COASTAL MANAGEMENT

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GOALS, OBJECTIVES, AND POLICIES

GOAL CME 1	PRESERVATION, PROTECTION, RESTORATION, AND MANAGEMENT
GOAL CME 2	BALANCE BETWEEN BUILT AND NATURAL ENVIRONMENTS
GOAL CME 3	PREPARATION AND ADAPTATION FOR THE IMPACTS OF CLIMATE CHANGE AND PERIL OF FLOOD
GOAL CME 4	NATURAL DISASTER PREPAREDNESS IN THE COASTAL AREAS
GOAL CME 5	PUBLIC PARTICIPATION AND STRATEGIC PARTNERSHIPS

COASTAL MANAGEMENT

WHAT IS THE COASTAL MANAGEMENT ELEMENT?

The Coastal Management Element sets forth the community's principles and strategies for the use and protection of the city's coastal resources. Coastal management is a multifaceted effort. Proper management ensures both the protection of life and property from natural disasters, as well as the conservation of natural resources. It strives at once to maintain and enhance the quality of life of citizens who value the area as a recreational asset, to protect wildlife and natural ecosystems, to maximize economic benefits generated from tourism, and to safeguard human life and public investment from natural disasters. Coastal Management requires a careful balance between the natural and built environments.

The City has already begun to make significant commitments to data collection and identification of vulnerabilities based upon its 2018 Intracoastal Waterway Water Level & Infrastructure Vulnerability Study and its Stormwater Master Plan Update. Both initiatives identify Coastal Protection Area and citywide vulnerabilities for seawalls, stormwater outfalls along the Intracoastal Waterway, and stormwater infrastructure. The City commits to comprehensively plan for its vulnerabilities through the development of a Sustainability and Climate Action Plan that holistically addresses infrastructure, natural systems and development at risk from future weather-related events and sea level rise. The City is taking a proactive approach to move beyond the current requirements within Chapter 163, F.S. to focus on resiliency and flooding preparedness within the Coastal Management Element. For further discussion regarding citywide sustainability and resiliency planning efforts, please see the Data, Inventory and Analysis and Goals, Objectives and Policies for the Conservation, Sustainability and Resiliency Element.

COASTAL MANAGEMENT GOALS

GOAL CME 1	**PRESERVATION, PROTECTION, RESTORATION, AND MANAGEMENT** CONTINUE TO PRESERVE, PROTECT, RESTORE, AND DILIGENTLY MANAGE THE NATURAL COASTAL ENVIRONMENT TO MAINTAIN OR ENHANCE ITS QUALITY FOR PRESENT AND FUTURE GENERATIONS.
GOAL CME 2	**BALANCE BETWEEN BUILT AND NATURAL ENVIRONMENTS** ENSURE DEVELOPMENT AND REDEVELOPMENT WITHIN THE COASTAL PLANNING AREA IS COMPATIBLE WITH THE EXISTING CHARACTER AND SENSITIVELY BALANCES THE NEEDS OF THE NATURAL ENVIRONMENT.
GOAL CME 3	**PREPARATION AND ADAPTATION FOR THE IMPACTS OF CLIMATE CHANGE AND PERIL OF FLOOD** ENHANCE EFFORTS TO PREPARE, ADAPT, MITIGATE, AND MANAGE CLIMATE CHANGE IMPACTS TO ACHIEVE A RESILIENT COMMUNITY THROUGHOUT THE COASTAL PLANNING AREA AND ELIMINATE INAPPROPRIATE AND UNSAFE DEVELOPMENT IN THE COASTAL AREAS WHEN OPPORTUNITIES ARISE.
GOAL CME 4	**NATURAL DISASTER PREPAREDNESS IN THE COASTAL AREAS** ENHANCE EFFORTS TO PREPARE FOR AND MANAGE IMPACT FROM NATURAL DISASTERS
GOAL CME 5	**PUBLIC PARTICIPATION AND STRATEGIC PARTNERSHIPS** FOSTER AND PARTICIPATE IN PARTNERSHIPS AND PROGRAMS THAT ADDRESS REGIONAL AND LOCAL COASTAL MANAGEMENT ISSUES, PROVIDE FUNDING AND ENCOURAGE PUBLIC PARTICIPATION IN SUCH PROGRAMS.

GOAL CME 1 PRESERVATION, PROTECTION, RESTORATION, AND MANAGEMENT

CONTINUE TO PRESERVE, PROTECT, RESTORE, AND DILIGENTLY MANAGE THE NATURAL COASTAL ENVIRONMENT TO MAINTAIN OR ENHANCE ITS QUALITY FOR PRESENT AND FUTURE GENERATIONS. (Updated Goal A Carried Forward)

Performance Measures: Success in addressing Objectives and Policies of **Goal CME 1** shall be measured using the following performance indicators:

- Maintaining the engineered design berm width, as a minimum, at each FDEP reference monument (R-mon). Sea turtle nest hatchling success rates;
- Total number of marine life accidents reported;
- Number of water quality violations including days beaches are closed to swimming due to poor water quality;
- Number of clean up events;
- Beach nourishment:
  - Evaluation and physical monitoring of the beach project annually
  - Completing planned periodic beach renourishment events
  - Coordinating swiftly with project partners (USACE, Palm Beach County and FDEP) to assess and repair storm damages to the beach;
- Funding secured over time; and,
- Total number of turtle lighting Code violations.

