

# CONSERVATION, SUSTAINABILTY AND RESILIENCY

### GOALS, OBJECTIVES, AND POLICIES

GOAL CSR 1 **Protect Air Resources** LIVE GOAL CSR 2 Conserve and Protect Water Resources Conserve and Protect Minerals and Soils GOAL CSR 3 GOAL CSR 4 Protect Lands for the Benefit of Habitat and Species WORK GOAL CSR 5 Promote Energy Efficiency and Diversify Energy Mix GOAL CSR 6 Support Sustainable Waste Management, Urban **Agriculture and Food Programs** GOAL CSR 7 Support Sustainable City Operations and Practices PLAY that Increase the Triple Bottom Line GOAL CSR 8 Increase Citywide Resilience to Sea Level Rise and Weather-Related Events Equitably for All City Residents **GROW** GOAL CSR 9 **Emergency Preparedness** 





### Conservation, Sustainability and Resiliency

#### WHAT IS THE CONSERVATION, SUSTAINABILITY AND RESILIENCY ELEMENT?

Preparing for the future is a key component of City services and policy making and the Conservation, Sustainability and Resiliency Element is the City of Delray Beach's approach for expanding its environmental stewardship more broadly beyond just marine and terrestrial natural resources. This approach also incorporates the concepts of energy use; air quality that factors in greenhouse gas emissions; the energy-water nexus; considering the sustainability of City operations and preparing for climate change and sea level rise.

Conservation, Sustainability and Resiliency is an enhanced Element that incorporates the new principles of Sustainability and Resiliency that are interrelated to other elements of the Comprehensive Plan. Beyond the statutorily required components of the Conservation Element to protect and maintain air, natural, water and marine resources, concepts of Sustainability and Resiliency are cross-disciplinary to focus on preparation for climate change and sea level rise. This approach allows the City to identify vulnerabilities to these impacts as well as mitigate exposure by becoming a more resilient community. The City will reduce its contribution to climate-altering greenhouse gas emissions and simultaneously prepare for its impacts with "no regrets" strategies based on best available data. Through this cross-disciplinary approach, the City will also realize operational cost savings, reduce heat island effects and improve the overall health of the community.

The inter-disciplinary planning effort includes goals, objectives and policies to acquire and manage best, continue and enhance partnerships, incorporate new considerations into operational and capital planning decisions and include both internal and external outreach and education mechanisms to increase staff and public support, sensitive to the social aspects of vulnerability and resiliency to promote equity. Finally, in this Element, linkages to the Coastal Management, Mobility, Capital Improvements and Strategic Partnerships Elements, among others, are critical to maintain seamless implementation.



### Conservation, Sustainability and Resiliency

#### CONSERVATION, SUSTAINABILITY AND RESILIENCY GOALS.

GOAL CSR 1 AIR QUALITY

PROTECT AND IMPROVE THE QUALITY OF THE CITY'S AIR RESOURCES.

GOAL CSR 2 CONSERVE AND PROTECT WATER RESOURCES

PROVIDE A SUSTAINABLE WATER SUPPLY BY PROTECTING, CONSERVING, AND REUSING THE CITY'S WATER SUPPLY, BY MAINTAINING AND IMPROVING THE CITY'S WATER QUALITY, AND BY EDUCATING THE PUBLIC ABOUT THEIR ROLE IN THESE

EFFORTS.

GOAL CSR 3 CONSERVE AND PROTECT MINERALS AND SOILS

CONSERVE, PROTECT, AND PROVIDE FOR THE APPROPRIATE USE OF AREAS SUITABLE

FOR THE EXTRACTION OF DESIRABLE SOILS AND MINERALS.

GOAL CSR 4 PROTECT LANDS FOR THE BENEFIT OF HABITAT AND SPECIES

CONSERVE, ENHANCE, REGENERATE, MAINTAIN AND PROTECT WETLANDS, NATURAL RESERVATIONS AND SENSITIVE LANDS, WHICH PROVIDE HABITAT FOR THE PROTECTION OF FISHERIES WILDLIFE AND ENDANGERED OR THREATENED SPECIES OR CONTAIN NATIVE VEGETATION VITAL TO THE ENVIRONMENTAL QUALITY OF THE CITY.

GOAL CSR 5 PROMOTE ENERGY EFFICIENCY AND DIVERSIFY ENERGY MIX

CONSERVE ENERGY RESOURCES BY PROMOTING ENERGY EFFICIENCY AND DIVERSIFY THE MIX OF ENERGY RESOURCES THROUGH INCREASING RENEWABLE ENERGY USE.

GOAL CSR 6 SUPPORT SUSTAINABLE WASTE MANAGEMENT, URBAN AGRICULTURE AND FOOD

**PROGRAMS** 

THE CONSERVATION OF NATURAL RESOURCES SHALL BE ENCOURAGED THROUGH CITY SUPPORT OF WASTE MANAGEMENT RECYCLING, URBAN AGRICULTURE AND

FOOD DELIVERY POGRAMS.

GOAL CSR 7 SUPPORT SUSTAINABLE CITY OPERATIONS AND PRACTICES THAT INCREASE THE TRIPLE

**BOTTOM LINE** 

THE CITY WILL BECOME MORE SUSTAINABLE THROUGH ADOPTION OF POLICY AND IMPLEMENTATION OF SUSTAINABLE PRACTICES. THE CITY ALSO, WHEN APPLICABLE, WILL IMPLEMENT POLICIES AND PROGRAMS THAT PROVIDE ENVIRONMENTAL, ECONOMIC AND SOCIAL BENEFITS TO RESIDENTS, BUSINESSES, VISITORS AND OTHER GOVERNMENTAL AGENCIES TO STRENGTHEN DELRAY BEACH'S POSITION AS A

MODEL OF SUSTAINABLE PRACTICES.

GOAL CSR 8 INCREASE CITYWIDE RESILIENCE TO SEA LEVEL RISE AND WEATHER-RELATED EVENTS

**EQUITABLY FOR ALL CITY RESIDENTS** 

THE CITY SHALL SUPPORT INCREASED RESILIENCE TO SEA LEVEL RISE, FLOODING, STORMS AND OTHER DISRUPTIVE WEATHER EVENTS.

GOAL CSR 9 EMERGENCY PREPAREDNESS

DAMAGE TO PUBLIC FACILITIES AND DISRUPTION OF SERVICES TO THE PUBLIC DUE TO NATURAL OR OTHER DISASTERS WILL BE MINIMIZED BY PRE-DISASTER FACILITIES

PLANNING.

#### PROTECT AND IMPROVE THE QUALITY OF THE CITY'S AIR RESOURCES.

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

- Ompletion of a greenhouse inventory with reduction targets.
- Reductions in vehicle miles traveled.
- Increase in the number of City vehicles using clean fuels and charging station infrastructure projects.
- Increase the mileage of safety features for cycling and paths.
- Increase in percentage of tree canopy coverage

### **Objective CSR 1.1 Air Quality**

Protect and improve the air quality throughout the City to meet the National Ambient Air Quality Standards (NAAQS) and other air quality requirements either individually or through partnerships.

### Policy CSR 1.1.1

Participate in any regional or statewide effort to attain satisfactory air quality at a condition equal to or better than state and federal air quality standards.

### Policy CSR 1.1.2

Provide data to, and coordinate with, the Department of Health, U.S. EPA and other relevant agencies to monitoring air quality impacts.

### Policy CSR 1.1.3

Ensure that all Prevention of Significant Deterioration (PSD) permits, Non-Attainment Area New Source Review (NAA-NSR) permits, Title V General permits, Title V Permits for Paper and Allied Products sources, Chemicals and Allied Products sources and Cane Sugar sources are issued by the FDEP or Department of Health before permits are issued by the City for construction and operation.

### Policy CSR 1.1.4

Cooperate with Florida Department of Environmental Protection (FDEP), Department of Health and other appropriate agencies in assessing air quality impacts associated with the waste transfer station located in Delray Beach.

### Policy CSR 1.1.5

Cooperate with the National Weather Service and Palm Beach County Environmental Resources Management to develop and implement a rapid response mechanism to notify the public of air pollution episodes that endanger public health.



### Objective CSR 1.2 Manage and Reduce Greenhouse Gas Emissions

Reduce greenhouse gas emissions both in City operations and communitywide to achieve improved air quality and lower the City's contribution of emissions resulting in climate change.

### Policy CSR 1.2.1

Conduct an inventory of City operations and communitywide greenhouse gas emissions within two (2) years, establish appropriate reduction targets in the inventory and continue with updates every (five) 5 years thereafter.

### Policy CSR 1.2.2

Develop greenhouse gas reduction strategies that strive to reduce the largest sources of emissions for City operations and communitywide

### Policy CSR 1.2.3

Include policy considerations into capital planning procedures for projects, and procurement requirements, which reduce greenhouse gas emissions to meet reduction targets, increase energy efficiency and renewable energy, decrease vehicle miles traveled and increase use of alternative modes of transportation to reduce vehicle use.



# Objective CSR 1.3 Reduce transportation-related emissions through a diversified transportation system

Develop a diversified transportation system that reduces reliance on fossil fuel consumption through infrastructure and program improvements that decrease vehicle miles traveled and enhance walking, cycling and transit opportunities.

Objective Mobility xx.

### Policy CSR 1.3.1

Implement transportation, mobility, and capital improvements plans that promote compact mixed-use development patterns accessible through multi-modal transportation options.

### Policy CSR 1.3.2

Focus high density and intensity land uses around existing and planned rail service.

### Policy CSR 1.3.3

Consider the recommendations of Delray Beach Tri-Rail Coastal Link Station Master Plan.

**MBL Policy** 

### Policy CSR 1.3.4

Work with the Palm Beach Transportation Planning Agency and other local governments to develop a baseline estimate of vehicle miles traveled and non-automobile mode share countywide, and downscale to the City level, in order to adopt short, mid-range and long-term goals for vehicle miles reduction.

