Always Delray Comprehensive Plan

A Sampling of References which Relate to Climate Action

COASTAL MANAGEMENT ELEMENT

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

Objective CME 3.1 Resilience and Adaptation to Climate Change- Increase adaptability and resiliency to climate change impacts by developing and implementing a Sustainability and Climate Action Plan with vulnerability assessment including strategies that address coastal flooding, tidal events, storm surge, flash floods, storm water runoff, salt water intrusion and other impacts related to or exacerbated by sea level rise, changing precipitation patterns, temperature increases, and other climate change factors.

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

Policy CME 3.1.3 Considerations for designated vulnerable areas may include, but not be limited to: Areas which experience flooding from tidal activity, storm surge, intense precipitation, or rising water table. Areas which have any hydrological connection to coastal waters. Locations which are within areas designated as evacuation zones for storm surge. Other areas impacted by stormwater/flood control issues.

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

Objective CME 3.4 Mitigate the Peril of Flood from Sea Level Rise in Coastal Areas- Update development and redevelopment policies based on the updated Stormwater Master Plan to reduce future flood risk in coastal areas resulting from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea-level rise.

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

Objective CME 3.7 Participation in the National Flood Insurance Program Community Rating System- Prioritize enhancing participation in the National Flood Insurance Program Community Rating System program administered by the Federal Emergency Management Agency by improving the City's rating.

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

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

CME 5 PUBLIC PARTICIPATION AND STRATEGIC PARTNERSHIPS

Objective CME 5.1 Coordination With Adjacent Communities- Coordinate with adjacent communities in matters dealing with the goals of the Coastal Management Element. ALSO Policy SPE 1.5.19

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

CONSERVATION, SUSTAINABILITY, AND RESILIENCY ELEMENT

GOAL CSR 1 AIR RESOURCES PROTECTION

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. [Complete by 2022]

Policy CSR 1.2.2 Within two years of completion of the inventory, develop greenhouse gas reduction strategies that strive to reduce the largest sources of emissions for City operations and communitywide

Objective CSR 1.3 Reduce Transportation- Related Emissions- 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. ALSO Policy MBL 1.4.2 Objective PFE 6.1

Policy CSR 1.3.3 Consider the recommendations of Delray Beach Tri-Rail Coastal Link Station Master Plan. ALSO Policy MBL 2.3.3 Policy NDC 2.4.5 Policy PFE 6.1.6

Policy CSR 1.3.5 Identify, analyze, and work to eliminate barriers to multimodal connectivity through studies, plans, and capital investments.

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. ALSO Policy MBL 2.4.6

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. [Complete by 2022]

Policy CSR 1.4.2 Consider the costs and benefits of City fleet vehicles powered by alternative fuels, 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.

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.

GOAL CSR 2 WATER RESOURCES CONSERVATION AND PROTECTION

Objective CSR 2.1 Water Resource Contamination- Focus on detecting and eliminating water resource contamination and instituting preventative measures to protect water supply sources. ALSO Objective PFE 3.1

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. ALSO Policy CME 3.1.2 Policy PFE 2.1.1, 2.3.1

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.

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.

GOAL CSR 3 SOIL RESOURCES CONSERVATION AND PROTECTION

Objective CSR 3.1 Soil Resources- Conserve and protect soils resources by maintaining land development regulations governing soil erosion. ALSO Policy PFE 3.1.1

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. ALSO Policy CME 1.6.3

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

Objective CSR 4.2 Habitat Protection- Identify, designate, protect, maintain and regenerate habitat, natural reservations and environmentally sensitive areas.

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. ALSO Policy CME 2.4.2

Policy CSR 4.2.14 Include impacts to habitat and wildlife in future climate planning efforts including vulnerability assessments. ALSO Policy CME 3.1.4

GOAL CSR 7 SUSTAINABLE PRACTICES THAT INCREASE THE TRIPLE BOTTOM LINE

Objective CSR 7.1 City Sustainability Practices- Develop a baseline of City sustainable practices and determine methods to increase the sustainability of the city with prioritized actions that result in the greatest greenhouse gas reductions.

Policy CSR 7.1.2 Build on the work of the Green Implementation Advancement Board, previous Sustainability Reports and recommendations of the City's Green Task Force by <u>developing a</u> <u>Sustainability and Climate Action Plan</u> that prioritizes actions, recommendations and outcomes to <u>reduce greenhouse gas emissions</u>. Update the Sustainability and Climate Action Plan recommendations every five (5) years. [Complete by 2025]

Objective CSR 7.2 Sustainability Implementation- Determine an actionable set of recommendations to implement environmental commitments in a timely, cost-effective, and citizen-centric manner, and explore new opportunities for sustainability.