Objective CME 1.1 Natural Coastal Habitats

Preserve, protect, restore, and enhance the quality of naturally occurring coastal habitats, including but not limited to reef systems, dune and beach systems, upland barrier island lands, estuarine shoreline and lagoons and areas of the mainland with a connection to the Intracoastal Waterway waterfront.

Policy CME 1.1.1
Define the Coastal Planning Area to include offshore reefs, the barrier island, all inland properties located along waterways that adjoin the Intracoastal Waterway westward including properties within a special flood hazard area.

Policy CME 1.1.2
Preserve the existence of viable populations of all native species of plant, wildlife and marine life.

Objective CME 1.2 Ocean Habitat

Enhance the quality of the ocean habitat for protection of marine life.

Policy CME 1.2.1
Seek to monitor the quality of ocean water and health of marine resources, such as but not limited to, health of the coral reef and diversify of species.

Policy CME 1.2.2
Protect and enhance the quality of the marine habitat through expansion of the City's reclaimed water program and use of deep well injection.

Policy CME 1.2.3
Evaluate the condition and continue to protect the size and health of the natural offshore reef.

Policy CME 1.2.4
Evaluate the condition of the SS Inchulva, also known as the "Delray Wreck," and follow the recommendations of experts to maintain and preserve it over time.

Policy CME 1.2.5
Conduct a study to determine the feasibility, cost, and location of creating a near-shore artificial reef, accessible from the municipal beach.

Policy CME 1.2.6
Continue to monitor Federal and State policies that could impact the quality of the marine and coastal habitats and coordinate with strategic partners to advocate for initiatives that improve and enhance the coastal environment.

Objective CME 1.3 Beach Protection and Enhancement
Continue to protect and enhance the high quality of the beach for the protection of human life and property

Policy CME 1.3.1
Continue to maintain beach quality through a regular program of beach cleaning and maintenance that removes litter and marine debris and includes beach tilling.

Policy CME 1.3.2
Continue to participate in beach nourishment programs, work with the State and the County to secure continued Federal funding, and seek new funding sources to ensure the continued health and maintenance of City beaches.
Policy SPE 1.5.22

Policy CME 1.3.3
Undertake studies as required by permitting agencies to monitor and maintain the beach nourishment project.

Policy CME 1.3.4
The City shall undertake geophysical and geotechnical investigations as needed to identify beach compatible sand sources to support the beach renourishment program.

Objective CME 1.4 Sea Turtle Protection
Protect sea turtles and their nesting habitat.

Policy CME 1.4.1
Continue to adhere to and enforce Palm Beach County's Turtle Protection Ordinance.

Policy CME 1.4.2
Continue to ensure nourishment sand meets the State Permit requirements in terms of grain size, chemical characteristics, and compaction after tilling.

Policy CME 1.4.3
Schedule beach nourishment projects between November and March, which is outside the turtle nesting and hatching season. If nourishment must be scheduled during the turtle nesting season, arrangements for turtle nest relocation shall be made subject to state and federal regulations.

Policy CME 1.4.4
Continue to promote public awareness regarding the importance of turtle protection.

Policy CME 1.4.5
Maintain a program to facilitate monitoring of sea turtle nesting activity.

Policy CME 1.4.6
All coastal development shall first avoid and then minimize adverse effects to nesting beach and dune system habitat.

Policy CME 1.4.7
Conduct pre-turtle nesting season nighttime surveys to reduce point source illuminants visible from the nesting beach for Code Enforcement to proactively engage property owners and suggest resolutions before nesting begins.

Objective CME 1.5 Dune Systems and Coastal Vegetation
Continue to actively protect, maintain, and enhance dune systems and coastal vegetation and to implement beach protection and erosion control programs, as well as the environmental protection and enhancement aspects of the Beach Renourishment Program.

Policy CME 1.5.1
Encourage public acquisition and preservation of dune systems.

Policy CME 1.5.2
Develop guidelines to maintain, restore, and enhance dune systems on private property.

Policy CME 1.5.3
Dune walkover structures or a fence delineating and containing existing crossover paths shall be required at all beach access points to minimize impacts to native vegetation and dune systems.

Policy CME 1.5.4
New private beach access points may be approved provided the dune and vegetative communities are not disturbed subject to state and federal regulations.

Policy CME 1.5.5
Undertake construction or restoration of the dune systems with native plantings where dune systems are not present, have been substantially impacted by development or erosion or degraded by invasive species.

Policy CME 1.5.6
Remove invasive and nuisance vegetation from dune systems and replace it with native vegetation that enhances animal habitat and plant diversity to the maximum extent practical.

Policy CME 1.5.7
As a part of the City's ongoing beach renourishment and protection program, maintain and enhance existing pedestrian accesses to the beach through the continuation of the dune management program.

Policy CME 1.5.8
Continue to implement the dune protection and enhancement programs, which include management of the dunes at the municipal beaches and regulation of private development activities. The City shall create and implement incentives, including educational materials, to private property owners to enhance, restore and manage dunes.

Policy CME 1.5.9
Protect the dune from the ocean side by continuing to use native vegetation, educational and informational signage, and barriers.