### **Policy 1.3.5**

Analyze and identify barriers to multimodal connectivity within two (2) years and work to eliminate those barriers through studies, plans, and capital investments.

### Policy CSR 1.3.6

Increase non-automobile transportation mode share 5% by 2025 with more walking, biking and transit use in priority areas throughout the City.

**MBL Policy** 

Policy CSR 1.3.7

Improve neighborhood connectivity by connecting sidewalks and multi-use paths that lead to City parks and require new development and redevelopment to accommodate bicycle and pedestrian facilities and connections to existing development through the use of striped or buffered/marked bicycle lanes, cycle-tracks, parallel off-street paths and/or other dedicated facilities.

### **MBL Policy**

### Policy CSR 1.3.8

Within eight (8) years, achieve recognition as a Bicycle-Friendly Community or Walk-Friendly Community OR achieve an average community Walk Score or Bike Score of 70 or more.

### **MBL Policy**

### Policy CSR 1.3.9

Assist in the coordination of programs that implement employer-option transportation control measures that reduce peak-hour vehicle use, such as flexible work hours, employer based carpooling, and compressed work weeks.

### Policy CSR 1.3.10

Support maximizing options to relieve congestion through trolleys, shuttles, transportation modalities that augment Palm Tran and Tri-Rail Services and operate with the cleanest fuels possible.

### **MBL Policy**



### Objective CSR 1.4 Reduce vehicle-related emissions

Promote the use of fuel efficient, hybrid, and alternatively fueled vehicles and implement operational enhancements that support reductions in transportation-related vehicle emissions.

#### Policy CSR 1.4.1

Complete a Right-Size vehicle fleet analysis within three (3) years with increased fuel economy (and acquisition plan) to determine the most optimal mix of pooled, sized and assigned vehicle with most efficient fuel sources. Seven (7) or more years of age should be a considered vehicle replacement standard. Ensure technician training



and the installation of electric vehicle support equipment (EVSE) are considered.

### Policy CSR 1.4.2

Consider the costs and benefits of City fleet vehicles powered by alternative fuels or engine design, such as hybrid or electric vehicles, and higher mileage vehicles as part of the City's capital purchasing process for new motor vehicles used in transportation and life and safety maintenance operations. (Objective C-1 carried forward)

### Policy CSR 1.4.3

To reduce fuel costs and reduce municipal greenhouse gas emissions, research and adopt a City-vehicle idling policy with corresponding educational materials.

### Policy CSR 1.4.4

Continue to require a percentage of off-street parking be to accommodate alternatively fuel parking spaces within the Central Business District. Develop a needs assessment for alternatively fueled vehicle spaces throughout the City.

#### Policy CSR 1.4.5

Work with major private sector companies that have large fleets to co-locate or strategically site clean fuel support infrastructure such as fueling stations.

### Policy CSR 1.4.6

Research and develop outreach materials to increase awareness of the relationship between prolonged vehicle idling, particularly for heavy duty trucks, and related greenhouse gas emissions.

### Policy CSR 1.4.7

Collaborate with other local governments to evaluate the feasibility of increasing alternative fuel sources such as biofuel, methane, electric, and or solar in government and/or private sector fleet vehicles.

### Policy CSR 1.4.8

Balance traffic flow, speed and street design, accounting for location-specific goals, such as continuing to implement the complete streets ordinance.

MME Policy



### **Objective 1.5 Air Quality**

Implement City operations in a manner to improve air quality where possible.

### Policy CSR 1.5.1

Continue to implement policies related to air quality and tobacco such as Smoke Free/Tobacco Free Work Place and maintain designated "No Smoking Areas" on the beach.

### Policy CSR 1.5.2

Continue to enforce prohibitions on burning trash and debris. The City shall partner with the Palm Beach County Health Department where necessary to enforce requirements for open burning operations related to residential land clearing and land clearing for commercial purposes.

### Policy CSR 1.5.3

Continue to ensure demolition permits mitigate air quality impacts.

### Policy CSR 1.5.4

Before permitting any demolition involving asbestos renovation projects or demolition of structures subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), the City shall ensure that written approval is obtained from the Health Department consistent with Chapter 11, Article II, Section 11-20 (a) (5)-(6) of the Palm Beach County Code (§ 4, Ordinance No. 78-5, as amended).



PROVIDE A SUSTAINABLE WATER SUPPLY BY PROTECTING, CONSERVING, AND REUSING THE CITY'S WATER SUPPLY, BY MAINTAINING AND IMPROVING THE CITY'S WATER QUALITY, AND BY EDUCATING THE PUBLIC ABOUT THEIR ROLE IN THESE EFFORTS.

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

- Increase in the availability and use of reclaimed wastewater.
- Increase in the number of new developments using reclaimed wastewater.
- Mumber of pollutants and pollutant levels detected in < Lake Ida? >.
- Change in number of new cases of saltwater intrusion in public wellfields.
- Change in the number of water bodies meeting state water quality standards.
- Number of substandard stormwater management systems retrofitted.

Objective CSR 2.1 Water Resource Contamination
Focus on detecting and eliminating water
resource contamination and instituting
preventative measures to protect water supply
sources (Objective A-1 carried forward)

### Policy CSR 2.1.1

Continue monitoring groundwater conditions through installation of monitoring wells consistent with the County's Wellfield Protection Ordinance and the City's Industrial Pretreatment Program, as well as applicable State and Federal requirements. (Policy A-1.1 carried forward)

### Policy CSR 2.1.2

Encourage the preservation of existing groundwater recharge areas through sensitive site planning, including maximizing open space, pretreatment of stormwater runoff, etc. In the case of environmentally sensitive lands, such preservation may include sensitive development under "planned development" concepts, exaction (public site dedication provisions of the Land Development Regulations), and acquisition (including the County Environmentally Sensitive Lands Acquisition Program). (Policy A-1.3 carried forward)

### Policy CSR 2.1.3

Continue water resource monitoring and protection programs and proactively address potential impacts on the coastal aquifer from

increased chlorides due to a changing climate and sea level rise.

### Policy CSR 2.1.4

Continue to monitor developments in the field of water treatment technology, including desalinization, and utilize the most cost-effective technology available to meet long-term demands. (Policy A-1.2 carried forward)

### Policy CSR 2.1.5

Protect existing wellfields and water supplies, and plan for infrastructure replacement and wellfield relocation as needed in consideration of potential increased coastal flooding, sea level rise, saltwater intrusion, and other potential future climate change impacts using the most recent sea level rise projections from the Southeast Florida Regional Climate Compact. This could include potential saltwater intrusion mitigation using reuse, stormwater, C-51 or other sources of water.



### **Objective CSR 2.2 Wellfield Protection**

Implement and expand upon the concepts, principles, and regulations contained in the Palm Beach County Wellfield Protection Program.

(Objective A-2 carried forward)

#### Policy CSR 2.2.1

Continue to assure compliance with the County Wellfield Protection Ordinance by including



compliance as a performance standard for which a specific finding must be made upon approval of any site plan or conditional use action. (Policy A-2.1 carried forward)

### Policy CSR 2.2.2

Inspect and monitor business premises, to ascertain that facilities and procedures exist and are utilized to properly manage hazardous materials and wastes commonly occurring as a result of existing or proposed activities in compliance with the Wellfield Protection Program, Industrial Pretreatment Program, and Fire department inspections. (Policy A-2.2 carried forward)

### Policy CSR 2.2.3

Prohibit the establishment of hazardous waste storage, transfer, or generating facilities in wellfield protection areas. (Policy A-2.3 carried forward)



### **Objective CSR 2.3 Water Quality**

Specific programs to protect water quality from threats to groundwater, surface and other water resources shall be implemented to monitor, enforce, reduce, eliminate, and provide environmentally responsible disposal methods of materials which may be hazardous or contaminate our water supply or other water bodies. (Objective A-3 carried forward)

### Policy CSR 2.3.1

Participate in data collection efforts, including but not limited to sampling for microbiological analysis, and enforcement of new water quality criteria for use in the Healthy Beaches Program required as of January 2016 adopted by the Florida Department of Health (DOH). These criteria reflect the most current, 2012 Recreational Water Quality Criteria (RWQ criteria), recommendations and water quality grant requirements put forth by the United States Environmental Protection Agency (USEPA) and sample sites exceeding established standards result in the issuance of an advisory.

### Policy CSR 2.3.2

Maintain the current program of monitoring and inspecting industrial and commercial sites. (Policy A-3.1 carried forward)

### Policy CSR 2.3.3

Implement public education programs to provide awareness of the impacts of the improper disposal of household hazardous waste. (Policy A- 3.2 carried forward)

### Policy CSR 2.3.4

Support the continuation of a central collection site, under the jurisdiction of the Solid Waste Authority, to which the public may bring and deposit household hazardous wastes on a daily basis. (Policy A-3.3 carried forward)



### Objective CSR 2.4 Water Supply and Shortage

Continue to mitigate against future water shortages using a series of innovative activities, which educate the public, reduce consumption, minimize waste, and generally protect water resources, shall continue to be undertaken. These activities shall be directed toward the continued reduction of water use, and shall be evaluated annually. Objective A-4 carried forward

### Policy CSR 2.4.1

Cooperate and support development and implementation of local and regional water resource strategies, water resource development, conservation and reuse projects that promote a sustainable water supply. Regional and local water resource development strategies shall include, but not be limited to, increased water conservation, aquifer recharge, additional reuse projects such as rapid infiltration basins (RIBS), reclaimed water, Upper Floridan aquifer development and the C-51 Reservoir Project.

