying areas especially vulnerable to sea level rise, in order to develop policies for adaptation and enhance the funding potential of infrastructure adaptation projects.~~

Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAA), per Florida State Law, in order to:

- 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.

#### CONSERVATION ELEMENT

##### Policy 13.8.23.

~~Broward County shall by 2017, work with its local municipalities to designate Adaptation Action Areas, per Section 163.3164(1) F.S., using the Priority Planning Areas for Sea Level Rise Map as a basis for identifying areas especially vulnerable to sea level rise, in order to develop policies for adaptation and enhance the funding potential of infrastructure adaptation projects.~~

Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAA), per Florida State Law, in order to:

- 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.

## INTERGOVERNMENTAL COORDINATION ELEMENT

### Policy 15.3.2a.

Broward County shall ~~work with its local municipalities to designate Adaptation Action Areas, per Florida State Law, using the Priority Planning Areas for Sea Level Rise Map of 9 to 24 inches from 2010 to 2060~~ and encourage local municipalities to develop policies to improve resilience to coastal and inland flooding, salt water intrusion, and other related impacts of climate change and sea level rise in their Comprehensive Plans, Sustainability Action Plans, Vision Plans, Stormwater Master Plans, Adaptation Action Areas Plans, Climate Change Plans and other city-wide plans.

### Policy 15.3.2b.



Broward County shall, in coordination with its local municipalities, designate Adaptation Action Areas (AAA), per Florida State Law, in order to:

- 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.

**Legend**

-  Sand Bypass Adaptation Action Area
-  Priority Planning Areas

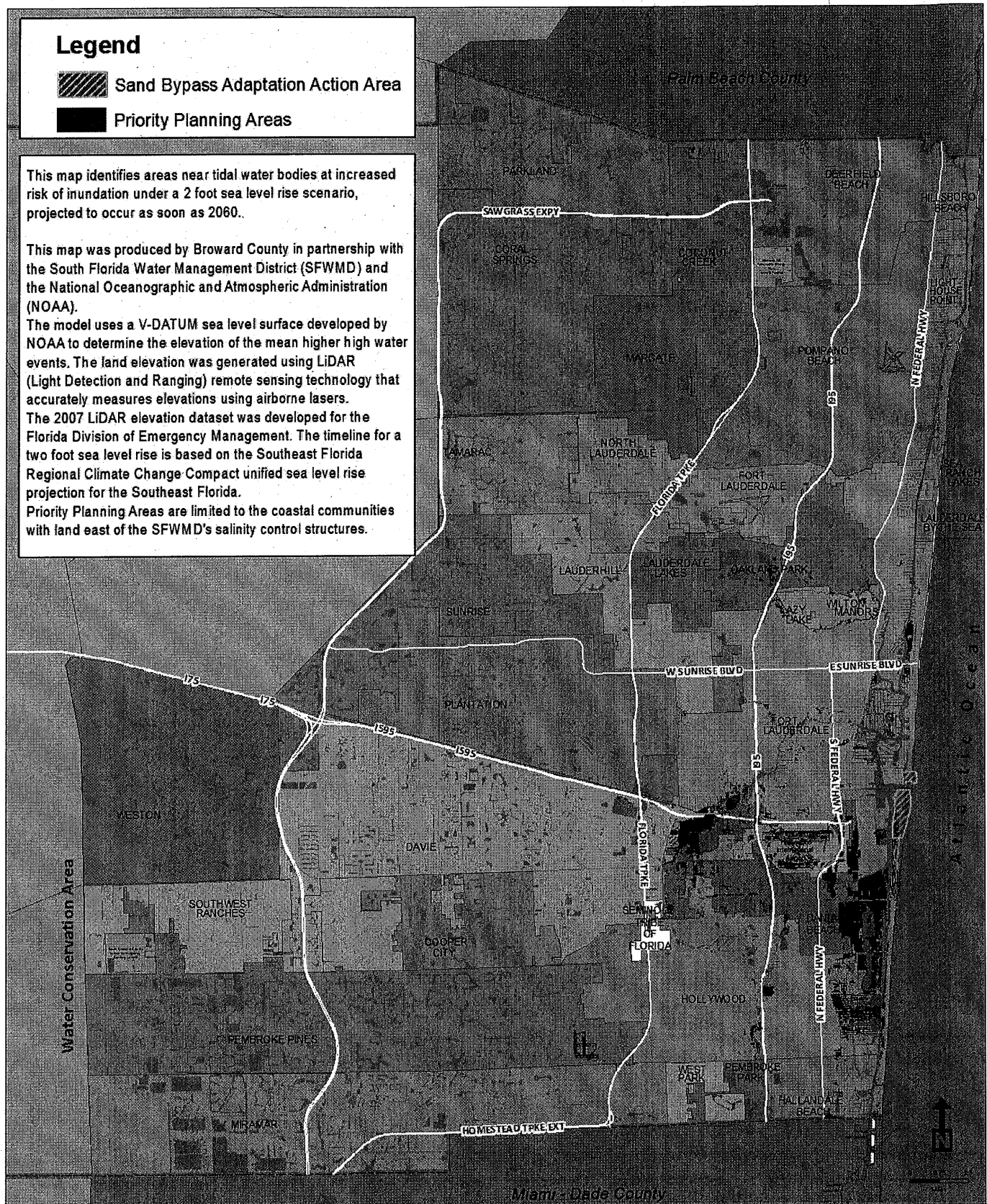
This map identifies areas near tidal water bodies at increased risk of inundation under a 2 foot sea level rise scenario, projected to occur as soon as 2060.