Policy CME 1.5.10
Coordinate with the Florida Department of Environmental Protection to develop and carry out a plan for remedial reduction of the seagrape footprint to predefined permit limits and replant with pioneer zone species.

Policy CME 1.5.11
Review pruning methods and train Parks Staff in recognition and appropriate care of special dune areas, and rare species.

Policy CME 1.5.12
Increase public awareness associated with exotic contamination, provide maps and encourage their participation to eradicate non-native species.

Objective CME 1.6 Intracoastal Waterway Protection

Protect the remaining estuarine ecosystem characteristics and water quality of the Intracoastal Waterway.

Policy CME 1.6.1
The quality of the Intracoastal Waterway shall continue to be improved by the control of storm water runoff, point sources and non-point sources, and the implementation of the projects and programs in the National Pollution Discharge Elimination System permit to reduce pollution in estuarine ecosystem.
CSR Objective 2.6
PFE Objective 3.1
PFE Policies PFE 2.3.3, 4.1.8, 4.1.9

Policy CME 1.6.2
Support and encourage, where feasible, living shoreline projects to improve estuarine ecosystem characteristics of the Intracoastal Waterway and protect upland areas from wave action.

Policy CME 1.6.3
Evaluate new shoreline hardening adjacent to the Intracoastal Waterway and encourage maintenance or repair of existing shoreline hardening. [Complete by 2025]
Policy CSR 3.1.3

Policy CME 1.6.4
Mangrove plants shall be preserved or enhanced consistent with state law and local regulation including:

- Removing invasive and nuisance vegetation from mangrove areas;
- Promoting a diversity of appropriate mangrove forest species through mangrove restoration and maintenance activities;
- Encouraging education programs oriented toward protection of mangroves and creating awareness of compliance with State statues that protect them and manage their trimming.

Policy CME 1.6.5
Restrict access and activities in designated Manatee Essential Habitat Areas and coordinate with the Florida Fish and Wildlife Commission to further reduce speeds.
Policy CSR 4.1.9

Policy CME 1.6.6
Continue to work with the Florida Inland Navigation District to manage use of Florida Inland Navigation District parcels 645A, 645B, and 650 (Mangrove Park) in a manner that serves the environmental goals of the City.
Policy CSR 4.2.6
Policy OPR 3.1.1

Policy CME 1.6.7
Continue to work with Florida Inland Navigation District to transfer these properties into City control upon termination of their need by the district for perpetual use as marine and wildlife habitats and passive recreation that allows residents a connection to the waterway.

Policy CME 1.6.8
Continue to implement a program of shoreline improvement and restoration on publicly-owned or controlled waterfront land through the following:

- Creation or restoration of shorelines vegetated with native species;
- Removal of exotic nuisance plant species from natural and filled shorelines; and
- Replacement of existing seawalls and rip-rap with naturally sloped and vegetated shorelines.

Policy CSR 8.1.2

Objective 1.7 Analysis of Coastal Resources
Analyze progress toward the stated environmental objectives by engaging in the collection of primary and secondary data related to number, size and quality of coastal resources, including key types of flora and fauna, water quality and other metrics as appropriate.

Policy CME 1.7.1
Identify primary and secondary environmental data that can be collected by the city, its consultants and other government agencies and develop a procedure for systematically collecting and maintaining this information.

Policy CME 1.7.2
Make data and information available for public and scientific review.

Policy: CME 1.7.3
Monitor and analyze the data to identify trends or anomalies at a minimum of every three years to address environmental concerns and ensure progress toward policy goals.

GOAL CME 2 BALANCE BETWEEN BUILT AND NATURAL ENVIRONMENT

ENSURE DEVELOPMENT AND REDEVELOPMENT WITHIN THE COASTAL PLANNING AREA IS COMPATIBLE WITH THE EXISTING CHARACTER AND SENSITIVELY BALANCES THE NEEDS OF THE NATURAL ENVIRONMENT.

Performance Measures: Success in addressing Objectives and Policies of **Goal CME 2** shall be measured using the following performance indicators:

- Completion of community vulnerability assessment;
- Number of shoreline protection projects completed;
- Adoption of new minimum standards for seawalls based on the community vulnerability assessment;
- Number of waivers that increase building envelope or development intensity; and,
- Amount of land designated as Open Space or Conservation within the Coastal Planning Area.

Objective CME 2.1 Municipal Beach Protection

Retain the Municipal Beach's high-quality environment to protect the beach as an economic and recreational resource.

Policy CME 2.1.1
Restrict the ocean shoreline for beach purposes only, including but not limited to, typical beach recreation, designated areas for beach recreational sports, lifeguard towers, access facilities, dune and beach restoration, and beach cleaning and maintenance.
Policy CSR 8.3.1

Policy CME 2.1.2
Along the ocean shoreline, continue to prohibit commercial development or water-dependent development (except the beach) or water-related uses, except those uses permitted pursuant to Policy 2.1.3 and 2.1.4 along the shoreline which abuts the beach.

Policy CME 2.1.3
Continue to provide valuable amenities for beach users, including reasonable support facilities, without jeopardizing the essentially passive character of the beach and its value as a natural managed resource.

Policy CME 2.1.4
Maintain the passive recreational quality and limit potential impacts from overuse of the Municipal Beach, continue to limit beach concessions to those under contract to the City to provide recreational amenities for beach visitors, prohibiting all other concessions; and, continue to prohibit cooking and pets.