### Policy CSR 2.4.2

Implement a water conservation program, as required by its water use permit, based on the following principles: enforcement of landscaping and xeriscaping ordinances, low volume plumbing ordinance, rain sensor ordinance, implementation of a conservation rate structure, leak detection system and water conservation education



programming and development of alternative water supply projects.

### Policy CSR 2.4.3

Continue developing other alternative water supplies as a mechanism to diversify the City's sources of potable water supply.

### Policy CSR 2.4.4

Raise public awareness of water conservation practices on a regular basis through multiple, creative outlets, including posting literature in City Hall, installing signs along major roads, providing information in utility bills, neighborhood newsletters, press releases, and social media platforms, as well as education programs in local schools. (Policy A-4.1 carried forward)

### Policy CSR 2.4.5

Continue to implement requirements for water conserving fixtures in new construction and incentivize higher efficiency standards in new construction and renovations. (Policy A-4.2 carried forward)

### Policy CSR 2.4.6

Require the use of native plants and environmentally-friendly landscaping and design in all publicly owned areas, including demonstration projects that educate the public on the resulting benefits of water and native wildlife conservation. Inform residents and/or plant or animal sellers about the benefits of native species and the hazards of invasive species, promoting at events such as tree giveaway

### Policy CSR 2.4.7

Revise land development regulations to eliminate required irrigation systems when a landscape plan is approved which includes the use of native plants and other vegetation that will survive without irrigation, while meeting landscape code requirements.

### Policy CSR 2.4.8

Continue to include requirements on the use of low-water tolerant plant species, as well as the installation of rain or moisture monitor devices for irrigation systems in landscape standards.

### Policy CSR 2.4.9

Continue to require the preservation of existing native plant communities, where practicable, and the use of native plants and trees in landscape plans for new development and redevelopment projects.

#### Policy CSR 2.4.10

Continue requiring a water source, other than City water, for irrigation purposes in geographically defined areas of the City. (Policy A-4.6 carried forward)

### Policy CSR 2.4.11

Continue to utilize and expand use of reclaimed water from the wastewater treatment plant, with prioritization for effluent reuse on golf courses, large homeowner associations with master meter systems, City parks, and within the Coastal Planning Area. (Policy A-4.5 carried forward).

### Policy CSR 2.4.12

Provide incentives for new construction and redevelopment to incorporate the use of grey water systems for both irrigation and toilets/sanitary sewer systems.

#### Policy CSR 2.4.13

Whenever water wells are discontinued from use, they shall be plugged and sealed as required by the Florida Department of Environmental Protection. (Policy A-4.8 carried forward)

### Policy CSR 2.4.14

Support public education programs and emergency powers of the South Florida Water Management District with respect to the conservation of water sources and, when such programs and activities are imposed by the District, impose those similar restrictions which are available under the City's emergency water conservation powers. (Policy A-4.9 carried forward)

### Policy CSR 2.4.15

Direct storm water into landscaped areas for use in irrigation throughout the city limits. (Policy A-4.10 carried forward)



### Policy CSR 2.4.16

Work with the South Florida Water Management District and Lake Worth Drainage District to enhance local regulations permitting innovative techniques of pervious paving/surfaces to reduce water runoff and promote percolation/stormwater recharge, including low impact development principles. (Policy A-4.11 carried forward)

### Policy CSR 2.4.17

Work with the South Florida Water Management District and Lake Worth Drainage District to maintain and enforce vegetative requirements and to investigate opportunities for shared or joint use of lands, easements or rights-of-way for passive, non-structural recreational opportunities.



### **Objective CSR 2.5 Potable Water**

To address the City's existing and projected potable water needs and sources in the context of the regional water supply, the following policies shall be implemented. Objective A-5 carried forward)

### Policy CSR 2.5.1

The City adopts, by reference, the City of Delray Beach's 201x Water Supply Facilities Work Plan. (Policy A-5.1 carried forward)

### Policy CSR 2.5.2

The City shall participate in the development of, and actively support the projects and recommendations contained within, the most recent version of the Lower East Coast Regional Water Supply Plan.



### **Objective CSR 2.6 Protecting Water Bodies**

Support individually, and participate in, regional efforts to protect and enhance the quality of water, including Lake Ida, the drainage canal system, and the Intracoastal Waterway. (Objective C-2 carried forward)

#### Policy CSR 2.6.1

Work with other agencies to improve Lake Ida water quality, with the goal of achieving a water

quality level that will allow swimming. (Policy C-2.1 carried forward)

### Policy CSR 2.6.2

Continue to monitor the quality of waters flowing into coastal water bodies and implement strategies to maintain protection or improvement in them considering potential contamination resulting from inundation, structural compromise, from sea level rise, storm events, or other climate related impacts.

### Policy CSR 2.6.3

Review existing City regulations on fertilizer application and update, if needed, to incorporate concepts including, but not limited to, blackout periods, effectiveness of enforcement and setback distances from water bodies. Expand education and outreach efforts for homes and business owners on proper fertilizer application techniques and the adverse fertilizer impacts on City water quality.



### **CSR 3 CONSERVE AND PROTECT MINERALS AND SOILS**

### CONSERVE, PROTECT, AND PROVIDE FOR THE APPROPRIATE USE OF AREAS SUITABLE FOR THE EXTRACTION OF DESIRABLE SOILS AND MINERALS.

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

- Decrease in permit violations related to lake excavation activities.
- Increase in more natural shoreline protection strategies such as mangrove plantings and installation of rip rap.
- Increase in landscaping along roadways to prevent soil erosion.
- Decrease in number of septic tanks.

### **Objective CSR 3.1 Soil Resources**

Conserve and protect soils resources by maintaining land development regulations governing soil erosion and limit the use of septic tanks to those soil associations suitable for such usage.

chronic drainfield problems that may have an adverse impact on the environment shall be abandoned and connection made to the central sewer system. (Policy A-1.1 carried forward)

### Policy CSR 3.1.1

To minimize soil erosion on new construction sites, land development regulations shall be maintained which require measures consistent with the Best Management Practices of the United States Natural Resources Conservation Service including, but not limited to, replanting, restoring and protecting vegetation.

### Policy CSR 3.1.2

Include appropriate landscaping and design, including, but not limited to, replanting, restoring and protecting vegetation, to minimize soil erosion in the design and construction or expansion of arterial and collector roadways with steep embankments.

### Policy CSR 3.1.3

Maintain shoreline protection and erosion control by continuing a program of beach and dune protection, coastal and shoreline buffering, and use of seawalls only when natural protection strategies are not feasible; and, evaluate opportunities to protect coastal investments and infrastructure, as appropriate, from the impacts of climate change.

### **Policy 3.1.4**

Existing septic tanks which are located in sewered areas throughout the City shall be removed from use as required by law and local regulation. Septic systems deemed subject to flooding, or with



### PROTECT LANDS FOR THE BENEFIT OF HABITAT AND SPECIES

CONSERVE, ENHANCE, REGENERATE, MAINTAIN AND PROTECT WETLANDS, NATURAL RESERVATIONS AND SENSITIVE LANDS, WHICH PROVIDE HABITAT FOR THE PROTECTION OF FISHERIES WILDLIFE AND ENDANGERED OR THREATENED SPECIES OR CONTAIN NATIVE VEGETATION VITAL TO THE ENVIRONMENTAL QUALITY OF THE CITY. (Goal Area "B" carried forward)

Performance Measures: Success in addressing the Objectives and Policies of Goal CSR 4 shall be measured utilizing the following performance indicators:

- Sea turtle nest hatchling success rates
- Maintain the number and size of existing wetlands
- Maintain conservation and specially designated and protected properties
- Beach nourishment:
  - Evaluation and physical monitoring of the beach project annually
  - o Completing planned periodic beach renourishment events
  - o Coordinating swiftly with project partners (USACE, Palm Beach County and FDEP) to assess and repair storm damages to the beach.

### Objective CSR 4.1 Fisheries, Wildlife and Habitat Implement policies that protect fisheries, wildlife,

wildlife habitat and marine habitat and restrict activities known to adversely affect the survival of endangered and threatened wildlife (Objective B-

### 2 carried forward?)

### Policy CSR 4.1.1

Continue to the Turtle implement Sea Conservation Program, which includes monitoring of nesting and hatching activity, and enforcement of lighting restrictions. (Policy B-4.2 carried forward)

#### Policy CSR 4.1.2

Continue enforce to sea turtle lighting requirements.

### Policy CSR 4.1.3

Maintain existing programs to protect offshore reefs and marine habitat through monitoring and management of beach renourishment construction activities. (Policy B-4.4 carried forward)

### Policy CSR 4.1.4

Protect, conserve, rehabilitate and restore wildlife habitat, open space and recreation areas, conservation areas and prevent any further net loss of these lands in the City. (Policy B-2.2 carried forward?)

### Policy CSR 4.1.5

Cooperate with the US Department of Agriculture, Florida Department of Environmental Protection (FDEP), Fish and Wildlife Conservation Commission to eliminate invasive exotic plant and animal species and pursue the removal, eradication, treatment and maintenance of exotic, nuisance and invasive species within all City-owned and City managed preserve areas.

### Policy CSR 4.1.6

The City's Landscape Ordinance shall provide for the removal of existing invasive exotic species such as Australian Pine, Brazilian Pepper, Shefelara Umbrella Plant, Ear-Leaf Acacia, and Melaleuca on private property as development and/or redevelopment occurs and shall also prohibit the planting or cultivation of these species anywhere within the City. (Policy B-1.6 carried forward)

### Policy CSR 4.1.7

On-site preservation shall be promoted as the most desirable alternative for the protection of upland habitats, and plant and wildlife species, with offsite preservation for endangered or threatened species of special concern utilized when recommended by the Florida Fish and Wildlife Conservation Commission and the US Fish and Wildlife Service.