This map was produced by Broward County in partnership with the South Florida Water Management District (SFWMD) and the National Oceanographic and Atmospheric Administration (NOAA).

The model uses a V-DATUM sea level surface developed by NOAA to determine the elevation of the mean higher high water events. The land elevation was generated using LIDAR (Light Detection and Ranging) remote sensing technology that accurately measures elevations using airborne lasers.

The 2007 LIDAR elevation dataset was developed for the Florida Division of Emergency Management. The timeline for a two foot sea level rise is based on the Southeast Florida Regional Climate Change Compact unified sea level rise projection for the Southeast Florida.

Priority Planning Areas are limited to the coastal communities with land east of the SFWMD's salinity control structures.



## **Sand Bypass and Coastal Resilience Proposed Adaptation Action Area Designation Briefing Document**

Prepared by the Environmental Planning and Community Resilience Division  
October 14, 2014

### **Implementation of Sand Bypass Project as Adaptation Action Area**

In 2011, the Florida Legislature passed the Community Planning Act (CPA 2011) providing for the definition and optional designation of Adaptation Action Areas within a Coastal Management Element of a local government comprehensive plan. The intent of such a designation would be to address coastal hazards and potential impacts to sea level rise in a specific location by pursuing adaptation planning within the designated area and prioritizing funding for infrastructure improvements. To elevate the importance of, and federal support for, the Port Everglades Sand Bypass Project as a critical shoreline resilience strategy for Broward County, staff proposes the designation of the Sand Bypass project area as an Adaptation Action Area.

### **Summary of Objectives**

This memorandum recommends the designation of the Port Everglades Entrance Sand Bypass Project area as an Adaptation Action Area (AAA) to achieve the following objectives:

- Increase the resilience of critical natural resources and infrastructure
- Address an erosional hotspot area along the shoreline
- Fortify storm protection for critical infrastructure and valuable property including the US Coast Guard Station, port facilities and over \$345 million in property (within the AAA)
- Reduce shoaling in the navigation channel
- Preserve habitat and nesting areas for three endangered and four threatened species in one of the most highly developed urban areas in the state
- Maintain opportunity for public outdoor recreation at John U. Lloyd Beach State Park, serving over half a million residents and visitors annually
- Advance towards achieving the priority goals set in Broward County's Climate Change Action Plan
- Increase potential federal permitting and funding support based on the federal administration's resiliency objectives.

### **Critical Importance of Port Everglades Entrance Sand Bypass Project for Community Resilience**

The navigational inlet at Port Everglades is documented to interrupt the natural alongshoremigration of sand from the north side of the inlet (Segment II) to the south side (Segment III). Sand that would generally be transported south alongshore instead accumulates

within the channel itself and a rubble shoal north of the channel, or is transported offshore. The lack of sand supply to the south side has resulted in significant chronic sand starvation along the length of the segment III beach, thus reducing its storm protection capacity and resilience to surge and wave action. Additionally, shoaling within the Federal navigation channel (buildup of sand on the channel bottom) is approaching problematic levels compared to historical rates of accumulation, thereby increasing maintenance costs to avoid navigation hazards. As a remedy and long-term shoreline resilience strategy, the Port Everglades Sand Bypass Project is proposed as a means for mitigating for the effects of the Channel Inlet on the downstream shoreline. The project is proposed to include a sand trap on the north side where sand will naturally collect and then be excavated every two-to-three years for the purpose of renourishing the beach along the south side of the inlet (Figure 1). This process is known as artificial sand bypassing.

Sand bypassing at Port Everglades Inlet will have both physical and economic benefits to sand management at the inlet. The primary benefit of the project is the reestablishment of north to south sediment transport across the inlet. The project is expected to provide a volume of sand, on average, that is essentially equivalent to the average demand south of the inlet within the area of inlet influence. Bypassing would reduce the need to import sand from remote sand sources for future renourishment of Segment III and reduce and/or eliminate sand shoaling within the Port Everglades Federal navigation channel. Recent studies have demonstrated sand bypassing to be economically feasible compared to importing other sources of beach compatible sediments. It is well documented that offshore sediment sources suitable for beach restoration in Broward County are almost depleted, and the location and economics of alternate sources for future beach project requirements are uncertain. Therefore, sand bypassing at Port Everglades is needed to address the adverse effects of the inlet upon the Segment III shoreline and as a regional sediment management system.

