

Regional Climate Action Plan - City of Miami Beach Matrix

Number	Recommendation	Regional, Local or Both	Direct Action by the City Required?	City Implementation
SP-1	Support implementation of the Regional Climate Action Plan by including recommendations from the Plan into existing land use and policy decisions and related elements of the municipal and county Comprehensive Plans, as appropriate; and recognize the Plan as a basis for the development of new goals, objectives and policies through the appropriate local government Comprehensive Plans.	Both	Yes	In Progress
SP-2	Develop policies, strategies and standards that will serve as guidance for climate change related planning efforts. Municipal and county planning authorities are encouraged to develop policies to improve resilience to coastal and inland flooding, salt water intrusion, and other related impacts of climate change and sea level rise in their Comprehensive Plans, Sustainability Action Plans, Vision Plans, Stormwater Master Plans, Transit Development Plans, Long Range Transportation Plans, Adaptation Action Area Plans, Climate Change Plans and other green planning efforts.	Both	Yes	In Progress
SP-3	Incorporate "Adaption Action Area" definition (as provided for in Florida law) into municipal and/or county Comprehensive Plans, to provide a means to identify those areas deemed most vulnerable to sea level rise and other climate change impacts including but not limited to extreme high tides, heavy local rain events, and storm surge for the purpose of prioritized funding and adaptation planning.	Both	Yes	Not Started
SP-4	Develop criteria in collaboration with municipal and county planning authorities for the purpose of defining Adaptation Action Areas as well as other areas requiring adaptation improvements related to coastal flooding and sea level rise that may include, but not be limited to: <ul style="list-style-type: none"> • Areas below, at, or near mean higher high water; • Areas which have a hydrological connection to coastal waters; • Areas designated as evacuation zones for storm surge; and/or • Other areas impacted by climate related drainage/flood control issues 	Both	Yes	Not Started
SP-5	Conduct new or utilize existing vulnerability analysis and other technical tools as they are developed as a means for identifying Adaptation Action Areas as well as other areas requiring adaptation improvements related to coastal flooding and sea level rise, to provide guidance for adaptation planning efforts in areas especially at risk to sea level rise, tidal flooding and other related impacts of climate change.	Both	Yes	Not Started
SP-6	Develop policies, as provided for in Florida law and in collaboration with the appropriate municipal and county planning authorities, related to areas designated as Adaptation Action Areas or similarly vulnerable areas to improve resilience to coastal flooding, sea level rise and other climate related vulnerabilities and provide guidance for other adaptation planning efforts.	Both	Yes	Not Started
SP-7	Develop sea level rise scenario maps to be considered for inclusion in appropriate Comprehensive Plans and/or regional planning documents as determined by the appropriate local government to guide municipal and county government climate adaptation planning efforts and continue to update regional and local planning efforts as more data becomes available and scientific projections are refined.	Both	Yes	Not Started
SP-8	Identify locations within Adaptation Action Areas or similarly vulnerable areas where targeted infrastructure improvements, new infrastructure, or modified land use and/or development practices could reduce vulnerability and/or improve community resilience.	Local	Yes	Not Started