Policy CME 2.1.5
Encourage healthy recreation and enjoyment of the shoreline through programs that stress safety and raise awareness of potential dangers such as sun exposure, rip tides, and marine animal interactions.

Policy CME 2.1.6
Continue to allocate municipal funds for enhancement of the streetscape along Ocean Boulevard (SR A-1-A) and the adjacent dune system; maintain consistency with the Beach Master Plan for all enhancements, use native plants as part of the Dune Management Plan, and regularly maintain street furniture and pavilions, particularly at beach access points and areas of congregation.

Policy CME 2.1.7
Maintain the amount of land designated as Recreational Open Space or Conservation within the Coastal Planning Area.
Policy NDC 1.5.1 & 2.1.5

Objective CME 2.2 Preserve Beach Character

Preserve the existing low density and low intensity uses which characterize the city's beach development.

Policy NDC 2.7.13

Policy CME 2.2.1

The City shall not increase the density or intensity of land use designations within the barrier island or approve commercial uses if impacts could diminish beach resources.

Policy CSR 8.6.4

Policy NDC 2.1.1

Policy CME 2.2.2

Direct population concentrations away from Coastal High Hazard Area.

Policy CME 2.2.3

Do not increase the net density within the Coastal High Hazard Area.

Policy HOU 3.1.6

NDC Policy 2.1.2

Policy CME 2.2.4

Develop remaining infill lots using zoning that is identical or similar to the zoning of adjacent properties or that results in less intense development.

Policy CME 2.2.5

Address critical features of development, such as setbacks, building height, finished floor elevation, and construction materials in the Land Development Regulations to maintain the current character of and to increase resiliency within the Coastal Planning Area. To discourage placing more property assets at risk, relief from the minimum lot size requirements, maximum lot coverage, or building height to increase the volume of building envelopes will not be considered.

Policy NDC 2.1.3

Policy CME 2.2.6

Study a Transfer of Development Rights program, establishing sending and receiving zones, to direct density and development away from the Coastal Planning Area.

Policy CSR 4.2.16, 8.5.5

Policy NDC 2.1.4

Policy CME 2.2.7

Continue the award-winning Coastal Management program to protect and enhance the tourism and hospitality industry.

Policy ECP 6.1.6

Objective CME 2.3_ Reduce Impervious Areas

Reduce the amount of existing impervious surface in the Coastal Planning Area and seek alternatives for reducing impervious surface area in future developments.

Policy CME 2.3.1

Due to the dynamic and fragile hydrological environment, prohibit variances from maximum building/lot coverage or minimum open space requirements within the Coastal Planning Area.

Policy CME 2.3.2

Encourage the use of pervious materials for landscaping in the Coastal Planning Area.

Policy CSR 2.4.16

Objective CME 2.4 Protect Coastal Resources

Prohibit development that would negatively affect, damage, or destroy coastal resources.

Policy CME 2.4.1

Require an environmental assessment as part of development proposed within the Coastal Planning Area that has the potential to adversely impact wetlands, wildlife habitat, living marine resources, or the beach and/or dune systems.

Policy CSR 2.4.9, 4.2.11, 8.3.4

Policy CME 2.4.2

In all new developments within the Coastal Planning Area, promote biodiversity and encourage the use of native vegetation as part of proposed planting plans, where feasible, and incorporate Florida-friendly vegetation as a major design component.

Policy CSR 2.4.6, 2.4.9, 4.2.2, 4.2.5, 4.2.11, 8.4.4

Objective CME 2.5 Historic and Archeological Preservation

Preserve historic and archaeological resources in the Coastal Planning Area.

Policy CME 2.5.1
Provide for the retention, rehabilitation, and protection of designated historic resources located in the Coastal Planning Area in the City's Land Development Regulations.
Policy CSR 8.5.10

Policy CME 2.5.2
Within the Coastal Planning Area, development, redevelopment or adaptive reuse of designated historic resources shall occur in a manner that does not significantly change the character of the building or parcel.

Policy CME 2.5.3
Balance the principles of historic preservation, economic development, and resiliency within the Coastal Planning Area.
Policy CSR 8.5.10

Objective CME 2.6 Public Access

Maintain and enhance accessibility to public beach areas, waterways, canals and lakes, and recreational and commercial working waterfronts.

Policy CME 2.6.1
In order to preserve the character of the city's recreational and commercial working waterfronts, redevelopment projects that eliminate or reduce public interaction with the waterfront are prohibited.

Policy CME 2.6.2
Strive to increase public interaction with the shoreline by improving the right of way facilities along A-1-A for bicyclists and pedestrians including the provision of bicycle lanes, sidewalks, street furniture, covered or shaded areas, etc.

Policy CME 2.6.3
New private beach access points may be approved, subject to state and federal regulations, provided the dune and vegetative communities are not disturbed without compensatory restoration and public access is created or improved.

Policy CME 2.6.4
Coordinate access to public beaches and waterways, including canals and lakes, with trail and greenway improvement plans.
Policy CSR 4.2.10

Policy CME 2.6.5
Develop incentives for development projects that increase and enhance public interaction with and enhance the city's recreational and commercial working waterfront. However, increased interaction shall not occur at the expense of the natural environment. The City shall create performance standards that guide the review of proposals in this respect.