The proposed project and designation are consistent with the regional resilience strategy for Southeast Florida. The proposed project serves to strengthen regional resilience through 1) a reduction in financial and physical losses (Regional Climate Action Plan (RCAP) Goal: Sustainable Communities) through storm protection provided by a regularly nourished beach, 2) implementation of management programs designed to protect natural systems and improve their capacity for climate adaptation (RCAP Goal: Natural Systems) through habitat restoration and preservation 3) a reduction in fuel consumption (RCAP Goal: Energy and Fuel) by nourishing with local bypassed sand rather than truck-hauling or dredging sand from far distance sources 4) providing a more resilient natural and built physical environment in light of climate change (RCAP Goal: Risk and Emergency Management) by mitigating risk of storm damage and vulnerability to sea level rise and mitigating public safety hazards by preventing shoaling in the navigation channel and preserving emergency response access through the channel by the USCG and on the beach by local emergency responders.

This shoreline resilience strategy is also well-aligned with draft recommendations being advanced to the President by the State, Local, and Tribal Leaders Task Force on Climate Resilience and Preparedness which include:



1. Increased support for climate resilience as part of coastal infrastructure planning and investments, especially support for sea-level rise and coastal erosion research and planning and implement response strategies that address both current and future impacts of climate change on coastal ecosystems and communities
2. Promotion and prioritization of green and natural infrastructure, inclusive of beaches
3. Expanded use of regional sediment management (RSM) programs to address coastal erosion threats in a comprehensive and cost-effective manner, focusing on the support of coastal sediment supplies and movement, beneficial reuse of dredged harbor sands, and implementation of innovative beach retention technologies, including nature-based "soft" armoring.

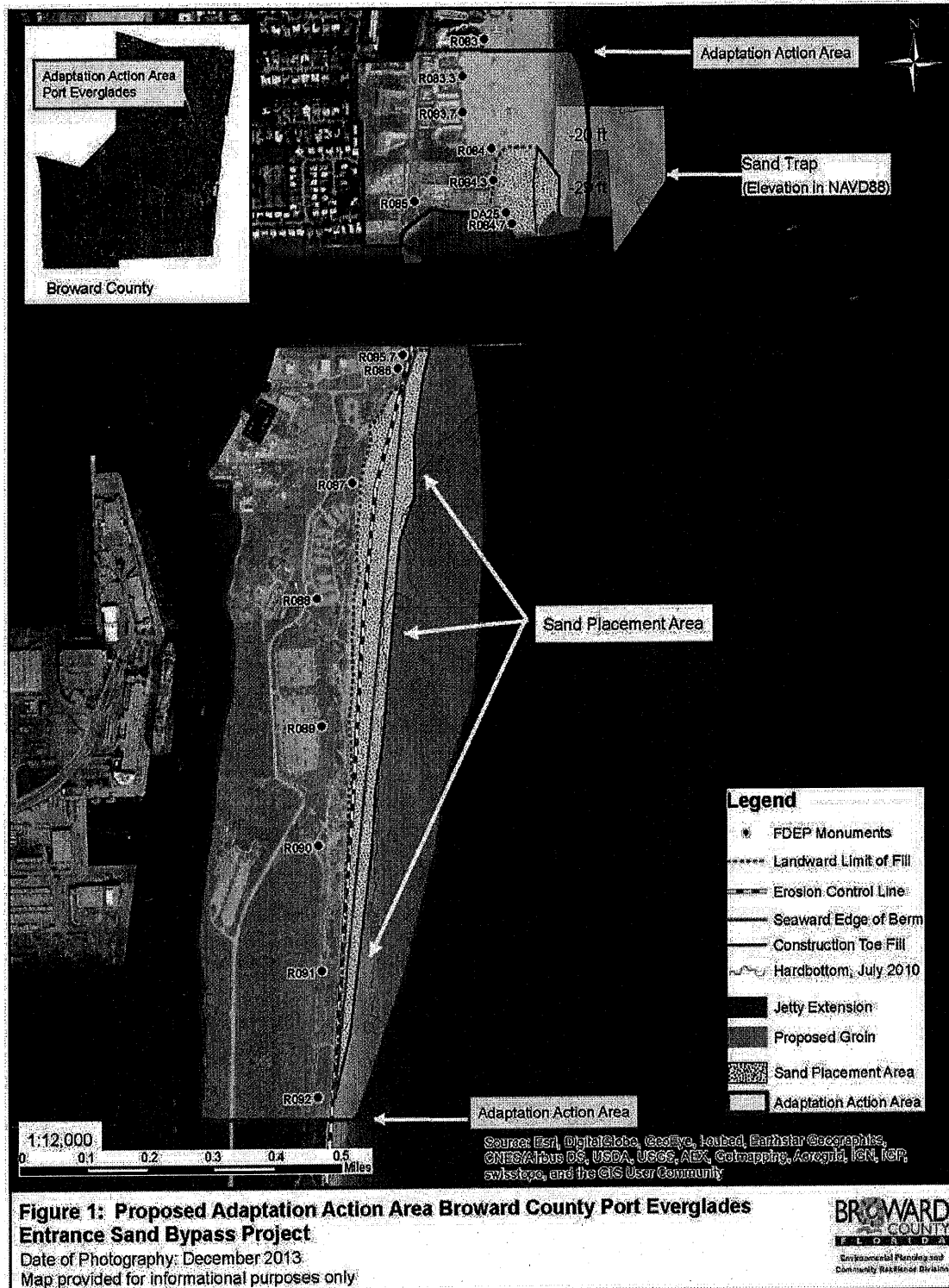
#### Implementation of Sand Bypass Project as Adaptation Action Area