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SP-9	Coordinate regionally across municipalities and county planning authorities on the development of projects and funding proposals to seek prioritized funding for identified infrastructure needs and specific adaptation improvements required within Adaptation Action Area or other related adaptation planning areas.	Both	Yes	Not Started
SP-10	Work with appropriate local, regional and state authorities to revise building codes and land development regulations to discourage new development or post-disaster redevelopment in vulnerable areas to reduce future risk and economic losses associated with sea level rise and flooding. In these areas, require vulnerability reduction measures for all new construction, redevelopment and infrastructure such as additional hardening, higher floor elevations or incorporation of natural infrastructure for increased resilience.	Both	Yes	In Progress
SP-11	Identify within Adaptation Action Areas and similarly impacted areas populations and communities most vulnerable or of special concern for the purpose of ensuring the proper consideration of individual needs and resources as part of local and regional planning activities.	Both	Yes	Not Started
SP-12	Develop new community flood maps reflective of a 100-year storm event under future sea level rise scenarios and use this information, in conjunction with similarly updated storm surge models for revising required elevations for new and redevelopment, and in the permitting/licensing of transportation projects, water management systems, and public infrastructure.	Regional	No	N/A
SP-13	Designate or otherwise recognize "Restoration Areas" to identify undeveloped areas that are vulnerable to climate change impacts for the purpose of environmental restoration, dune restoration, agriculture, conservation of natural resources or recreational open space, or as stormwater retention areas. Local governments and appropriate regional planning authorities should prioritize land acquisition in these areas. These areas could also be established or acquired through mitigation or transfer-of-development rights initiatives.	Local	Yes	In Progress
SP-14	Designate or otherwise recognize "Growth Areas" as areas outside of Adaptation Action Areas, or other areas subject to adaptation planning efforts, where growth is encouraged due to higher topographic elevation and the presence of existing infrastructure, such as transportation and water and sewer infrastructure. Growth Areas should be developed with Urban Design guidelines that address character of urban place and provide a high quality pedestrian experience through landscaping and the creation of public space.	Local	No	N/A
SP-15	Modify or develop new design standards for transportation infrastructure located in identified vulnerable areas to include environmentally supportive road materials, bridge design, elevation, and stormwater management. Include different pitches combined with stormwater design to effectively remove water from the roadway; explore roadway materials that may be utilized in road construction that are more tolerant of extended periods of extreme temperatures.	Local	Yes	In Progress
SP-16	Develop policies to address new transportation infrastructure development in light of anticipated future climate impacts, such as consideration of future floodplain conditions and vulnerable areas which could require the rerouting of roads because of potential flooding and related damage.	Local	Yes	In Progress
SP-17	Analyze potential blighted sites and develop an approach for converting underutilized or unused properties and structures, including properties in financial distress, into community gardens or farmers' markets. (i.e., Redfields to Greenfields).	Local	No	N/A

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SP-18	Identify means to effectively engage the multiple public and private sector entities with roles and responsibilities involving the provision and maintenance of transportation infrastructure and the delivery of transportation services in the region, in climate adaptation and mitigation initiatives. Document current and evolving coordination efforts among these entities.	Regional	No	N/A
SP-19	<p>Focus transportation investments and service expansions on projects and strategies contributing to greenhouse gas emissions reductions and enhancing resilience to climate change.</p> <p>a. Continue to enhance and implement regionally coordinated transportation planning through the Regional Long Range Transportation Plan (RLRTP). Identify goals and objectives in the RLRTP which, as they are attained, reinforce the desired achievement of greenhouse gas emissions reductions and enhanced resilience to climate change. Articulate the supportive role of these goals and objectives for emissions reductions and climate resilience.</p> <p>b. Give higher investment priority to and advocate for state and federal transportation infrastructure investments, programs and services that will reduce greenhouse gas emissions and enhance resilience and adaptability to climate change. Performance standards for climate and related metrics, such as reduced VMT and increased mode split, should be incorporated in transportation plans and programs. Transportation planning should include performance measures in major decisionmaking phases such as land use visioning, long range transportation plans, corridor studies, programming, environmental review, and performance monitoring.</p> <p>c. Incorporate evaluation criteria and processes to prioritize projects that meet RLRTP goals and objectives — into local and regional planning and programming processes — with an initial emphasis on evaluation criteria that reduce VMT and increase use of transportation modes other than the personal vehicle. Projects that enhance economic vitality should also be given priority, such as projects and service expansions along transit-oriented corridors and those that improve connections to major airports and seaports.</p> <p>d. Prioritize studies funded through existing programs and other sources addressing effective climate adaptation and mitigation strategies, particularly those addressing barriers to adaptation and assisting in integrating land use and transportation planning.</p> <p>e. Improve coordination among economic development, land-use/housing, transportation and water resource planning activities. Review local and regional planning and decision making processes to ensure a complementary approach toward developing and maintaining a transportation network, including for purposes of reducing VMT and providing more transportation choices.</p>	Both	Yes	In Progress
SP-20	Require that new development and redevelopment in areas with existing and planned multimodal corridors that connect urban and other centers in the region be planned and designed to support walking, biking and transit use.	Both	Yes	In Progress