Policy CME 2.6.6
Require view corridors to the water with public, pedestrian access in redevelopment that results in additional units on a parcel that boarders the Intracoastal Waterway or the Ocean.
Policy HOU 1.4.8
Policy OPR 3.2.4
Policy NDC 2.2.5

Policy CME 2.6.7
Require a property survey for proposed development east of SR A-1-A that identifies public access to lands seaward of the mean high tide or Erosion Control Line by prescription, prescriptive easement, or any other legal means or include a surveyor's note that no such access exists; access shall not be eliminated or replaced, except in compliance with Florida laws (Section 161.55(6), F.S.).

Policy CME 2.6.8
Retain all existing public access to the Intracoastal Waterway, including street ends, and enhance these areas with placemaking improvements, such as pocket parks with reasonable use restrictions including limited hours of operation.

Policy CME 2.6.9
Provide additional marina facilities and waterway access for the Intracoastal Waterway pursuant to the boating facility-siting plan in the Palm Beach

County Manatee Protection Plan, adopted on August 21, 2007, as amended.
Policy CSR 4.1.9 & 4.1.10

Policy CME 2.6.10
Maximize opportunities for placemaking improvements that provide or enhance public access to the Intracoastal Waterway while protecting the environment.

Policy CME 2.6.11
Retain the existing public parking under City control on the barrier island and explore opportunities to expand public parking opportunities on existing paved areas for increased public beach access.

Policy CME 2.6.12
Ensure that the ocean beach and Intracoastal waterfront is accessible by public transit, free or low cost rideshare service, bicycles, and other transportation technologies.

Policy CME 2.6.13
Limit new marinas and boating facilities to a maximum of six powerboat slips per 100 linear feet of shoreline owned or controlled by the applicant, except the C-15 Canal and portion of the Intracoastal Waterway, approximately 1,000 feet to the north of the canal, which shall be limited to one powerboat slip per 100 linear feet of shoreline owned or controlled by the applicant.

GOAL CME 3 PREPARATION AND ADAPTATION FOR THE IMPACTS OF CLIMATE CHANGE AND PERIL OF FLOOD

ENHANCE EFFORTS TO PREPARE, ADAPT, MITIGATE, AND MANAGE CLIMATE CHANGE IMPACTS TO ACHIEVE A RESILIENT COMMUNITY THROUGHOUT THE COASTAL PLANNING AREA AND ELIMINATE INAPPROPRIATE AND UNSAFE DEVELOPMENT IN THE COASTAL AREAS WHEN OPPORTUNITIES ARISE.

Performance Measures: Success in addressing the Objectives and Policies of **Goal CME 3** shall be measured using the following performance indicators:

- Completion of a Sustainability and Climate Action Plan
- Designation of Adaptation Action Areas, or similar concept, ("vulnerable areas") based on completed Sustainability and Climate Action Plan
- Development of updated land development regulations applicable to the Adaption Action Areas and other vulnerable areas
- Investment dollars in infrastructure to reduce flooding
- Acquisition and use change of repetitive loss properties
- Percentage of seawalls that meet the City's standards
- Number of capital improvement projects in Coastal Protection Area completed relating to sea level rise

Objective CME 3.1 Resilience and Adaptation to Climate Change

Increase adaptability and resiliency to climate change impacts by developing and implementing a Sustainability and Climate Action Plan with vulnerability assessment including strategies that address coastal flooding, tidal events, storm surge, flash floods, storm water runoff, salt water intrusion and other impacts related to or exacerbated by sea level rise, changing precipitation patterns, temperature increases, and other climate change factors.

Policy CME 3.1.1
Within one (1) year of the completion of a sustainability and climate action plan and vulnerability assessment, identify and designate one or more Adaptation Action Areas, or similar concept, ("vulnerable areas") to prioritize funding for infrastructure and land-use regulations that address adaptation to coastal flooding resulting from extreme high tides, storm surge, and other related impacts of rising sea levels. [Complete by 2025]
Policy CSR 8.5.1

Policy CME 3.1.2
As a basis for the designation of vulnerable areas, utilize the best available data and resources, including sea level rise projections developed by the Southeast Regional Climate Compact and NOAA, or other appropriate projections, to identify and understand the risks, vulnerabilities and opportunities to formulate timely and effective adaptation strategies.
Policy CSR 2.1.5 & 8.6.2
Policy SPE 1.5.23

Policy CME 3.1.3
Considerations for designated vulnerable areas may include, but not be limited to:

- Areas which experience flooding from tidal activity, storm surge, intense precipitation, or rising water table.
- Areas which have any hydrological connection to coastal waters.
- Locations which are within areas designated as evacuation zones for storm surge.
- Other areas impacted by stormwater/flood control issues.