In 2011, the Florida Legislature passed the Community Planning Act (CPA 2011), which made significant changes to the state's growth management laws, including the addition of an optional designation of an Adaptation Action Area within a Coastal Management Element of a local government comprehensive plan. This language was successfully advanced as a regional effort by partners in the 4-County Southeast Florida Regional Climate Change Compact (Compact) with the intent providing local governments with additional planning and policy tools to address coastal hazards and the potential impacts of sea level rise within vulnerable areas, to formally advance the infrastructure improvements and prioritization of funding needed to build community resilience to climate impacts.

In order to integrate adaptation planning into the existing state framework and coordinate adaptation efforts statewide, the Florida Department of Economic Opportunity (DEO) initiated a Section 309 Strategy titled "Community Resiliency: Planning for Sea Level Rise," funded by the National Oceanographic and Atmospheric Administration (NOAA). As a lead author of the enabling language and partner in the Compact, Broward County and the City of Fort Lauderdale were invited to partner in a pilot project in the identification of Adaptation Action Areas within a municipal setting and the development of general guidance to aid local governments interested in employing Adaptation Action Area designations in furtherance of community resilience.

To continue the implementation of adaptation strategies, Broward County included the language for Adaptation Action Area designation in the Climate Change Element of the County's Comprehensive Plan in 2012. Additionally, the Coastal Management Element was recently updated to include policy language specific to Adaptation Action Areas while the County's 10-year water supply plan and other elements of the Comprehensive Plan, including the Land Use Plan, are also being updated to support the County's efforts in support of climate resilience with similar references. Regionally and state-wide there has been increasing interest in the use of Adaptation Action Areas to support diverse climate resilience strategies, ranging from stormwater retrofits to natural area conservation.





In addition to the inclusion of Adaptation Action Areas in the Broward County comprehensive plan, the City of Fort Lauderdale has also adopted Adaptation Action Area policies into the City's 2014 Comprehensive Plan and the City of Satellite Beach is undertaking a similar process. A summary of these and other local efforts was presented at a widely-attended Regional Climate Action Plan Implementation workshop hosted by the Compact on August 29, 2014, specifically focusing on Adaptation Action Area planning. This planning approach was also highlighted at the annual meeting of the Florida Shore and Beach Preservation Association in September 2014.

Broward County's participation in furthering Adaptation Action Area planning is well-aligned with the ever-increasing federal emphasis on climate resilience and preparedness. In the absence of new funding streams, it is expected that federal support for local and state projects will increasingly seek to prioritize funding for projects that not only further community resilience to climate impacts, but that are also designed to maximize the conservation and enhancement of natural systems and infrastructure. These priorities are well-established as part of the President's Climate Action Plan and are represented in the diverse program opportunities announced during this last year with increased federal support for initiatives organized around climate resilient communities and investments in green infrastructure. The Port Everglades Sand Bypass Project represents a critical resiliency strengthening measure for the Broward County community. By designating the area within the sand bypass project footprint as an Adaptation Action Area, the County will formally present the sand bypass project at Port Everglades as a keystone climate resilience strategy for Broward County.

#### Stakeholders

Community stakeholders associated with the Port Everglades Sand Bypass project include condominium associations located immediately north of the inlet and those south of John U Lloyd State Park. Agency stakeholders include the Broward County Board of County Commissioners (Port Everglades), U.S. Army Corps of Engineers (Federal navigation channel), the State of Florida (John U. Lloyd State Park), and the cities of Dania Beach and Fort Lauderdale.