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SP-21	<p>Support effective planning and implementation of transit oriented developments (TODs), from both a local and regional scale, in coordination with effective planning and delivery of transit services, particularly transit stations, to maximize ridership.</p> <p>a. Recognize that planning for TOD requires consideration of transit and land use issues at the system, corridor and station levels, as well as evaluation of adequate infrastructure such as water and sewer mains.</p> <p>b. Develop policies to streamline approval processes involving TODs.</p> <p>c. Ensure equitable distribution of the benefits of TOD and premium type transit services.</p>	Both	Yes	In Progress
SP-22	<p>Introduce a new activity-based regional travel demand forecast model to directly simulate individual trip making and mode choice behaviors. Simulations done using the model will allow for robust tests of the effectiveness of policy alternatives.</p>	Regional	No	N/A
SP-23	<p>Consider regional implementation of rapid transit zones to maintain land use control around a station with multiple jurisdictions. Modify local land use plans and ordinances to support compact development patterns, creating more walkable and affordable communities.</p> <p>a. Identity potential future land use map and other comprehensive plan changes at the local level. Also address the subject in regional level plans.</p> <p>b. Adopt form-based codes that have physical form, design of buildings and the public realm, and an emphasis on mixed and evolving land uses as organizing principles.</p> <p>c. Consider regional implementation of rapid transit zones or other such designations to maintain land use control around transit stations, including ones with multiple jurisdictions.</p>	Regional	No	N/A
SP-24	<p>Consider the adoption of green neighborhood certification programs, such as LEED ND (Neighborhood Development) to guide decision making and development and to provide an incentive for better location, design, and construction of new residential, commercial, and mixed-use developments with the goal of increasing transportation choices while reducing household transportation costs. Incorporate sustainable building and neighborhood ratings or national model green building codes, including but not limited to those defined in Section 255.253(7), Florida Statutes, into municipal codes region-wide.</p>	Both	Yes	Not Started
SP-25	<p>Adopt or create a green rating system for roads to reduce emissions from construction, maintenance, and agency operations through practices such as using recycled materials, purchasing materials found or manufactured sustainably in the region, and requiring construction contractors to implement emissions reductions practices such as using alternative fueled vehicles and clean diesel practices.</p>	Both	Yes	Not Started
SP-26	<p>Improve movement and safety for non-motorized modes through the adoption and implementation of best practice models including Complete Streets.</p> <p>a. Develop policy, ordinances, guidelines, models and projects to accelerate implementation.</p> <p>b. Identify partners and resources to support training and the research into new techniques for transportation design and other professionals.</p>	Local	Yes	In Progress

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Number	Recommendation	Regional, Local or Both	Direct Action by the City Required?	City Implementation
SP-27	<p>Complete, expand and connect networks of bicycle and pedestrian facilities, including supporting access to transit.</p> <p>a. Prioritize implementation of planned bicycle and pedestrian networks. Improve overall coordination of local and regional agency planning and implementation efforts. Evaluate whether these facilities are connected regionally and on a local scale to major employment, education, and recreation centers.</p> <p>b. Implement a roadway design project checklist that includes measures of pedestrian, bicycle, and transit (e.g. bus bay) accommodation.</p> <p>c. Work regionally to improve safety for pedestrians and bicyclists.</p> <p>d. Consider regional adoption of Transit, Pedestrian, and Biking programs that aim to improve access to transit.</p> <p>e. Develop policies to increase designated bike parking facilities at office and retail developments.</p>	Both	Yes	In Progress
SP-28	<p>Continue to implement strategies aimed at maximizing the efficiency of the existing transportation network by all agencies across the region. Many of these strategies also result in greenhouse gas emissions reductions. There is a need for a toolbox of successful strategies that can be duplicated across the region. Agencies should make an effort to collect information that will allow for evaluation of the effectiveness of a strategy in reducing greenhouse gas emissions. Information collected by implementing agencies should include emissions reductions, fuel reductions, VMT impacts, or other performance measures as appropriate. Information collected should also include steps for implementation, costs, and lessons learned. Among the strategies to consider are use of roundabouts, real time operation of the traffic signal system, traffic signal prioritization and queue jumps for transit, interstate ramp metering, and employment of a virtual freight network (freight network managed in real time using intelligent transportation systems).</p>	Regional	Yes	Not Started
SP-29	<p>Increase transit ridership by providing premium transit service on targeted regional corridors. Examples of successful routes include the I-95 Express bus service and "The Flyer" route from Miami International Airport to Miami Beach. The goal of these routes is to bring people who might otherwise drive to work (known as "choice riders") from residential areas to regional centers of employment. Agencies should review levels of service policies and service standards and modify as necessary to prioritize increasing services along corridors with dense land use. Improve quality of service by continuing to monitor and address safety and performance.</p>	Regional	Yes	In Progress
SP-30	<p>Increase the amenities and infrastructure available to transit riders, such as shade, shelters, kiosks utilizing solar power when feasible, and route and real time boarding information.</p>	Local	Yes	In Progress