### Policy CSR 4.1.8

Comply with all relevant State and Federal regulations which pertain to listed species and consult, as required, with regulatory agencies prior to the issuance of a land use approval that would result in an adverse impact to any listed species.



### CSR 4 PROTECT LANDS FOR THE BENEFIT OF HABITAT AND SPECIES

### Policy CSR 4.1.9

Support marine law enforcement programming and restrict access and activities in designated Manatee Essential Habitat Areas and support existing speed regulations such as Idle Speed Zones, Low Speed Zones and Slow Speed Buffer Zones to promote boater safety and protect manatees. (Policy B-2.4 carried forward)

### Policy CSR 4.1.10

Marine construction activities shall comply with all state and Federal regulatory requirements and shall be located so as to minimize impacts to manatees and resources that they depend upon, as well as other rare, threatened or endangered species. Such activities shall also require minimal or no dredging as well as have good tidal flushing. In instances where dredging is required, both initial and maintenance dredging shall be minimized.



### **Objective CSR 4.2 Habitat Protection**

Identify, designate, protect, maintain and regenerate habitat, natural reservations and environmentally sensitive areas. (Objective B-1 carried forward)

### Policy CSR 4.2.1

Conserve and protect natural reservations and environmentally sensitive areas as depicted on City maps of designated properties of ecological concern.

### Policy CSR 4.2.2

Consider the climate adaption needs of native plants, the diversity of plant and wildlife species, and consider strategies for assisting in their natural migration.

### Policy CSR 4.2.3

The submission of a biological survey and a habitat analysis shall accompany land use requests for plan amendments, rezonings, and site plan approval. However, the requirement shall not apply where it is apparent that there are no such resources. (Policy B-2.1 carried forward)

### Policy CSR 4.2.4

Continue to protect valuable open space and conservation lands through dedication of park

lands, impact fees or dedication in lieu of and the provision of greenspace and buffering at the time of site plan review.

### Policy CSR 4.2.5

Continue to maintain and implement regulations that protect and preserve trees, including those in areas of native vegetative communities and promote the use of native vegetation. The City shall maintain and enforce land clearing requirements and enhance tree replacement policies that focus on like kind species in the site planning process.

### Policy CSR 4.2.6

Identify the following areas as "Conservation" on the Neighborhood, Districts and Corridors Map: Policy carried forward

- The FIND parcels 645, and 650 along the Intracoastal;
- The Leon Weekes Environmental Preserve;
- Delray Oaks; and
- The Donnelley Tract on Palm Trail.
- The Public Beach Dunes
- Bexley Park Preserve

Policy OPR 3.1.1

### Policy CSR 4.2.6

Publicly-owned environmentally sensitive areas have been identified on the Future Land Use Map by an "Open Space - Conservation" symbol. The FIND parcels 645 has been zoned into the conservation zone district and parcel 650 (Mangrove Park) has been zoned Open Space. These designations shall be maintained in order to further Objective xx as well as the Goals, Objectives and Policies of the Open Space and Recreation Element. (Policy B-1.1 carried forward) MOU with FIND to improve public access, passive public benefit.

### Policy CSR 4.2.7

With development of the Heritage Club project, a portion of the Hurricane Pines site has been preserved as part of the open space for the project. This area shall continue to be maintained by the homeowners association as a preservation area. Policy B-1.2 carried forward)

Policy CSR 4.2.8



### CSR 4 PROTECT LANDS FOR THE BENEFIT OF HABITAT AND SPECIES

The City-owned park site in the Hammock Reserve area shall be developed with primarily passive uses to maximize retention of the existing native plant communities and continue to be preserved as an environmentally sensitive cite. (Policy B-1.3 carried forward)

### Policy CSR 4.2.9

Natural reservations which exist as historic sites shall be protected through the continued implementation and enforcement of the City's Historic Preservation Ordinance. (Policy B-1.5 carried forward)

### Policy CSR 4.2.10

Required project open spaces shall integrate with the trail system where feasible and functionally possible, particularly where there are contiguous parcels identified for the trail system.

### Policy CSR 4.2.11

Continue to require the conservation of trees and existing native vegetation in redevelopment and new development projects.

### **Policy CSR 4.2.12**

Promote the ongoing protection and maintenance of unique habitats and natural areas to preserve environmental, recreation, and other public benefits, including but not limited to, the conservation of publicly-owned natural lands, wetland mitigation areas and water recharge areas.

### Policy CSR 4.2.13

Prioritize and pursue funding opportunities for the restoration and/or enhancement of degraded natural areas, such as, restoration of shorelines or dunes, restoration of natural hydrology, or removal of non-native vegetation.

### Policy CSR 4.2.14

Include impacts to habitat and wildlife in future climate planning efforts including vulnerability assessments.

### Policy CSR 4.2.15

Continue to implement and enforce regulations which promote proper tree and vegetative maintenance.



Objective CSR 4.3 Local Government Coordination Maintain cooperation with adjacent local governments to conserve, appropriately use, or protect unique vegetative communities located within more than one local jurisdiction.

### Policy CSR 4.3.1

Coordinate with applicable agencies to identify, manage, and protect unique native vegetative communities, and marine and estuarine resources that are located within the City but cross jurisdictional boundaries or are of regional significance.

### Policy CSR 4.3.2

Participate in data collection and updating management plans for unique vegetative communities that are entirely or partially located within the City.

### Policy CSR 4.3.3

Participate in efforts to secure funding to protect, or the designation process for, unique vegetative communities within the City.



### **Objective CSR 4.4 Protecting Wetlands.**

Protect and conserve the functions and values of wetlands and direct future land uses that are incompatible with the protection and conservation of wetlands and wetland functions away from wetlands.

### Policy CSR 4.4.1

Implement provisions that avoid and minimize impacts to wetland function, and where impacts are unavoidable, require replacement of lost function through mitigation.

### Policy CSR 4.4.2

Implement integrated water management strategies in order to lessen negative impacts to open spaces, wetland mitigation areas, and natural systems, improve the ability of these systems to adapt to climate change, and optimize the ability of these systems to create additional benefits to the City's residents and visitors.



### CSR 4 PROTECT LANDS FOR THE BENEFIT OF HABITAT AND SPECIES

### Policy CSR 4.4.3

Maximize connectivity between wetland areas, onsite preserve areas in private developments, areas subject to habitat management plans and/or mitigation projects to enhance their relationships with other wetlands.

### Policy CSR 4.4.4

Integrate wetlands into stormwater drainage/water management practices in permitted development, protected lands and mitigation areas to provide necessary recharge hydrology and conditions to sustain the wetland areas.

### Policy CSR 4.4.5

Distribute land uses in a manner that avoids or minimizes, to the greatest degree practicable, the effect and impact on wetlands. Impacts to wetland functions shall be directed away from wetland areas, or when compatible land uses are allowed to occur, shall be mitigated or enhanced, or both, to compensate for loss of wetland functions.

### Policy CSR 4.4.6

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



### **Objective CSR 4.5 Habitat Outreach**

Educational programs shall be implemented to increase public awareness on species and habitat protections.

### Policy CSR 4.5.1

Increase public awareness of manatees and manatee protection efforts including signage at new and existing public and private marinas, boat ramps, and non-residential boat docks, as well as appropriate public parks, and educational displays or informational kiosks that raise manatee awareness.

### Policy CSR 4.5.2

Increase public awareness of threatened and endangered species through signage at appropriate habitat locations and coordinate with other partners to increase public awareness of native flora and fauna and their unique role in the ecosystem.



### OPR 5 PROMOTE ENERGY EFFICIENCY AND DIVERSIFY ENERGY MIX

CONSERVE ENERGY RESOURCES BY PROMOTING ENERGY EFFICIENCY AND DIVERSIFY THE MIX OF ENERGY RESOURCES THROUGH INCREASING RENEWABLE ENERGY USE.

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

- Reduction in residential, commercial and municipal electricity use.
- Increase in the number of green buildings in the City.
- Increases in energy efficiency municipal retrofit projects.
- on Increases in City and communitywide renewable energy projects.

### **Objective CSR 5.1 Energy Efficiency**

Promote and provide incentives for energy efficient buildings, homes and infrastructure to reduce electricity use.

### Policy CSR 5.1.1

Consistent with the Florida Building Code, increase energy efficiency requirements for residential and commercial construction through an outreach effort to determine best incentives, approaches and case studies. Encourage increasing energy efficiency attributes of repurposed buildings. Develop a sustainable construction incentive program for new residential and commercial construction. Evaluate strategies to use various fee structures encouraging sustainable construction standards consistent with law.

### Policy CSR 5.1.2

By 2022, create a Sustainable Development Standards evaluation system and Handbook to assist with interpretation of criteria for clarification in the development community. Include aspects of energy efficient design for homes and businesses and sustainable landscaping. [2022]. Short Term goal

### Policy CSR 5.1.3

Consistent with the Florida Building Code, determine feasibility of changes to promote cooler roof systems with reflective coating materials.

### Policy CSR 5.1.4

Create outreach campaign on how residents and business owners can implement simple

solutions to become more energy efficient and save on power bills.

### Policy CSR 5.1.5

Undertake energy and water audits and retrocommissioning of operations for City facilities, and sources of energy use such as streetlights, within three (3) years to develop an energy and water efficiency capital retrofit program with a return on investment analysis showing costs and benefits of a citywide retrofit program. Implement a recurring program of retrocommissioning every eight (8) years on City facilities.

#### Policy CSR 5.1.6

Develop sustainable construction standards for City-owned buildings and major renovations consistent with Section 255,2575, Florida Statutes, requiring energy efficient and sustainable buildings. Require public infrastructure projects incorporate elements of efficiency for energy and water consumption in new or upgraded infrastructure investments and develop energy efficiency criteria to include in City procurements and capital projects as measured through Envision or a similar program. In the capital improvements planning process infrastructure decisions shall consider the most energy efficient technologies available. Develop or financially support infrastructure operators' participation in training programs on energy and water efficiency techniques.