#### Recommendation

Development of Adaptation Action Area designations can be accomplished through a variety of mechanisms within or authorized by a local government's Comprehensive Plan. These can include capital improvement plans, floodplain regulations, zoning and overlay zones, setbacks and buffers, transferable development rights, conservation easements, rebuilding restrictions, by comp plan amendment, resolution or ordinance, or by other planning tools. Staff recommends designation of the Sand Bypass Project Area as an Adaptation Action Area within the Broward County Land Use Plan and the Priority Planning Areas for Sea Level Rise Map.

## ATTACHMENT 4

**Von Stetina, Deanne**

---

**From:** Fernando Leiva <fernandol@lauderdalelakes.org>  
**Sent:** Tuesday, March 31, 2015 11:27 AM  
**To:** Von Stetina, Deanne  
**Cc:** Danny Holmes; Jonathan Allen; Fernando Leiva  
**Subject:** Adaption Action Areas - Proposed County Amendments

Hi Deanne-

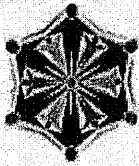
Thank you for enlisting local municipalities input in this matter. Please allow this email to serve as the City's statement of no objection to the proposed text amendment to the Broward County Land Use Plan (BCLUP) and an amendment to the Natural Resource Map Series regarding the Priority Planning Area map.

Sincerely,

Fernando Leiva

**Fernando Leiva, AICP, Assoc. AIA**

Development Services Manager and Principal Planner | Development Services



**Lauderdale Lakes**  
LIFE IN FULL COLOR

City of Lauderdale Lakes  
4300 NW 36th Street | Lauderdale Lakes, FL 33319  
V: 954-535-2496  
F: 954-731-5309  
[fernandol@lauderdalelakes.org](mailto:fernandol@lauderdalelakes.org)  
[www.lauderdalelakes.org](http://www.lauderdalelakes.org)

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**City Operating Hours**

**City Hall:** Monday - Friday 8:00 a.m. - 5:00 p.m.

**Development Services:** Monday - Friday 8:00 a.m. - 3:30 p.m.

The City of Lauderdale Lakes is a public entity subject to Chapter 119 of the Florida Statutes concerning public records. E-mail messages are covered under such law and thus subject to disclosure. All E-mails sent and received are captured by our servers and kept as public record.



April 8, 2015

Ms. Barbara Blake Boy, Executive Director  
Broward County Planning Council  
115 South Andrews Avenue, Room 307  
Fort Lauderdale, FL 33301

RECEIVED

APR 10 2015

BROWARD COUNTY  
PLANNING COUNCIL

RE:    **A) Text Amendment PCT 15-3**  
         **B) Natural Resource Map Series Amendment PCNRM 15-2**

Dear Ms. Blake Boy:

Please accept this letter in response to the proposed amendment to the Broward County Land Use Plan Text Amendment PCT 15-3 and the proposed amendment to the Natural Resource Map Series Priority Planning Area for Sea Level Rise map (Natural Resource Map Series Amendment PCNRM 15-2) tentatively scheduled for consideration by the Broward County Planning Council on May 28, 2015. Please see the following comments:

**Text Amendment PCT 15-3**

While the City is a proponent of the designation of Adaptation Action Areas (AAAs) of Regional Significance in concept, the City does not entirely concur with the proposed amendment's suggested criteria. Specifically, the City recommends that the portion of the amendment's new text "Broward County shall, *in coordination with its local municipalities*, designate Adaptation Action Areas..." be modified to read "Broward County shall, *with the support of all municipalities included within the proposed Adaptation Action Area of Regional Significance's boundary*, designate Adaptation Action Areas..." The City recommends additional clarification language be included as a criterion within the Implementation Regulations and Procedures, the proposed amendment table's qualifying criteria column, and all other relevant sections or elements, that defines support. The City recommends, at a minimum, "support" include an approved resolution from all municipalities included within the boundary of a proposed AAA of Regional Significance in support of and agreeing to inclusion within the proposed AAA of Regional Significance. The City recommends this requirement be applicable to any proposed AAA of Regional Significance, whether it is initiated by a local government or Broward County. The City recommends the same protocol for de-designation of an AAA of Regional Significance.

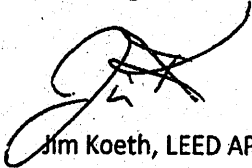
In addition, Text Amendment PCT 15-3 lists the Port Everglades Sand Bypass Project Area as a proposed AAA of Regional Significance. As a municipality with property located within the area of the proposed Port Everglades Sand Bypass Project Area AAA of Regional Significance boundary, please be advised of the City's position on this matter. The City of Fort Lauderdale City Commission passed Resolution No. 09-11 (attached) opposing the Port Everglades Entrance Sand Bypass Project on January 6, 2009.

**Natural Resource Map Series Amendment PCNRM 15-2.**

Consistent with the City's reasoning above in response to Text Amendment PCT 15-3, the City objects to the designation of the Port Everglades Entrance Sand Bypass Project as an AAA of Regional Significance and its inclusion on the Natural Resource Map Series Priority Planning Area for Sea Level Rise map.