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Number	Recommendation	Regional, Local or Both	Direct Action by the City Required?	City Implementation
SP-31	<p>Provide seamless transitions to increase the use of low carbon modes for the movement of people and freight in the region.</p> <p>a. Improve connections among Tri-Rail and county transit service, municipal trolley and community shuttle bus services which may include realignment of routes. District circulators, such as the Metro Mover in downtown Miami, which connects to Metro Rail, provide the last leg of a commute for transit riders and should have high frequency and ease of transfer.</p> <p>b. Implement seamless regional transit fare and transfer media (traditional or virtual) across transit services in the region while improving walking and biking access to transit.</p> <p>c. Develop planning strategies to address planning for the “First and Last Mile” of transit trips, which act as barriers for commuters who could potentially take transit but whose starting point or final destination cannot be conveniently accessed from the nearest transit stop/station due to distance, terrain (street patterns), or real or perceived safety issues (traffic, crime).</p> <p>d. Partner to implement a Virtual Freight Network as part of the region’s comprehensive Intelligent Transportation System/Transportation System Management and Operations Programs. Establish a software application to provide “load matching” for shippers and truckers to alleviate “deadheading” of empty trucks traveling back to destination.</p> <p>e. Incorporate climate adaptation strategies and greenhouse gas emissions inventories into Seaport and Airport Master Plans and Regional Freight Plans. Plans should address the critical last mile to and from major seaports and airports in part by providing comprehensive plan land use designations, policies, and standards that protect that function of roadway segments connecting seaports and airports (hubs) to corridors, such as interstates.</p> <p>f. Establish performance measures including VMT reduction and emissions reductions monitoring for freight projects such as ship to rail projects which remove drayage truck operations.</p> <p>g. Support clustering of distribution facilities to promote intermodal centers and economic development.</p>	Both	Yes	Not Started
SP-32	<p>Use and expand Transportation Demand Management (TDM) strategies, which reduce peak hour and single-occupant vehicle travel.</p> <p>a. Vanpool and Carpool Programs - Work with MPOs, South Florida Commuter Services and South Florida Vanpool to identify and pursue opportunities to more fully utilize and expand these programs.</p> <p>b. Car and Bike Sharing Programs - Work with companies providing these services and strategic partners (universities, municipalities, large employers, etc.) to establish zip car, bike sharing and personal vehicle sharing programs.</p> <p>c. Employee Benefits – Encourage sharing of information on and use of employee benefits that support use of walking, biking and transit modes for work commutes (e.g., pre-tax benefits and Emergency Ride Home program).</p> <p>d. Commute Trip Reduction Programs - Local governments should promote participation in programs such as the EPA Commuter Choice Program and explore the adoption of commute trip reduction ordinances.</p>	Local	Yes	In Progress