Policy CSR 8.5.5

Policy CME 3.1.4
Develop and adopt land development regulations specific to vulnerable areas that include best-practice development that prioritizes the natural environment and habitats, and that includes strategies for protection, accommodation, managed retreat, and avoidance of flooding impacts. [Complete by 2025]
Policy CSR 4.2.14, 8.1.2, 8.5.5, 8.5.1 & 8.5.15

Policy CME 3.1.5
As part of the adoption of the vulnerable areas, consider strategies and engineering solutions that reduce the flood risk in coastal areas that result from high-tide events, storm surge, flash floods, storm water runoff, and related impacts of sea-level rise.
Policy CSR 8.5.1 & 8.5.7

Policy CME 3.1.6
Actively seek funding for the implementation of projects and capital improvements in vulnerable areas associated adaptation strategies from sources such Federal and State grants and technical expertise assistance (in-kind); local storm water utility fees; Capital Improvement Plan prioritization; public/private partnerships; and other sources.

Objective CME 3.2 Capital Planning for Resilience

During the annual Capital Improvements Project planning process, prioritize and fund projects and programs intended to enhance protection of infrastructure and development against the impacts of climate change and the effects of natural disasters.

Policy CME 3.2.1
Limit the amount and type of public infrastructure investments in the Coastal High Hazard Area to minimize the impacts and costs to the City as a result of a disaster.

Policy CME 3.2.2
Provide a Level of Service for infrastructure in the Coastal Planning Area that is sufficient for reasonable use of the land with respect to traffic, solid waste, water supply, drainage, and sewage capacity and considers future flood risk.

Policy CME 3.2.3
Do not expand public expenditure to subsidize expanded development on the barrier island, unless such expenditures are necessary to provide services to development allowed by the Land Use Map; provide for recreational needs; maintain, restore or enhance natural resources; maintain adequate evacuation times; and maintain or enhance public beach access and use.

Policy CME 3.2.4
Connect all development in the Coastal Planning Area to the City's centralized municipal water and sanitary sewer systems, and prohibit the use of well water.

Policy CME 3.2.5
Upon completion of the City of Delray Beach Intracoastal Waterway Water Level & Infrastructure Vulnerability Study, identify locations for new hard and soft coastal protection systems, and develop construction standards and strategies for funding, permitting, and constructing the repair, enhancement, or replacement of seawalls located on both public and private properties. [Complete by 2025]
Policy CSR 8.6.2, 8.5.3, 8.5.15
Policy PFE 6.1.10
Policy CIE 3.1.8

Policy CME 3.2.6
Analyze and determine whether to build, modify or relocate public infrastructure to allow for adaptation, strategic managed retreat or relocation from areas at risk to sea level rise.

Objective CME 3.3 Mitigation of Peril of Flood from Sea Level Rise on the Intracoastal Waterway

Create development and redevelopment policies based on the Intracoastal Waterway Water Level & Infrastructure Vulnerability Study (2018) to reduce future flood risk in coastal areas resulting from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea-level rise.

Policy CME 3.3.1
The City of Delray Beach Intracoastal Waterway Water Level & Infrastructure Vulnerability Study (2018) shall be one of the resources to base new principles, strategies, and engineering solutions to reduce future flood risk of existing and future development along canals and the Intracoastal Waterway.

Policy CME 3.3.2
Within two (2) years of adoption of the Intracoastal Waterway Water Level & Infrastructure Vulnerability Study (2018), adopt new design criteria for both public and private seawalls throughout the city. [Complete by 2022]
Policy CSR 8.1.4

Policy CME 3.3.3
Phase projects, including but not limited to, elevation of seawalls, backflow prevention devices, in-line check valves and other strategies for public seawall and dock repair based on the existing conditions, year of projected impacts and economies of scale to minimize commercial and residential disruption from future flooding.

Policy CME 3.3.4
Develop and implement a long-term capital plan, through the Capital Improvements Element, to fund public seawall repair and maintenance.
Policy CSR 8.1.5

Policy CME 3.3.5
Develop funding alternatives for public and private seawall repair and maintenance that may include incremental funding through capital improvements, assessments or other strategies. Funding alternatives shall also prioritize funding partnerships and grant sources.
Policy CSR 8.1.5

Objective CME 3.4 Mitigate the Peril of Flood from Sea Level Rise in Coastal Areas

Update development and redevelopment policies based on the updated Stormwater Master Plan to reduce future flood risk in coastal areas resulting from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea-level rise.

Policy CME 3.4.1
Continue to require management of stormwater on site to the maximum degree feasible in all development and redevelopment on the barrier island to minimize its impact on the City's stormwater system and compliance with the City's Stormwater Master Plan.
Policy PFE 4.2.2

Policy CME 3.4.2
To avoid exacerbating onsite flooding, continue to prohibit stormwater discharge into waterways except via an approved connection to the municipal storm sewer system or privately permitted system through South Florida Water Management District or Lake Worth Drainage District.

Policy CME 3.4.3
Use information from the Stormwater Master Plan Update to revise and develop new regulations and policies that reduce water quality and quantity impacts. The Plan shall include assumptions for existing and future flood risk and data to better define vulnerable areas. [Complete by 2022]

Policy CME 3.4.4
All stormwater planning shall include projections from the Southeast Florida Regional Climate Compact, or other appropriate projections, for sea level rise and seasonal precipitation trends forecasts.

Policy CME 3.4.5
Based on the Stormwater Master Plan Update, identify new principles, strategies, and engineering solutions that will mitigate flood risks in vulnerable areas or risk prone areas for inclusion in future capital planning efforts; including, outlining priority rankings based on existing conditions and future risk and developing initial capital budget estimates.