As collaborative partners on successful Adaptation Action Area initiatives in the past, the City looks forward to further discussion with Broward County Planning Council staff and all other associated Broward County staff with regard to these comments. Thank you for your consideration of the City's comments. Should you have any questions, please do not hesitate to contact me at (954) 828-5276 or [JKoeth@fortlauderdale.gov](mailto:JKoeth@fortlauderdale.gov).

Kind Regards,



Jim Koeth, LEED AP BD+C  
Principal Planner

Attachment: City of Fort Lauderdale Resolution No. 09-11

cc: Lee R. Feldman, ICMA-CM, City Manager  
Susanne M. Torriente, Assistant City Manager  
Hardeep Anand, Public Works Department Director, City of Fort Lauderdale  
Jenni Morejon, Sustainable Development Department Director, City of Fort Lauderdale  
Nancy Gassman, Ph.D., Assistant Public Works Department Director, City of Fort Lauderdale  
Glen Hadwen, Sustainability Manager, City of Fort Lauderdale  
Todd Okolichany, AICP, LEED Green Assoc., Principal Planner, City of Fort Lauderdale

**PUBLIC WORKS SUSTAINABILITY DIVISION**

101 NE 3<sup>RD</sup> AVENUE SUITE 1400, FORT LAUDERDALE, FLORIDA 33301  
TELEPHONE (954) 828-6137, FAX (954) 828- 4745

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CAM # 15-1028  
Exhibit 1  
57 of 64

RESOLUTION NO. 09-11

**A RESOLUTION OF THE CITY COMMISSION OF THE CITY  
OF FORT LAUDERDALE, FLORIDA, STRONGLY OPPOSING  
THE PORT EVERGLADES ENTRANCE SAND BYPASS  
PROJECT.**

WHEREAS, the city has received notice of an application made to the Florida Bureau of Beaches & Coastal Systems to obtain a permit to modify the inlet infrastructure by constructing a 7.1 acre sand trap on the north side of the Port Everglades entrance channel sufficient to facilitate the economical collection of sand materials that will be available for future mechanical bypassing to the beaches south of the inlet with sand placement along the John U. Lloyd Beach State Park shoreline; and

WHEREAS, the City has grave concerns regarding this proposed project and the negative impacts that are likely to result to the City's beaches from the creation of this Sand Bypass Project; and

WHEREAS, the project site is bounded by multi-family high-rise condominiums and single family residences to the north and the Atlantic Ocean to the east; and

WHEREAS, the application does not address the short term and long term effects that the project will have on the City's beaches and residents during both the construction and operational phases of the project; and

WHEREAS, the City's beach is an economic and recreational asset to the City and its erosion is of great concern; and

WHEREAS, staff and the City Commission have reviewed the information we have received to date on this proposed project and wish to state that it is strongly opposed to further review of this application for a Florida Bureau of Beaches & Coastal Systems permit;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA:

**SECTION 1.** That the City Commission of the City of Fort Lauderdale, Florida is hereby strongly opposed to the construction of the Port Everglades Entrance Sand Bypass Project.

**SECTION 2.** That the City strongly requests that the construction of the Segment II beach renourishment project, which includes the City of Fort Lauderdale beaches, be completed prior to any permit being issued for the construction of the Port Everglades Entrance Sand Bypass Project.

**SECTION 3.** That the City strongly requests that the Florida Bureau of Beaches & Coastal Systems deny the application for the reasons stated herein.

**SECTION 4.** That a copy of this resolution shall be sent to Broward County & the Florida Bureau of Beaches & Coastal Systems in Tallahassee, Florida.

**SECTION 5.** That the office of the City Attorney shall review and approve as to form all documents prior to their execution by City officials.

ADOPTED this the 6th day of January, 2009.



\_\_\_\_\_  
Mayor  
JIM NAUGLE

ATTEST:



\_\_\_\_\_  
City Clerk  
JONDA K. JOSEPH

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## ATTACHMENT 6



Environmental Protection and Growth Management Department  
**ENVIRONMENTAL PLANNING AND COMMUNITY RESILIENCE DIVISION**  
115 S. Andrews Avenue, Room 329H • Fort Lauderdale, Florida 33301 • 954-519-1270 • FAX 954-519-1496

April 20, 2015

**RECEIVED**

Jim Koeth, Principal Planner  
Fort Lauderdale Public Works Sustainability Division  
101 NE 3<sup>rd</sup> Avenue, Suite 1400  
Fort Lauderdale, FL 33301

APR 21 2015

BROWARD COUNTY  
PLANNING COUNCIL

RE: Proposed Broward County Land Use Plan Text Amendment PCT 15-3 and Natural Resource Map Series Amendment PCNRM 15-2

Dear Mr. Koeth,

This correspondence is provided in response to comments received from the City of Fort Lauderdale dated April 8, 2015 pertaining to the above referenced Broward County Land Use Plan Text and Map Amendments.