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SP-33	<p>Coordinate initiatives with those of the seven-county Southeast Florida Prosperity Plan, known as Seven50, to maximize the opportunities presented as Seven50 is developed (e.g., sharing data and analyses; participating in alternative future scenario planning; engaging a myriad of public, private and civic partners) and actively engage in Seven50 implementation efforts, designed to address the following Livability Principles:</p> <ul style="list-style-type: none"> • Provide more transportation choices • Promote equitable, affordable housing • Enhance economic competitiveness • Support existing communities • Coordinate policies and leverage investment; • Value communities and neighborhoods and • Enhance community resilience to the impacts of Climate Change 	Both	Yes	Not Started
WS-1	<p>Develop local and, where appropriate, regional inventories of existing potable water supply delivery and collection systems, vulnerable wellfields, wastewater collection and/or treatment infrastructure, septic tanks/drainfields, and stormwater drainage and treatment facilities; assess the potential impact from climate change of each component; and develop different climate change scenarios and adaptation strategies for high-risk utilities and/or infrastructure which may require replacement, reinforcement, or relocation to ensure the long-term viability of the system (e.g., modified site, depth, elevation, materials, or connection requirements).</p>	Both	Yes	In Progress
WS-2	<p>Develop a regional saltwater intrusion baseline and utilize saltwater intrusion models to identify wellfields and underground infrastructure at risk of contamination/infiltration by saltwater with increases in sea level.</p>	Regional	No	N/A
WS-3	<p>Utilize existing and refined inundation maps and stormwater management models to identify areas and infrastructure at increased risk of flooding and tidal inundation with increases in sea level, to be used as a basis for identifying and prioritizing adaptation needs and strategies.</p>	Local	Yes	In Progress
WS-4	<p>Evaluate the impacts of rising sea and groundwater levels on soil storage, infiltration rates and inflow to stormwater and wastewater collection and conveyance systems; consider longer-term influences on water quality; and develop strategies for implementing reclaimed water and stormwater reuse projects that account for current and future conditions.</p>	Local	Yes	In Progress
WS-5	<p>Develop and apply appropriate hydrologic and hydraulic models to further evaluate the efficacy of existing water management systems and flood control/drainage infrastructure under variable climate conditions. Quantify the capacity and interconnectivity of the surface water control network and develop feasible adaptation strategies.</p>	Local	Yes	In Progress
WS-6	<p>Coordinate with the South Florida Water Management District, Drainage/Water Control Districts, and utilities/public works officials to identify flood control and stormwater management infrastructure already operating below the design capacity. Further examine water control structures to ensure that they can provide for inland or upstream migration of riparian species as freshwater habitats become more saline.</p>	Local	Yes	In Progress

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WS-7	Develop Integrated Water Management Plans that present a joint assessment and planning strategy involving local water utilities, wastewater service providers, water managers, and partners to the Southeast Florida Regional Climate Change Compact, for coordinated consideration of stormwater use and disposal, traditional and alternative water supplies, wastewater disposal and reuse, and water conservation measures for use by local leadership to guide planning decisions as well as amendments to applicable codes and regulations.	Both	Yes	In Progress
WS-8	Develop and test water management and drainage system adaptation improvements needed to maintain existing levels of service relating to drainage, flood control, and water supply, and use cost-benefit analyses to prioritize potential improvements.	Local	Yes	In Progress
WS-9	Incorporate and prioritize preferred climate adaptation improvement projects in capital improvement plans and pursue funding.	Local	Yes	In Progress
WS-10	Encourage, foster, and support investigative work and scientific research that improves the understanding of local and regional climate change impacts specific to Southeast Florida, including: <ul style="list-style-type: none"> • Improved down-scaling of global climate models for representation of precipitation at the regional/local scales • Identification and targeting of gaps in monitoring to improve quantification of the hydrologic system and its response to climate change, such as evapotranspiration, groundwater levels, and precipitation, and local sea level • Development of risk-based decision support tools and processes for application in analysis of infrastructure design, water resource management, natural systems management, and hazard mitigation alternatives. Tools should provide for consideration of potential economic costs of comparative planning scenarios, management decisions, and infrastructure investments and the evaluation of potential tradeoffs. 	Both	Yes	In Progress
WS-11	Undertake efforts to fill identified data gaps through local program efforts, agency collaborations, and advocacy for additional state/federal resources, as needed.	Both	Yes	In Progress
WS-12	Foster the development and exchange of new information, methods and technical capabilities to address key questions of concern related to climate variability and sea level rise to support management decisions: <ul style="list-style-type: none"> • Assess impacts of observed and predicted climate variability and sea level rise on the frequency, duration, and intensity of flooding as a result of extreme tidal excursions, storm surge, and 100-year storm events, and where impacts are likely to be greatest. • Examine the effects of climate change on water availability and groundwater vulnerability due to sea level rise, and predicted changes in precipitation and evapotranspiration patterns and rates. • Establish a venue for a periodic exchange of ideas between resource managers, policy makers, and researchers. 	Regional	No	N/A
WS-13	Develop agency capabilities to provide rapid deployment of resources in immediate response to intense precipitation and storm events through use of Next RAD technology.	Both	Yes	Not Started