### Policy CSR 5.1.7

Implement a system to maintain a centralized database (Utility Management System) which collects and tracks key sustainability indicators to



### OPR 5 PROMOTE ENERGY EFFICIENCY AND DIVERSIFY ENERGY MIX

facilitate sustainability and energy reporting, management of programs, and assessment of performance.

### Policy CSR 5.1.8

Cooperate with organizations such as the Palm Beach Branch of the US Green Building Council, Florida Green Building Coalition, Green Roofs for Healthy Cities and others to host informational events for residents and professionals on green roofs, green building techniques, and energy conservation.

### Policy CSR 5.1.9

Continue to enforce any environmental lighting restrictions and promote the goals of the Dark Sky Initiative.



### **Objective CSR 5.2 Renewable Energy**

Increase renewable energy projects in homes, commercial buildings and City facilities.

### Policy CSR 5.2.1

Promote, as appropriate and feasible, solar arrays, wind turbines, bio-diesel, energy storage technologies, micro-grids, community battery storage of electric power, and solar car charging on public assets, residential buildings, and commercial property.

### Policy CSR 5.2.2

Where feasible, the design and construction of all new City buildings shall allow for easy, costeffective installation of solar systems, such as optimal roof orientation, roof framing to support solar panels, installation of electrical conduit to accept solar electric system wiring, and installation of plumbing to support a solar hot water system, including space for a solar hot water storage tank.

### Policy CSR 5.2.3

Encourage, through the development of financial and regulatory incentives, such as the Property Assessed Clean Energy program (PACE), the increased use of electricity generated by alternative and renewable energy within the City, such as solar, wind, geothermal, and ocean energy technologies as well as

energy efficiency and wind resistance improvements.

### Policy CSR 5.2.4

Encourage and reduce barriers to solar cooperatives and other community renewable energy aggregation programs.

### Policy CSR 5.2.5

Work towards achieving the SolSmart Silver designation to offer expedited permit review for clean energy projects and remove regulatory barriers to the installation of solar in nearly all zoning districts. Develop and promote Support programs that encourage solar energy, such as solar cooperatives, that assist residents and businesses with the soft/indirect costs of solar arrays, and by streamlining the permitting processes and lowering permitting fees to facilitate implementation of alternative energy projects. [Complete by 2022].

### Policy CSR 5.2.6

Eliminate unnecessary obstacles for renewable energy generation (appropriately sized and sited: hydrogen, solar energy, geothermal energy, bioenergy, and wind energy projects or facilities).

### Policy CSR 5.2.7

Provide incentives for the deployment of private sector renewable energy projects by adding criteria for program requirements related to the use of any appropriate economic development incentives that encourage such developments such as through the Community Redevelopment Agency.

### Policy CSR 5.2.8

Complete a renewable energy feasibility study on all City facilities within two (2) years to identify opportunities for renewable energy projects to power municipal operations, minimize disruptions from major storms and weather events coupling renewable energy with backup power storage and establish a renewable energy target for municipal operations. [2021].

### Policy CSR 5.2.9

In the land development regulations, provide and encourage the use of energy design



### OPR 5 PROMOTE ENERGY EFFICIENCY AND DIVERSIFY ENERGY MIX

techniques, such as passive solar design for residential and commercial solar installations. Provide incentives for installing solar arrays on rooftops and other impervious spaces and remove any barriers to their installation in such areas.

### Policy CSR 5.2.10

Collaborate with local jurisdictions, state, and federal agencies to advance renewable energy goals through new programs, adoption of best practice programs, pursuit of grants for project and policy research, and policy implementation.

### Policy CSR 5.2.11

Create website and outreach materials about solar incentives, programs and net-metering opportunities into a compiled initiative.



THE CONSERVATION OF NATURAL RESOURCES SHALL BE ENCOURAGED THROUGH CITY SUPPORT OF WASTE MANAGEMENT RECYCLING, URBAN AGRICULTURE AND FOOD DELIVERY POGRAMS. (Goal Area "D" carried forward).

**Performance Measures:** Success in addressing the Objectives and Policies of **Goal CSR 6** shall be measured utilizing the following performance indicators:

- Increase in tonnage of waste recycled.
- Number of materials eligible for recycling.
- Increase in construction and demolition recycling.
- on Increase in hazardous waste drop off utilization.
- Increase in composting.
- Maintain and increase community gardening opportunities.
- Increase in backyard farming and urban agriculture.
- Increase in the number of businesses and community organizations who use locally produced food.

### **Objective CSR 7.1 Materials Management**

Develop a cooperative materials management system and infrastructure, with partnering organizations, in order to maximize the recovery and reuse of waste and other materials in ways that capture their economic value, conserve embedded energy, and minimize net life-cycle emissions of greenhouse gases and other pollutants.

### Policy CSR 6.1.1

Continue to participate in the Palm Beach County Solid Waste Authority recycling program. Work with Palm Beach County to meet or exceed county-imposed recycling goals in Section 403.706(2)(a), Florida Statutes requiring a recyclable materials program that have a goal of recycling solid waste by 75 percent by December 31, 2020. (Objective D-1 carried forward).

### Policy CSR 6.1.2

Work with the Solid Waste Authority to increase rates of residential and commercial recycling and implementation of hazardous waste management programs for the proper storage, recycling, collection and disposal of hazardous wastes.

### Policy CSR 6.1.3

Continue to support the County's education program to increase participation in recycling. (Policy D-1.2 carried forward).

### Policy CSR 6.1.4

Implement communitywide incentives and policies ensuring that residents and businesses are working toward achieving community waste reductions goals. Conduct an annual education program to encourage increased participation in the recycling program by low performing neighborhoods. (Policy D-1.3 carried forward).

### Policy CSR 6.1.5

Work with the waste hauler to receive city-level monitoring data and utilize annual and quarterly service reports to create a database of waste management services, analyze usage, and identify opportunities for improving waste management within the Delray Beach Planning Area.

### Policy CSR 6.1.6

To reduce waste, promote use of more sustainable products in certain industries such as biodegradable straws, bags, packaging and containers.



#### Policy CSR 6.1.7

Update commercial recycling requirements consistent with Section 403.7046(3), F.S. and Collaborate with Chamber to reach business entities on importance of recycling and benefits to the community overall in increasing recycling rates with an emphasis on restaurants.

### Policy CSR 6.1.8

To increase recycling of construction and demolition debris, provide the public with educational materials about available pick up service, and partner with the Solid Waste Authority, its waste hauler and other appropriate agencies to promote available methods of disposal.

### Policy CSR 6.1.9

Promote the recycling of hazardous wastes through education and outreach conveying information about available locations and programs for hazardous waste recycling; and, consider collection events to promote convenient drop-off opportunities.

### Policy CSR 6.1.10

Cooperate with the Palm Beach County Health Department and other concerned agencies in developing emergency response plans to handle accidents involving hazardous wastes.

### Policy CSR 6.1.11

Continue to support and enforce the implementation of the Oil and Grease Management Program and the Surcharge Program. Coordinate with the City's waste hauler and Chamber of Commerce to determine if opportunities exist for the City to assist in waste oil reduction through consolidated pick up, hauling services and recycling.

### Policy CSR 6.1.12

Explore opportunities to add recycle receptacles on City properties specifically in locations where the City currently supports trash receptacles, such as on Atlantic Ave., the Beach (the sidewalk that is adjacent to Highway A1A), Pineapple Grove, Swinton, US-1 and other appropriate areas.

### Policy CSR 6.1.13

Work closely with the Solid Waste Authority in the preparation of public notices, educational materials, promotional materials to be distributed to residential and commercial customers.

### Policy CSR 6.1.14

Actively work with the waste hauler in the administration of the "Optional Benefits" described in Exhibit 13 of the current Agreement with the City:

- Collaborate in the administration of the "Recycle Delray" program, which promotes recycling through community events and outreach programs for local schools and businesses.
- The City shall use the contribution made to the Delray Beach Public Library for recycling and composting educational outreach activities.
- The City shall ensure continued support of one Keep America Beautiful Coastal Cleanup event per year.
- The City shall coordinate with its waste hauler to support the "Annual Shredder Day" providing free shredding services to the City and its residents.
- The City shall coordinate to support the "You Recycle, We Replant" provision of the Agreement which provides for new or replacement trees in public places.

### Policy CSR 6.1.15

Prior to demolition, salvageable materials should be removed and sourced to upcycling and reuse organizations or recycled.

### Policy CSR 6.1.16

The City shall work with the Green Market to reduce waste, minimize polystyrene and plastic bag use and promote composting and recycling.



Objective CSR 6.2 Food and Organic Waste

Develop partnerships with Solid Waste Authority, stakeholders and waste hauler to decrease the amount of food and organic waste citywide.



### Policy CSR 6.2.1

The City shall explore opportunities with the Solid Waste Authority and its waste hauler to implement a food and organic waste recycling program to potentially include collection of, containers for, and recycling of fruits and vegetables, meat, poultry, seafood (bones and shells), bakery items and ingredients, eggs and paper egg cartons, plants, cut flowers, potting soil, coffee grounds, filters, tea bags and paper products (napkins, paper towels) which could include a shared composting program for food waste management.

### Policy CSR 6.2.2

Prepare educational materials on restaurantbased recycling strategies and work with waste hauler to target distribution to largest enterprises and ensure availability of recycling containers for other waste materials.

### Policy CSR 6.2.3

The City shall identify or designate other materials that the City aspires to have handled separately (such as organic material or preconsumer waste) through partnerships with the Solid Waste Authority and/or new services by amending the current Waste Management Agreement, or in negotiating future contracts with waste management entities identify opportunities for community composting programs where food and organic waste may be handled separately and used to create natural compost to be used in community gardens or sold to interested parties.