County staff appreciates the City's overall support for the designation of Adaptation Action Areas and collaborations to date with the City of Fort Lauderdale to develop guidance for local jurisdictions in employing this important policy and planning tool to support climate resilience and adaptation initiatives.

As you know, Broward County has placed great emphasis on working regionally to advance climate resiliency and adaptation planning at both the local and regional scales. Since adoption of authoring language as part of the State's Growth Management Act, the County has amended its comprehensive plan to include reference to the designation of Adaptation Action Areas in the Broward County Land Use Plan, as well as the Climate and Coastal Management Elements, and specifically referenced the importance of working with municipalities in this effort.

As a regional government, the County is also cognizant of its specific responsibilities in advancing and protecting projects of regional consequence, capital infrastructure and services for which the County bears a significant social and financial responsibility, and the County's own responsibilities for regional land use planning. Concerning the city's request that the County add language that would require a resolution of municipal support in order for the County to designate Adaption Action Areas of regional significance, it is felt that such a requirement would be inconsistent with the County's duties to appropriately address land use issues of regional significance, including situations involving multiple jurisdictions. It is noted that the County will still be required to adhere to the same process as all local

Broward County Board of County Commissioners  
Mark Bogen • Beam Furr • Dale V.C. Holness • Martin David Kiar • Chip LaMarca • Stacy Ritter • Tim Ryan • Barbara Sharief • Lois Wexler  
[www.broward.org](http://www.broward.org)



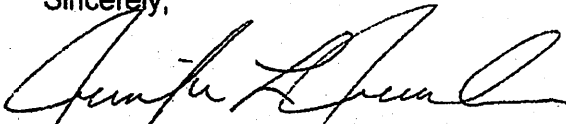
jurisdictions in requesting the designation of Adaptation Action Areas. It will also be incumbent upon the County, as with any applicant, to demonstrate that the designation is one that is in the interest of the broader community with the purpose of improving climate resilience.

Regarding the proposed Text and Map Amendments relating to the specific designation of the Sand Bypass Project Area as an Adaptation Action Area of regional significance, this project is recognized by the County to be of critical importance in improving shoreline protection for the communities of Dania Beach, Hollywood and Hallandale Beach, without impacting shoreline protection for the City of Fort Lauderdale, while also providing diverse natural systems benefits. Planning for this project has spanned decades and Broward County staff has worked closely with all affected municipalities and local communities to refine the project design in a manner that was sensitive and responsive to community interests. The County recognizes the City's opposition to the Sand Bypass Project as expressed via resolution in 2011. However, please note the above described collaborative approach has produced a final project design that has been formally supported by key stakeholders in the City of Fort Lauderdale (see attached letter dated May 2014).

We hope that these responses serve to address the City's concerns with respect to the process and proposal for Adaptation Action Area designations and that City staff may also reconsider its position, and report such to the City Commission, with respect to the Sand Bypass Project given the resilience benefits to be achieved and the potential for additional federal support and resources with its designation as an Adaptation Action Area.

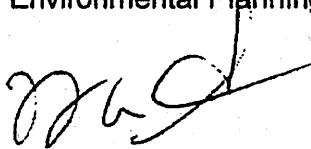
We thank the City staff for its comments and look forward to further coordination in our collective efforts to plan for community climate resilience.

Sincerely,



Jennifer L. Jurado, Ph.D.

Director, Environmental Planning and Community Resilience



Henry Snizek, Deputy Director, Environmental Protection and Growth Management Department

Cc: Lee Feldman, City Manager, City of Fort Lauderdale  
Susanne Torriente, Assistant City Manager, City of Fort Lauderdale  
Cynthia Chambers, Director, Environmental Protection and Growth Management Department  
Barbara Blake Boy, Executive Director, Broward Planning Council



## Point of Americas Condominium Apartments, Inc.

Board of Governors  
2100 -2200 S. Ocean Lane  
Fort Lauderdale, FL 33316-3826

May 19, 2014

Hon. John Seiler, Mayor of Fort Lauderdale, Florida

City Hall  
100 N. Andrews Avenue  
Fort Lauderdale, FL 33301

Dear Mayor Seiler:

**RECEIVED**

APR 21 2015

BROWARD COUNTY  
PLANNING COUNCIL

Since the mid 1990's, Broward County has been proposing plans to capture large quantities of sand from north of the Port Everglades Inlet, periodically harvest that sand, and deliver it to sand deprived and eroding beaches south of the Inlet. Until two (2) years ago, Point of Americas Condominium Apartments, Inc. (POA) together with adjacent homeowners and civic organizations vigorously opposed the County's plan. This was primarily because the plan envisioned use of blasting to break up hard rock formation at depths between forty (40) to fifty (50) feet below sea level in order to create a sand trap. POA's concern centered on the effect the blasting would have on our building's structure and underground foundations, including the integrity of our wells and piping systems. We were extremely grateful that the City Council recognized our concerns and added its opposition to the proposed project.