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WS-14	Cultivate partnerships with federal and state agencies and professional associations with expertise in integrated water resource planning (such as the U.S. Army Corps of Engineers Institute for Water Resources, the United States Geological Survey, and Water Foundations) as sources of important research, reports, and information regarding climate change, and efforts being undertaken in other communities.	Both	Yes	In Progress
WS-15	Monitor changes in rainfall patterns, temperature means and extremes and sea level rise through coordination with NOAA and other key organizations/partners to better predict future wet-season and dry-season rainfall. Monitor emerging science in order to assess the adequacy of regional climate models. Choose an annual conference or other venue at which such trends can be reviewed at regular intervals.	Both	Yes	In Progress
WS-16	Manage water storage in the region’s publicly-owned uplands and wetlands and in other land uses compatible with water storage, including wetland restoration, certain agricultural operations and certain renewable energy production facilities. This will further serve to protect high quality drinking water supply, increase aquifer recharge, and as a means for managing saltwater intrusion.	Regional	No	N/A
WS-17	Support complete implementation and funding for the Comprehensive Everglades Restoration Plan (CERP) and its updated versions as fundamental to Everglades restoration, to include increased freshwater flows to the Everglades system, thereby improving water quality, maximizing regional freshwater storage and aquifer recharge, and providing potential to abate saltwater intrusion, which will become increasingly important under variable climate conditions and in the face of sea level rise.	Regional	No	N/A
WS-18	Combine existing and develop new land acquisition priorities in a regional setting to protect high quality drinking water supply.	Regional	No	N/A
NS-1	Develop a vital signs status and trends monitoring program for biological communities. Key parameters may include rate of sea level rise, saltwater intrusion boundary and monitoring wells, landscape-level vegetation patterns, percent coral cover and condition in offshore reef zones, water temperature and pH in areas, and occurrence and range of invasive exotic plants and animal species.	Regional	No	N/A
NS-2	Promote collaborative federal, state and local government conservation land acquisition programs. Explore fee simple and less-than-fee approaches which reflect regional acquisition priorities and result in conserving a diversity of natural areas including hot spots of biological diversity, protecting open space and buffer areas to create or maintain resilience and adaptive capacity of existing natural areas to transition inland/upslope.	Regional	No	N/A
NS-3	Support regional fire management coordination efforts emphasizing frequent, low intensity fire regimes in wetland and pine forest systems to maximize habitat quality, resilience to change and carbon neutrality while preventing hazardous fuel load buildup that leads to major carbon releases.	Regional	No	N/A
NS-4	Quantify monetary values of hazard mitigation and adaptation provided by natural systems using Ecosystem Services Valuation or comparable model. Create a sustainable funding mechanism for their protection and management.	Both	Yes	In Progress
NS-5	Maintain or restore multiple areas of habitat and large-scale connectivity to facilitate native species population stability and habitat shifts resulting from climate change.	Both	Yes	In Progress