### Objective CSR 6.3 Disposal of Waste on Beaches

The City shall enhance and protect the character of Delray Beach's public beach system through promotion of coastal cleanup activities and supporting the proper disposal of solid waste and recyclable materials.

### Policy CSR 6.3.1

The City shall restrict litter and marine pollution at City events and activities.

### Policy CSR 6.3.2

The City shall promote recycling of waste generated by residents and visitors of Delray Beach's public beach by providing recycling receptacles and public notices.

### Policy CSR 6.3.3

The City shall support the coastal cleanup program conducted by the Keep America Beautiful and any other approved coastal cleanup activities.

### Policy CSR 6.3.4

The City shall partner with community organizations, schools, agencies, and non-for-profit groups to sponsor bi-annual coastal cleanup events.



### **Objective CSR 6.4 Local Food Resources**

Maximize local resources for energy-efficient food processing within the City's local foodshed. Identify strategies, research policies and limitations and encourage enabling location-appropriate urban agriculture and community gardening.

### Policy CSR 6.4.1

Partner with community groups and other local governments in the region to delineate and promote a local foodshed as part of a sustainable local food system.

### Policy CSR 6.4.2

Work with other local governments, institutions, and community groups in the defined foodshed to identify processing facilities and related infrastructure needed to process locally grown foods.

### Policy CSR 6.4.3

Create programs and policies which encourage and support composting, community garden networks and local food production, in order to meet the multiple goals of reduced emissions and energy consumption, while increasing the resiliency and long-term food security of the community.



### Policy CSR 6.4.4

Encourage backyard agriculture and community gardening throughout the City. Increase the use of locally grown and/or processed foods in City facilities where food is provided and encourage other local government facilities to do the same.

### Policy CSR 6.4.5

Work to facilitate partnerships between local farmers and local government organizations such as the Palm Beach County Cooperative Extension Service, Palm Beach County School Board to provide healthy, fresh foods in local schools and other institutions.

### Policy CSR 6.4.6

Increase support for the City's Green Market by encouraging increase of, and removing barriers for, local city-based growers. Permit and encourage small-scale agricultural production and sale direct to the public.

### Policy CSR 6.4.7

Explore opportunities and assess community readiness for support of a community garden network to be located on publicly held lands by partnering with local organizations, schools, agencies, non-for-profit groups, and individuals to provide fresh food for non-commercial use and green spaces.



# CSR 7 SUPPORT SUSTAINABLE CITY OPERATIONS AND PRACTICES THAT INCREASE THE TRIPLE BOTTOM LINE

THE CITY WILL BECOME MORE SUSTAINABLE THROUGH ADOPTION OF POLICY AND IMPLEMENTATION OF SUSTAINABLE PRACTICES. THE CITY ALSO, WHEN APPLICABLE, WILL IMPLEMENT POLICIES AND PROGRAMS THAT PROVIDE TRIPLE BOTTOM LINE (ENVIRONMENTAL, ECONOMIC AND SOCIAL) BENEFITS TO RESIDENTS, BUSINESSES, VISITORS AND OTHER GOVERNMENTAL AGENCIES TO STRENGTHEN DELRAY BEACH'S POSITION AS A MODEL OF SUSTAINABLE PRACTICES. (Goal Area "E" carried forward)

**Performance Measures:** Success in addressing the Objectives and Policies of **Goal CSR 7** shall be measured utilizing the following performance indicators:

- Develop and adopt a Sustainability and Climate Action Plan within three (3) years.
- Track and increase the number of sustainability policies or regulations adopted including policies incorporated into procurement guidelines.
- Ontinue annual reporting from the Green Implementation Advancement Board.
- Increase in the number of City events and resources promoting sustainable practices.
- Increase in education and outreach materials promoting sustainable practices.
- Increase in sustainability and climate resiliency web page traffic.
- Promote the green economy by increasing sustainability-related business within the City.
- Number of solar systems installed on City buildings and facilities.
- Track participation and attendance at major community arts and cultural events, performances, festivals, and programs where green or sustainability educational materials are presented, or materials are distributed.

### **Objective CSR 7.1 City Sustainability Practices**

Develop a baseline of City sustainable practices and determine methods to increase the sustainability of the City overall with prioritized actions that result in the greatest greenhouse gas reductions, extent of outreach and increased community support.

### Policy CSR 7.1.1

Review and re-evaluate current zoning codes, regulations and policies according sustainable community development practices, as those outlined in the criteria recommended by the United States Green Building Council's Leadership in Energy Environmental Design Neighborhood for Development (LEED-ND) certification, application of a national rating system for local governments, such as the STAR Community Index ™ (STAR), or other methodology.

### Policy CSR 7.1.2

Build on the work of the Green Implementation Advancement Board, previous Sustainability Reports and recommendations of the City's previous Green Task Force by developing a Sustainability and Climate Action Plan that prioritizes actions, recommendations and outcomes to reduce greenhouse gas emissions based on established targets in the previously referenced City inventory. Update the Sustainability and Climate Action Plan recommendations every five (5) years.

### Policy CSR 7.1.3

Review the City's procurement guidelines to address the importance of energy efficiency, renewable energy, reductions in greenhouse gas emissions, recycling and other sustainable practices. Create environmentally preferable purchasing policy for local government procurement of safe, healthy, and environmentally responsible products.

### Policy CSR 7.1.3

In order to meet the City's greenhouse gas reduction goals, and highlight renewable energy projects to the community, require any new major public facilities or retrofits (upgrade) include solar energy or other renewable energy source, where feasible.





# CSR 7 SUPPORT SUSTAINABLE CITY OPERATIONS AND PRACTICES THAT INCREASE THE TRIPLE BOTTOM LINE

**Objective CSR 7.2 Sustainability Implementation** 

Annually, determine an actionable set of recommendations that enables the City of Delray Beach to implement its current environmental commitments in a timely, costeffective, and citizen-centric manner, as well as explore new opportunities for sustainability.

[Amended by Amendment 10-1] (objective E-1 carried forward)

### Policy CSR 7.2.1

By February 1st of each year, the Green Implementation Advancement Board (GIAB), shall review City operations and policies toward achieving Delray Beach's green and sustainability goals and providing a report of recommendation to the City Commission regarding: [Amended by Amendment 10-1] (Policy E-1.1 carried forward)

- 1. Ways to improve the environmental Sustainability of City programs, services, and equipment facilities.
- 2. Strategies for improving environmental sustainability of the community.
- 3. Incentives for residents, businesses, and organizations to practice environmental conservation including recycling.
- 4. Proposed means to enhance water and energy conservation.
- 5. Ideas for promotion of tree planting and xeriscaping.
- 6. Best Practices for implementation in Delray Beach, including long-term strategies.
- 7. Proposed revisions to City Ordinances to address Green Technologies and operations.
- 8. Strategies to address factors that affect energy conservation.

The GIAB will consider the cost, environmental, and social equity implications related to any potential recommendation to the City. The GIAB's consideration will include the "Triple Bottom Line" approach.

(Policy E-1.1 carried forward)



### Objective CSR 7.3 Sustainability Initiatives.

Increase community and staff awareness, and support for, sustainability initiatives.

### Policy CSR 7.3.1

Develop informational signage in city facilities to educate visitors about sustainability and resilience initiatives such as relative elevation or location from mean sea level identifiers.

### Policy CSR 7.3.2

Develop a sustainability training program for City staff and track training of new hires and existing employees. Establish a City Green Team with representatives from each City department.

### Policy CSR 7.3.3

Annually review and update sustainability information available on the City's website and coordinate input with other City departments to cross reference common programs and initiatives.

### Policy CSR 7.3.4

Track participation, attendance or other performance measures for major community arts and cultural events, performances, festivals, and programs where green or sustainability educational materials are presented or materials are distributed.

### Policy CSR 7.3.5

Collaborate with neighborhood associations, civic groups, and local service providers to identify and address neighborhood-specific needs with regard to sustainability and climate issues.

### Policy CSR 7.3.6

Develop partnership opportunities with Palm Beach County Public Schools through the District's School Sustainability program to collaborate with City students on sustainability activities.



### **Objective CSR 7.4 Green Economy.**

Encourage the development of the green industry and businesses to diversify the local



### CSR 7 SUPPORT SUSTAINABLE CITY OPERATIONS AND PRACTICES THAT INCREASE THE TRIPLE BOTTOM LINE

economy and make a positive environmental contribution to the City.

### Policy CSR 7.4.1

Coordinate plans and programs in coordination with Palm Beach County, neighboring cities, power companies, and private partners, in order to reduce greenhouse gas emissions by:

- Expanding the market for energy efficient products and services
- Supporting alternative and renewable energy production through innovative financing; and
- Promoting and incentivizing energy conservation retrofits.

### Policy CSR 7.4.2

Strengthen the local economy by promoting green business training programs in industries that reduce reliance on fossil fuels; advance the use of sustainable materials, technologies, and services; and encourage local jobs in climate-change conscious, sustainable businesses that offer a living wage job.

### Policy CSR 7.4.3

Track increased number of green business establishments in the jurisdiction over time from a 2018 baseline through occupational licenses or other mechanism. Partner with the Community Redevelopment Agency and Downtown Development Authority to create incentives and promotional events for green businesses and services

#### Policy CSR 7.4.4

Create programs that directly help businesses transition to new green practices and implement a green business promotion program.

### Policy CSR 7.4.5

Create or support promotional campaigns to bank locally, buy locally, or buy from small and independent businesses and retailers.



THE CITY SHALL SUPPORT INCREASED RESILIENCE TO SEA LEVEL RISE, FLOODING, STORMS AND OTHER DISRUPTIVE WEATHER EVENTS.