Policy CME 3.4.6
After completion of the Stormwater Master Plan, review and update the floodplain management regulations to address current and future flood risk, including development and redevelopment

principles and strategies that reduce current and future flood risk. [Complete by 2025]

Objective CME 3.5 Development of Best Practices to Reduce the Risk of Flood Peril

Update and create development techniques and best practices to reduce losses due to flooding and claims made under flood insurance policies in conjunction with the completion of the updated Stormwater Master Plan

Policy CME 3.5.1
Develop and update land development techniques and best practices that will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency. Such standards may include, but are not limited to, structural and nonstructural techniques such as, low impact development and green infrastructure strategies that will enhance water quality treatment while also providing flood mitigation benefits. Best practices include flood mitigation strategies, for instance design of elements on structures, such as electrical components, and modification of infrastructure (including utilities) and shall consider impacts to adjacent properties, historic properties, and infrastructure projects.

Policy CME 3.5.2
The City's Land Development Regulations shall continue to be consistent with or more stringent than the requirements in the Florida Building Code and applicable floodplain management regulations set forth in 44 C.F.R., Part 60.

Policy CME 3.5.3
Within one (1) year of completion of the Intracoastal Waterway Water Level & Infrastructure Vulnerability Study (2018), the Stormwater Master Plan and City's Sustainability and Climate Action Plan with a vulnerability analysis, adopt updated freeboard standards, consistent with, or in exceedance of, the Florida Building Code, generally base floor elevation plus 1 foot for residential, requiring that structures or substantial renovations be elevated based on these standards. Freeboard standards shall also consider implications with the city's unique historic properties. Freeboard standards shall also account for existing height regulations and the need to allow for limited increases in height consistent with elevation of properties or implementation of new freeboard standards as a point of analysis. [Complete by 2022]
Policy NDC 2.1.3

Policy CME 3.5.4
Encourage the use of pervious materials for landscaping and driveways in the Coastal Planning Area.

Policy CME 3.5.5
Development in the Coastal Planning Area shall be subject to the same findings of concurrency as is required for other development in the city and shall additionally include a finding that such development is consistent with the densities proposed by the Neighborhoods, Districts, and Corridors Element, except as provided in Policy CME 4.2.3, and is consistent with coastal resource protection and safe evacuation programs.

Policy CME 3.5.6
Coordinate the development of best practices, floodplain management regulations and land development regulations with the business and development community.

Policy CME 3.5.7
Coordinate with the South Florida Water Management District and Lake Worth Drainage District in the development of best practices, floodplain management regulations and land development regulations.

Objective CME 3.6 Coastal Construction Compliance

Coastal construction activities seaward of the coastal construction control lines established pursuant to Section 161.053, Florida Statutes, shall be consistent with Chapter 161, Florida Statutes.

Policy CME 3.6.1
Continue to enforce the rules and regulations pertaining to the Department of Environmental

Protection "Coastal Construction Control Line" and "Erosion Control Line" programs in the Land Development Regulations; and, continue to prohibit non-beach related construction seaward of the Erosion Control Line and to provide performance standards for construction seaward of the Coastal Construction Control Line consistent with Chapter 161.053, F.S.

Policy CME 3.6.2
Continue established and ongoing programs that regulate coastal construction practices and contribute to the resilience of the built environment.

Objective CME 3.7 Participation in the National Flood Insurance Program Community Rating System

Prioritize enhancing participation in the National Flood Insurance Program Community Rating System program administered by the Federal Emergency Management Agency by improving the City's rating.

Policy CME 3.7.1
Link future cycles of Community Rating System scoring with completion of its City Sustainability and Climate Action Plan and a vulnerability analysis to incorporate sea level rise projections as outlined by FEMA in the most recent version of the National Flood Insurance Program Community Rating System Coordinator's Manual.
Policy CSR 8.5.1 & 8.5.14

Policy CME 3.7.2
Coordinate climate, vulnerability, sustainability and resiliency activities with Community Rating System cycles to enhance and maximize community outreach activities and result in reductions in flood risk and insurance premiums for residents and businesses.
Policy CSR 8.5.1 & 8.5.14

CME 4 NATURAL DISASTER PREPAREDNESS IN THE COASTAL AREAS

ENHANCE EFFORTS TO PREPARE FOR AND MANAGE IMPACTS FROM NATURAL DISASTERS [Goal D Carried Forward and Updated]

Performance Measures: Success in addressing Objectives and Policies of **Goal CME 4** shall be measured using the following performance indicators:

- No net increase in the total number of residential units/density within the Coastal High Hazard Area
- Total time for hurricane evacuation
- Total number of repeat loss properties
- Total number of structures impacted by natural disasters, per occurrence
- Total value of uninsured and insured losses post event.

Objective CME 4.1 Protection From Natural Disasters

Implement projects and programs that ensure protection of human life, property, infrastructure, and cultural and natural resources from the effects of natural disasters. [Reworded Objective D-1 Carried Forward]

Policy CME 4.1.1
Define the Coastal High Hazard Area as the area extending from offshore inland, including special flood hazard areas and areas that are below the elevation of the category 1 storm surge line as established by a Sea, Lake and Overland Surges for Hurricanes computerized storm surge model, as described in F.S. 163.3178(2)(h).