POA engaged its own coastal engineering consultant organization and held several meetings with the County in 2012. The objective was to see if there might be a way to achieve the County's objective while simultaneously alleviating POA's concerns. A new concept was introduced. The County would abandon the use of blasting and instead would achieve its goal using conventional dredging techniques. The original sand trap area would be expanded and enlarged. It would swing more to the north and would be off shore from the POA beachfront. The depth of the trap would be reduced to between twenty-nine (29) and forty-two (42) feet. So, both sides agreed to recognize the needs of the other. There would be no blasting, but the trap would be located seaward of the POA beachfront. The County agreed to study this alternative. The study resulted in a revised plan.

On March 24, 2014, representatives of the County met with representatives of POA and our neighbor, Everglades House, and presented a new plan. A copy of that plan is attached. At the meeting, the County confirmed that the project would not result in blasting. A large cutter-suction dredge would be employed. If hard rock was encountered, the dredge would either be able to handle it, or would leave the rock in place while working around it. POA was assured that all work in constructing the sand trap would be accomplished using water based equipment and personnel, with land based functions limited to possibly some surveying. The County's expectation is that the revised plan would still capture approximately 60,000 cubic yards (cy) of sand per year, that harvesting of a 200,000 cy sand yield from the trap would take place once

every 3 or 4 years and would be completed in a 30 day time frame. The harvested sand would be loaded onto barges for transport to our neighbors in the south...all within the 30 day window.

If permitted soon, the expectation is that the excavation work will take place in 2016 or 2017 and it will last for four to six months. Unfortunately, because of regard for sea animals, the work must be accomplished during the winter months.

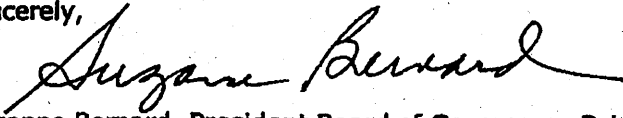
The County assured POA that:

- A. Even if the revised plan does not obtain the desired depth levels for the sand trap, it will not resort to blasting, but will accept the sand yields produced by the use of the conventional rock and sand removal methods.
- B. The existing rock jetty on the north side of the harbor inlet will be reconfigured so that the jetty more effectively captures the migrating sand flow from the north. This will be accomplished by a redesign of the jetty itself and by making the rock formation of the jetty more compact.
- C. The reconfiguration of the rock jetty will not only secure the existing beach dimensions north of the inlet, but the beaches may actually gain width by new sand accretion.
- D. The existing rock shoal debris in the ocean waters near POA's beach front will be cleaned up and/or removed at the County's expense. This also includes such debris or dirt that affects the beaches or oceanfront caused by the County's proposed operations.
- E. The County is also to build a barrier wall further out in the ocean, east of the proposed sand trap. This submerged wall will serve to not only block incoming coral debris, but is intended to serve as a place where rock debris caused by the sand trap operations will be dumped and held from coming ashore.
- F. We have been assured that noise levels from the County's operations will be no greater than the engine noises that currently emanate from ship traffic entering or leaving Port Everglades harbor.
- G. POA and other affected home-owners and residents will be kept informed and will be consulted as the revised Plan moves forward in the permitting process.
- H. The County plans to cooperate with POA and other affected parties in resolving potential impacts to resident use and enjoyment of their property and beaches, including vibrational impacts from dredging equipment, noise levels, debris, dirt and discoloration of the beaches and bathing waters.

Given the above considerations, POA is pleased that the County has addressed our concerns in a thorough and comprehensive manner. Our Board believes that the County has proposed a reasonable Plan which addresses our major concerns. While we are still concerned about the effect these operations will have on our resident's use and enjoyment of their property, the Board believes that the County will work with us to alleviate and/or mitigate issues that may arise.

Accordingly, POA wishes to advise you and the City Council that given the County's assurances as stated above, POA will support the proposed Sand Bypass and Redesigned Sand Trap Project as described in Consultant's Memorandum dated March 10, 2014 and other documents.

Sincerely,



Suzanne Bernard, President Board of Governors Point of Americas Condominium Apartments,  
Inc.

Cc: All Commissioners – City of Fort Lauderdale

Mr. Eric Myers, Natural Resource Administrator, Broward County

Mr. Christopher Creed, PE Olsen Associates, Inc. ✓

Mr. Michael Jenkins, PE Applied Technology and Management

Mr. Steven Weber, Everglades House

Encl: Memorandum – Olsen Associates, Inc. to Eric Myers dated March 10, 2014