**Performance Measures:** Success in addressing the Objectives and Policies of **Goal CSR 8** shall be measured utilizing the following performance indicators:

- Completion of a Sustainability and Climate Action Plan with a vulnerability analysis
- Number of shoreline protection projects completed.
- Dune health, beach width and elevation
- Percent of restored seawalls.
- Percent of raised seawall.
- Number of shoreline-strengthening capital projects completed.
- Number of capital projects with resiliency features that reduce flooding or other impacts from other weather events including green infrastructure.
- Establish tree canopy goals to mitigate heat island impacts and increase stormwater benefits
- Increase community awareness of the need to address vulnerabilities and increase resiliency through the number of outreach events.

### **Objective CSR 8.1 Protection from Erosion**

The City shall implement programs and techniques to protect property from erosion and deterioration created by the impacts of wind and water. Objective B-3 carried forward

### Policy CSR 8.1.1

Continue to control erosion from wind and flowing water through the building permit review and inspection process and the soil erosion control ordinance. (Policy B-3.1 carried forward)

### Policy CSR 8.1.2

Prohibit the construction of new vertical seawalls and promote the replacement of vertical seawalls with naturally sloped shorelines, living shorelines, mangrove replanting and other non-structural strategies, unless vertical seawalls are found to be an overriding public interest to reduce impacts to property from tidal flooding, sea level rise and other weather-related events.

### Policy CSR 8.1.3

Continue to support Palm Beach County's program to restore and protect the shoreline of Lake Ida. In addition, the City supports continuing monitoring of boating activity in the

lake to assure that this activity does not produce adverse impacts on the shoreline. (Policy B-3.2 carried forward)

### Policy CSR 8.1.4

Consistent with the City of Delray Beach Intracoastal Waterway Water Level & Infrastructure Vulnerability Study, review and revise seawall height requirements for all City and privately-owned seawalls within three (3) years to address sea level rise and tidal flooding. [2024].

### Policy CSR 8.1.5

Consistent with the City of Delray Beach Intracoastal Waterway Water Level & Infrastructure Vulnerability Study, establish a program to accommodate necessary repair, replacement, and maintenance of City owned seawalls and stormwater outfalls along the Intracoastal Waterway and canals. (Policy B-3.3 carried forward)

Policy CIE xxx



**Objective CSR 8.2 Coastal Construction** 



The rules and regulations of the Florida Department of Environmental Protection which establish a "Coastal Construction Control Line" and an "Erosion Control Line" shall continue to be enforced as a part of the Land Development Regulations.

### Policy CSR 8.2.1

The City shall continue to administer its adopted regulations which prohibit non-beach related construction seaward of the Erosion Control Line (ECL) and which provide performance standards for construction seaward of the Coastal Construction Control Line (CCCL). Any construction activities seaward of the coastal construction control line shall be consistent with Chapter 161, F.S.



Objective CSR 8.3 Minimize Coastal Impacts Enforce the coastal construction standards that minimize further impacts of man-made structures on City beaches, and restore altered beaches.

### Policy CSR 8.3.1

Limit the use of beaches and shorelines to appropriate ocean-oriented preservation, recreation, and education functions.

### Policy CSR 8.3.2

Maintain or improve the existing natural conditions on the City public beaches.

### Policy CSR 8.3.3

Coordinate with the State to implement state-ofthe-art beach and dune stabilization techniques as needed.

### Policy CSR 8.3.4

Limit the cumulative effects of development on natural systems by strict maintenance of setback requirements, adherence to stormwater retention requirements, and retention of publicly owned natural habitats, and the use of transfer of development rights.

### Policy CSR 8.3.5

Prohibit the destruction or degradation of natural inter- and sub-tidal vegetative communities in

the development of new man-made estuarine beaches, except for overriding public interest.



### Objective CSR 8.5 Green Infrastructure

Protect and enhance local and regional ecosystems, optimizing the co-benefits of habitat restoration, coastal buffers, wetland mitigation, urban reforestation, and expanded green infrastructure, in order to mitigate against heat island impacts, reduce greenhouse gas emissions and provide stormwater retention benefits.

### Policy CSR 8.5.1

The City shall conduct a tree inventory within three (3) years (including City rights-of-way and private lands) and set an appropriate canopy goal to maintain as a strategy to address heat islands and stormwater. The City shall also develop a list of priority planting areas in conjunction with the inventory. [Complete by 2022].

### Policy CSR 8.5.2

Maintain the City's status designated as a Tree City USA. The City shall seek funds to develop and maintain an urban reforestation program, in order to expand green infrastructure, reduce the heat island effect and encourage local carbon sequestration and storage.

### Policy CSR 8.5.3

Develop better data regarding current and projected heat island effects in the City. Encourage planting of native trees known to sequester carbon on available public and private lands and pursue programs and funding strategies designed to mitigate heat island effect and create carbon emission offsets through tree plantings and/or carbon mitigation banks.

### Policy CSR 8.5.4

Incorporate species and habitat vulnerability to climate change into land use planning, land acquisition, mitigation projects and conservation easement considerations.

Policy CSR 8.5.5



Analyze water and stormwater management operations in the context of sea level rise, to lessen negative impacts to open spaces, wetland mitigation areas, and natural systems, improve the ability of these systems to adapt to climate change, and optimize the ability of these systems to create additional benefits to the City's residents and visitors.



Objective CSR 8.6 Reduce Vulnerability
Prepare the City's land, infrastructure and historic assets to become less vulnerable and withstand flood and other weather-related disruptions.

### Policy CSR 8.6.1

Develop critical data sources to support, and complete, a City Sustainability and Climate Action Plan and a vulnerability analysis within three (3) years that characterizes climate change impacts, such as, flood risk citywide from weather-related events and future flood risk from sea level rise, as well as heat, drought and other environmental changes. Include the vulnerability of public facilities and services, including but not limited to: buildings; water and wastewater stormwater facilities: systems infrastructure including roads; power generation facilities; health and safety services and facilities; historic assets; and natural areas, as well as economic impacts to both the public and private sectors. Include recommendations to mitigate risk including a comprehensive suite of capital improvements projects linked to the Capital Improvements Element. Include a longterm funding strategy for climate adaptation integrated into the City's capital planning process. Link Sustainability and Climate Action Plan and vulnerability analysis recommendations to further Comprehensive Plan and Code revisions for implementation which shall include design criteria that address future climate impacts. Update the analysis every five (5) years.

### Policy CSR 8.6.2

Maintain and enhance current and best available data for mapping and adaptation analysis in preparation of the Sustainability and Climate Action Plan with a vulnerability analysis including, but not limited to, accurate elevation data, and other necessary modeling data. Include recent data from the City's 2018 Stormwater Master Plan Update and Intracoastal Waterway Water Level & Infrastructure Vulnerability Study into the development of the Sustainability and Climate Plan.

### Policy CSR 8.6.3

Incorporate sea level rise, flooding and climate information into the planning, siting, construction, replacement and maintenance of public infrastructure, including roads, in a manner that is cost-effective and that maximizes the use of the infrastructure throughout its expected life span.

### Policy CSR 8.6.4

Ensure development is resilient through the implementation of vulnerability and adaptation principles into policies in the Strategic Plans, comprehensive plan, capital improvements plans, building codes, life-safety codes, emergency management, land development and zoning regulations, water resource management, flood control and stormwater management, coastal management, and community development frameworks.

### **Policy 8.6.5**

Revise Transfer of Development Rights policies, including sending and receiving areas, to encourage development and redevelopment in less vulnerable areas and discourage it in flood prone areas.

### Policy CSR 8.6.6

Continue to utilize the best available and regionally accepted modeling parameters that identify future conditions under which the stormwater system is expected to operate including future precipitation and sea level rise conditions.

### Policy CSR 8.6.7

Develop first floor elevation information within building footprints for City facilities (and critical non-City owned facilities and assets). Identify facilities, municipal and critical, within the special flood hazard area (SFHA) which should



receive site level investigation including elevation data and engineering assessments of for vulnerability. Analyze elevation data for surrounding roads for City and critical at-risk facilities to determine impacts from future conditions. This data should be integrated into a GIS management tool.

### Policy CSR 8.6.8

Ensure locally-owned public facilities that will be used as shelters, command centers, storage, staging or demonstration areas to meet the highest risk standards for new construction or substantial renovations.

#### Policy CSR 8.6.9

Inventory socially vulnerable facilities such as at risk elderly, homeless or other populations who are residing in facilities that may not have auxiliary power through generators and ensure they are complying with state statutes.

### Policy CSR 8.6.10

Consider building elevations and future flood risk in the historic preservation review process and create programs and materials that help property owners adapt to flood threats and sea level rise.

### Policy CSR 8.6.11

Continue monitoring of potential saltwater intrusion into the City's groundwater supply.

### **Policy CSR 8.6.12**

Inventory critical water and wastewater treatment plants and ensure adequate auxiliary power, chemical and mechanic spare resources are available to ensure City has the capability to operate and produce water and treat and dispose wastewater in accordance with State Statutes.

### **Policy CSR 8.6.13**

Enhance pre-disaster and post-disaster debris management activities to increase clearing and decrease obstruction after storm events including permit streamlining and debris mulching opportunities for residents and City facilities.

### **Policy CSR 8.6.14**

Provide resources and better link pre-disaster planning, post-disaster recovery and resiliency planning through improvement in the City's Community Rating System Class rating of 8 including the following strategies:

- Enhance public outreach activities and resources that can improve future Community Rating System cycle reviews that focus on flood risk and FEMA mapping.
- Evaluate the administrative costs associated with pursuit of additional conditions" credits in "future Community Rating System against the insurance premium reductions that will accrue to the approximately 7,500 (as of 6/30/18) property owners who currently hold flood insurance policies through the National Flood Insurance Program. If the benefits outweigh the costs, the City should consider pursuing these credits in the Community Rating System program.