Policy CME 4.1.2
Maintain a coastal high hazard evacuation time of 7-10 hours, and reduce hurricane clearance times within the city as a component of maintaining and reducing evacuation times for Palm Beach County and the region.
Policy MBL 3.5.4
Map AD-12

Policy CME 4.1.3
Appendix I, Hurricane Evacuation; to Appendix V, Evacuation, (III-L) of Palm Beach County's Comprehensive Emergency Management Plan (date, as amended), and its attendant recommendations for hazard mitigation and interagency hazard mitigation reports, as amended, is hereby adopted and the City Director of Emergency Management is directed to provide for the effective implementation and coordination required by those recommendations.

Policy CME 4.1.4
Prohibit development on the barrier island that increases hurricane evacuation time beyond its present level or lowers the level of service at the intersections of SR A-1-A and Atlantic Avenue; George Bush Boulevard and SR A-1-A; or Linton Boulevard and SR A-1-A.

Policy CME 4.1.5
Manage vegetation and remove exotics reducing or removing obstructions for maintaining or improving hurricane evacuation clearance times and increasing recovery time from vegetative debris.

Policy CME 4.1.6
Given the strong density and intensity controls on the barrier island, and physical constraints with adding access to/from the barrier island, improve public information alerts and information campaigns to educate and prepare residents for evacuation procedures and pre-storm preparations.

Policy CME 4.1.7
To mitigate the threat to human life and to control proposed development and redevelopment to protect the coastal environment and consider cumulative impacts, develop and update land development techniques and best practices that will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency; maintain consistency with the Florida Building

Code and applicable floodplain management regulations set forth in 44 C.F.R., Part 60; limit development on the barrier island that increases hurricane evacuation times; develop a post-disaster recovery and redevelopment plan; and develop model codes and policies to encourage post-hazard redevelopment in areas with less vulnerability.

Objective CME 4.2 Post-Disaster Redevelopment Best Management Practices

Manage and promote best management practices during post-disaster redevelopment.

Policy CME 4.2.1
Develop a post-disaster recovery and redevelopment plan which minimizes future risk to human life and damage to public and private property.
Policy CSR 9.1.2

Policy CME 4.2.2
To mitigate the impacts of development and redevelopment in the coastal planning and coastal high hazard areas, cooperatively develop model codes and policies to encourage post-hazard redevelopment in areas with less vulnerability to storm surge, inundation, flooding, sea level rise and other impacts of climate change, and incentivize locally appropriate mitigation and adaptation strategies.

Policy CME 4.2.3
Provide direction for the redevelopment of properties with nonconforming structures that are significantly damaged or destroyed by natural disasters in the Land Development Code.

Policy CME 4.2.4
To mitigate the impacts of development and redevelopment in the coastal planning and coastal high hazard areas, consider, when feasible, cooperating with strategic partners to obtain funding to purchase properties most vulnerable to storm surge and repetitive flooding for recreational and open space use.

CME 5 PUBLIC PARTICIPATION AND STRATEGIC PARTNERSHIPS

FOSTER AND PARTICIPATE IN PARTNERSHIPS AND PROGRAMS THAT ADDRESS REGIONAL AND LOCAL COASTAL MANAGEMENT ISSUES, PROVIDE FUNDING AND ENCOURAGE PUBLIC PARTICIPATION IN SUCH PROGRAMS.

Performance Measures: Success in addressing Objectives and Policies of **Goal CME 5** shall be measured using the following performance indicators:

- Difference in total dollar amount of funding received for coastal management and protection related projects
- Increase in number of partnerships and programs that are established or improved
- Increase in the number of programs and educational outreach events offered to the public.
-

Objective CME 5.1 Coordination With Adjacent Communities

Coordinate with adjacent communities in matters dealing with the goals of the Coastal Management Element.
Policy SPE 1.5.19

Policy CME 5.1.1
Continue to participate with adjacent municipalities along the Intracoastal Waterway in responding to their efforts to implement programs contained within its Comprehensive Plan or their Comprehensive Plans for the protection of living marine resources, the reduction of exposure to natural hazards, and the continuing provision of public access.
Policy SPE 1.5.19

Policy CME 5.1.2
Monitor development requests in adjacent communities to ensure that all assets and services with the Coastal Planning Area are not adversely impacted. The item shall be referred to the Intergovernmental Plan Amendment Review Committee or Treasure Coast Regional Planning Council for review and mediation as needed.

Policy CME 5.1.3
Cooperate and collaborate with adjacent communities in an Inlet-to-Inlet strategy to address issues relating to local coastal and environmental management and protection, as well as adaptation to climate change.
Policy SPE 1.5.23

Objective CME 5.2 Pursuit of Funding for Coastal Protection and Management

Continue to pursue funding opportunities for coastal protection and management related improvements.

Policy CME 5.2.1
Consider additional funding options through the establishment of new impact fees to benefit coastal management.

Policy CME 5.2.2
Open to, and actively pursue, new funding sources for coastal related projects including but not limited to concepts such as environmental and resiliency bonds.

Policy CME 5.2.3
Evaluate development of a general fund, special assessment or other funding mechanism to be allocated to beach nourishment and environmental protection to supplement the program that may expire in 2023. [Complete by 2022]

Policy CME 5.2.4
Consider establishing a Municipal Service Taxing Unit to assess private properties with dune systems and sea walls.