Policy CSR 7.2.1 Conduct an annual review of City operations and policies toward achieving Delray Beach's green and sustainability goals and provide a report of recommendations to the City Commission regarding: 1. Improved environmental sustainability of City programs, services, and equipment facilities. 2. Improved 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. Promotion of native tree planting, and native and environmentally-friendly landscaping. 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. ALSO Policy OPR 3.5.3

Objective CSR 7.3 Sustainability Initiatives- Increase community and staff awareness, and support for, sustainability initiatives.

Policy CSR 7.3.2 Provide sustainability training for City staff and establish a City Green Team with representatives from each City department.

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.

Objective CSR 7.4 Green Economy- Encourage the development of the green industry and businesses to diversify the local economy and make a positive environmental contribution to the city.

Policy CSR 7.4.1 Coordinate plans and programs with Palm Beach County, neighboring cities, power companies, businesses, and other Strategic Partners 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.

GOAL CSR 8 INCREASED RESILIENCE

Objective CSR 8.1 Protection from Erosion- Implement programs and techniques to protect property from erosion and deterioration created by the impacts of wind and water.

Policy CSR 8.3.3 Coordinate with the State to implement state-of-the-art beach and dune stabilization techniques as needed.

Objective CSR 8.4 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. ALSO Policy PFE 4.2.5 Policy OPR 3.4.3

Policy CSR 8.4.3 Develop 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. ALSO Policy OPR 3.5.3

Objective CSR 8.5 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 8.5.1 Complete a City Sustainability and Climate Action Plan and a vulnerability analysis that addresses: Flood risk from weather-related events and sea level rise; Heat, drought, and other environmental changes; The vulnerability of public facilities and services (buildings, water and wastewater facilities, stormwater systems, mobility infrastructure, power generation facilities, health services and facilities, historic assets, and conservation areas, as well as economic impacts); Recommendations to mitigate risk, including a comprehensive suite of capital improvements projects; A long-term funding strategy for climate adaptation; and, Recommendations for revisions to the Land Development Regulations to include design criteria that address future climate impacts. Update the analysis every five (5) years. [Complete by 2025] ALSO Policy PFE 4.2.4, 7.2.2, Policy CME 3.1.1, 3.1.4, 3.1.5, 3.7.1, 3.7.2

Policy CSR 8.5.3 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. ALSO Policy CME 3.2.5, Policy PFE 6.1.10

Policy CSR 8.5.4 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. ALSO Policy PFE 4.1.4, 4.2.3, 4.2.4, Policy CME 2.2.5

Policy CSR 8.5.6 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. ALSO Policy PFE 4.1.4, 4.2.6

Policy CSR 8.5.15 Prior to incorporating a new project to the Capital Improvements Element, review for 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. 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. ALSO Policy CIE 3.1.8 Policy CME 3.1.4, 3.2.5, Policy PFE 4.2.4, 7.2.2

Objective CSR 8.6 Coordinate Resources- Continue to work with strategic partners to share resources and data related to climate, vulnerability and sea level rise, as well as common resiliency strategies to address impacts.

Policy CSR 8.6.2 Continue participation with Strategic Partners, including the Southeast Florida counties and municipalities, academia, and state and federal government agencies 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. ALSO Policy CME 3.1.2, Policy SPE 1.5.25

Objective CSR 8.7 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 8.7.1 Increase resilience to, and community awareness of, natural and man-made hazards or disasters through education and outreach materials.

Policy 8.7.3 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 8.8 Social Aspects of Resiliency- Identify socially vulnerable populations at risk from future climate impacts, including flooding and heat exposure, to develop initiatives that address service deficiencies and increase the resilience and equity of those areas.

Policy CSR 8.8.1 Ensure vulnerability assessments specifically identify and quantify socially vulnerable populations at risk from aging infrastructure or lack of economic capacity to respond to climaterelated events and develop strategies that are sensitive to these characteristics of those areas.

Policy CSR 8.8.3 Increase and diversify opportunities for public input in the capital planning process, determine strategies to reach vulnerable populations.

GOAL CSR 9 EMERGENCY PREPAREDNESS

Objective CSR 9.1 Hardened Public Facilities- Implement programs to "harden" public facilities and prevent disruption of service as a result of natural or other disasters. ALSO Objective PFE 7.2 & 7.3