### Policy CSR 8.6.15

Prior to incorporating a new project to the Capital Improvements Element, the City shall assure that it is reviewed for recommendations to increase resiliency, including future flooding and heat conditions, and account for the impacts from climate change, including but not limited to, sea level rise and storm surge. The City shall focus on level of service standards, as one of the points of analysis, to assure that infrastructure useful life and service expectations can be met in the face of climate change impacts.



### **Objective CSR 8.7 Coordinate Resources**

Continue work across levels of government and agencies including non-profit organizations, professional and industry organizations, and academic institutions, to share resources and data related to climate, vulnerability and sea level rise, as well as common resiliency strategies to address impacts.

Policy CSR 8.7.1



Coordinate with agencies such as the Florida Department of Emergency Management, SFWMD, NOAA, the US Army Corps of Engineers, the US Geological Survey, State of Florida agencies and others to ensure the availability of best available data and tools for climate modeling and analytical efforts.

### Policy CSR 8.7.2

Continue participation with Southeast Florida counties and municipalities, academia, state and federal government agencies and other organizations in the analysis of sea level rise, drainage, storm surge and hurricane impacts and the planning of mitigation and adaptation measures. Coordinate to create and support new initiatives and incorporate new data, such as updated sea level rise projections, into future decision-making. Coordinate efforts with the latest version of the Regional Climate Action Plan and other appropriate regional planning initiatives.

### Policy CSR 8.7.3

Coordinate with the SFWMD and Lake Worth Drainage District to address efforts related to sea level rise impacts on coastal structures upon which Delray's drainage capacity is linked.

### Policy CSR 8.7.4

Participate in the development of the County's Local Mitigation Strategy to better link resiliency, climate preparedness and emergency management through the submission of projects within the context of the City's preparedness and emergency plans.

### Policy CSR 8.7.5

Partner with the Department of Health on programs and initiatives to exchange data, plan and educate the community on the public health consequences of climate change, such as extreme temperatures and vector-borne diseases, and take steps to build capacity to respond to or prevent those consequences.

### Policy CSR 8.7.6

Continue to collaborate with organizations that provide advocacy, education and outreach efforts including, but not limited to The

Sandoway House Nature Center, the American (and Florida) Shore and Beach Preservation Association, Marine Industries Association of Florida, etc.

### Policy CSR 8.7.7

The City will coordinate its resiliency planning efforts with Florida Power & Light to develop partnerships and project collaborations with the goal of reducing storm or climate-related impacts to the power grid.



Objective CSR 8.8 Outreach on Resiliency Increase communitywide dialogue on the importance of mitigation and response to flooding, sea level rise, heat events and weather-related events to increase the City's resiliency.

### Policy CSR 8.8.1

Increase resilience to, and community awareness of, emergency management, natural or man-made hazards or disasters through education and outreach materials ensuring outreach to vulnerable populations.

### Policy CSR 8.8.2

Discuss City's vulnerability and resiliency strategies with the business community, through the Chamber of Commerce or other avenues, to avoid business disruption due to floods, weather events and disasters (promoting incorporation of City's data into recovery plans). Work with the business community to develop resources encouraging business continuity planning.

### **Policy 8.8.3**

Develop a communications strategy in conjunction with the City Sustainability and Climate Action Plan that includes targeted outreach events, signage on sea level rise impacts at key public locations and other creative components and events.



Objective CSR 8.9 Social Aspects of Resiliency Identify socially vulnerable populations at risk from future climate impacts, including flooding



and heat exposure, to develop initiatives and address service deficiencies, that will increase the resilience and equity of those areas of the City.

### Policy CSR 8.9.1

Ensure vulnerability assessments specifically identify and quantify socially vulnerable populations at risk from aging infrastructure or lack of economic capacity to respond to climate-related events and develop strategies that are sensitive to these characteristics of those areas.

### Policy CSR 8.9.2

Partner with organizations, such as the Department of Health, and not for profit organizations, to develop materials and education or community outreach events, sited where socially vulnerable populations reside, to increase awareness of, tools to address and improved resiliency for these areas in the City.

### Policy CSR 8.9.3

Increase diversity in the public input components of the capital planning process- particularly for vulnerable populations.

DAMAGE TO PUBLIC FACILITIES AND DISRUPTION OF SERVICES TO THE PUBLIC DUE TO NATURAL OR OTHER DISASTER WILL BE MINMIZED BY PRE-DISASTER FACILITIES PLANNING.

**Performance Measures:** Success in addressing the Objectives and Policies of Goal PFE 9 (Emergency Preparedness) shall be measured utilizing the following performance indicators:

- Number of projects that "harden" City facilities
- Adoption of an Emergency Operations Plan
- Preparation, completion, and implementation of a Continuity of Operations Plan (COOP); effectiveness of execution of COOP (if needed)
- Remaining available capacity at emergency shelters during storm

### **Objective CSR 9.1**

Implement programs to "harden" facilities and prevent disruption of service as a result of natural or other disasters.

### Policy CSR 9.1.1

All major repairs, reconstruction, or new construction of public facilities shall include design features to "harden" the facility and to add, where appropriate, self-sustaining energy source (i.e. solar with backup battery power) to enable these facilities to continue to provide services and be used as a safe haven during storm events.

### Policy CSR 9.1.2

Plan for and work with others to upgrade the information/technology (IT) infrastructure in the City to assist with rapid post-disaster recovery.

### Policy CSR 9.1.5

Plan for, construct, and maintain an emergency operations center (EOC) with a brick and mortar facility, staff, equipment, technology, and training that will meet current and estimated future needs of the City of Delray Beach. (add dates to complete by)

### Policy CSR 9.1.6

Continue to participate in the Palm Beach County Local Mitigation Strategy Group and propose projects for funding via Federal Emergency Management Agency's Hazard Mitigation Grant Program.



### **Objective CSR 9.2**

Adopt an Emergency Operations Plan that includes the existing disaster planning and recovery programs of the City, coordinate with other County plans and procedures, which shall be reviewed annually.

### Policy CSR 9.2.1

The City's Emergency Operations Plan shall be modeled after the Federal Emergency Management Agency standards for Emergency Operations Plans and shall be comprised of all departmental Continuing of Operations Plans, as well as technical and hazard specific annexes.

### Policy CSR 9.2.3

Annually review the City's Emergency Operations Plan to ensure the plan is consistent with the Palm Beach County Comprehensive Emergency Management Plan.

### Policy CSR 9.2.4

Address both immediate and short-term aspects in the Emergency Operations Plan, including mobilization for cleanup; repair, and restoration of services; removal of hazards and damaged structures; and, coordination of interagency hazard mitigation and response reports/programs. The Plan shall include a post disaster recovery component for "all hazards," (excessive heat, drought, hurricanes, storms) and man-made disasters (chemical spill, large event attack, terrorist attacks, attacks on public infrastructure). (add date by)



### CSR 9 EMERGENCY PREPAREDNESS

### Policy CSR 9.2.5

Provide long range redevelopment in the Plan that provides for the land use and character of development which presently exists, except that the height of reconstructed buildings shall be limited to the then current height regulations of the City, except as provided in Policy CME 4.3.3.

### Policy CSR 9.2.6

Adopt and utilize the shelter plan in the Palm Beach County Comprehensive Emergency Management Plan. Periodically assess the need for additional emergency staff shelter capacity and, when a need is anticipated, plan and budget for expanded capacity. To fund shelter expansions, consider an impact fee based on new residential development.



### **Objective CSR 9.3**

Execute the steps outlined in the adopted COOP, as needed, for each event to ensure efficient and timely planning before, during, and after an event.

### Policy CSR 9.3.1

Adopt a Continuing of Operation Plan for all City departments to complete the Emergency Operations Plan and continue to review and update the Emergency Operations Plan and train departmental staff to implement the plan. [Complete by 2020]. Provide ongoing training for the use and implementation of the plans. (add date by)

### Policy CSR 9.3.1

Ensure that all facilities, roadways, and public services are prepared for an event.

### Policy CSR 9.3.2

Take the available and appropriate steps to ensure the safety of its residents and emergency personnel during an event.

### Policy CSR 9.3.3

Ensure that damage and impacts from the event are assessed immediately following the event.

### Policy CSR 9.3.4

Take the appropriate steps to ensure a timely clean-up and restoration of the community support and continuity of operations for city services for all residents and businesses.

### Policy CSR 9.3.5

Coordinate with FEMA to ensure appropriate assistance is provided to the City and its residents based on the impact of the event.

### Policy CSR 9.3.6

Evaluate and assess the actions taken before, during, and after the event to address any issues or concerns, as well as areas of improvement and strength to ensure readiness for the new event

### Policy CSR 9.3.7

The City shall continue established and ongoing programs for emergency preparedness, emergency evacuation, and disaster relief and shall enhance and expand such programs through periodic reviews. After a significant event, evaluate the effectiveness of these programs and policies, as well as the those of the County, schools, hospitals, etc. and provide an after-action report to the public.



### **Objective CSR 9.4**

Continue to inform the public of the impact of potential natural disasters and hazard events, before, during and after events, as well as measures taken to protect human life and property.

### Policy CSR 9.4.1

Maintain and enhance means of public information before, during, and after named and unnamed events using text messaging, social media, AM radio station, other means of communication when no power available.

### Policy CSR 9.4.1

Provide public education campaigns and workshops in order to increase understanding of the potential impacts of natural disasters, including evacuation areas, evacuation routes, and preparedness.



### Policy CSR 9.4.2

Provide public information regarding planned and completed infrastructure projects to mitigate the impacts of natural disasters, such as, but not limited to storm surge and tidal flooding.

### Policy CSR 9.4.3

Provide public information regarding programs and grants available to harden properties.