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NS-6	Coordinate and implement regional invasive exotic species prevention and control efforts to minimize the diversity and abundance of habitat-homogenizing exotic plants and animals by emphasizing prevention of new invasions and early detection/rapid response to nascent invasions.	Both	Yes	In Progress
NS-7	Coordinate “living shorelines” objectives at regional scale to foster use of natural infrastructure (e.g. coral reefs, native vegetation and mangrove wetlands) instead of or in addition to grey infrastructure (e.g. bulkheads).	Both	Yes	Not Started
NS-8	Leverage existing work of the Florida Reef Resilience Program’s “Climate Change Action Plan for Florida’s Coral Reef System 2010-2015” for protection of marine habitat.	Regional	No	N/A
NS-9	Engage and cooperate with marine resource agencies to maintain coral reef (e.g., selective breeding) and mangrove ecotones as estuarine habitat and natural barriers to storm surge that also maintain coastal biodiversity.	Regional	No	N/A
NS-10	Advocate for federal and state funding for applied monitoring and climate related science: <ul style="list-style-type: none"> • identify economic and physical linkages between marine systems (e.g. reefs and mangroves) and hazard risk/damage claim reduction • monitor coastal and freshwater marsh vegetation tolerance to changing salinity, depth and other climate variables • improve data on estuarine bathymetry and use appropriate models to help identify habitats at risk • develop refined climate projections, hydrologic and ecological models to aid in planning 	Regional	No	N/A
NS-11	Support regulatory requirements that provide for ecologically beneficial uses of clean, dredged materials.	Regional	No	N/A
NS-12	Develop long-term turtle-nesting beach preservation and management strategies to reduce nest vulnerability and mortality.	Both	Yes	In Progress
NS-13	Compile information on rare plant species in threatened natural communities and develop adaptation plans that include, at a minimum, seed bank repository collection and assisted propagation.	Regional	No	N/A
NS-14	Maintain/restore urban tree canopy.	Local	Yes	In Progress
AG-1	Promote policies which preserve the economic viability of agriculture as the industry adapts in the face of climate change.	Regional	No	N/A
AG-2	Develop and seek regional, state, and county-based funding for willing buyer/willing seller Agriculture Purchase of Development Rights Program to maintain agricultural land for its ability to lessen climate change impacts and provide for national food security.	Regional	No	N/A
AG-3	Support academic research in the agriculture sector on best management practices for crops presently grown or new crops which may be grown as climate conditions change in Southeast Florida.	Regional	No	N/A
AG-4	Provide incentives to growers/land owners to manage agricultural lands to lessen impacts of climate change regionally and provide environmental benefits (which may include, but not be limited to: open space, water aquifer recharge and storage, carbon sequestration, wind farms, biofuels, and wildlife habitat).	Regional	No	N/A
AG-5	Ensure availability of water supply, at reasonable cost, to meet the diversity of needs across Southeast Florida to include agricultural irrigation needs and crop freeze protection.	Regional	No	N/A

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AG-6	Identify and reduce obstacles for permitting agricultural practices (including growing and selling produce) in urban areas, in order to encourage urban farming and reduce greenhouse gas emissions related to the transport of farm produce.	Regional	No	N/A
EF-1	Undertake regional efforts to advance energy efficiencies, energy conservation and the deployment of alternative and/or renewable energy technologies in existing and proposed developments through local ordinance, incentives, education, and energy efficiency financing strategies.	Regional	No	N/A
EF-2	Work toward the establishment of a regional framework to deliver Energy Efficiency and Renewable Energy finance options, in addition to other local government initiatives and partnerships, to achieve regional greenhouse gas emissions reductions, the use of alternative and renewable energy technologies, in furtherance of green sector economic development.	Both	Yes	Not Started
EF-3	Set a recurring five-year regional goal to increase renewable energy capacity and conservation – which includes the co-benefits of economic development and job creation – through revising building and zoning codes and architectural design guidelines to allow for, encourage, and integrate renewable energy sources into the power supply.	Regional	No	N/A
EF-4	Seek amendments to existing land development regulations and development standards and revise or eliminate provisions that act as a barrier to the installation and use of renewable energy systems pursuant to Section 163.04, F.S.	Both	Yes	Not Started
EF-5	Develop policies to facilitate and streamline the deployment of energy efficient and renewable energy such as the installation of LEDs and use of solar power for public infrastructure such as street lighting, parks, and parking facilities. Survey counties, cities and regional agencies with lighting infrastructure to determine the level of deployment and to gather best practice policies and implementation steps to facilitate the application of efficient, environmentally sensitive (sea turtles), and responsive lighting practices in additional infrastructure.	Both	Yes	In Progress
EF-6	Support or facilitate development and distribution of local sources of sustainable fuels and availability of fueling infrastructure. Adopt policies to facilitate the development of locally sourced sustainable alternative fuels, those achieving a reduction in lifecycle greenhouse gas emissions when compared to conventional fossil fuels (including, but not limited to, waste-based bio-diesel and methane gas from sources like landfills). Include these policies in regional plans and Local Comprehensive Plans. Identify incentives and modify local code to encourage the establishment of a local alternative energy industry.	Regional	No	N/A

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EF-7	<p>Establish a working group of public and private stakeholders to develop a strategy to promote the use of Plug-in Electric Vehicles in the region.</p> <p>a. Establish locations where infrastructure and/or battery switching stations are needed. Solar charging and other renewable options should be designated a priority to maximize emission reduction benefits and to improve the community's emergency management preparedness in times of power outages.</p> <p>b. Develop policies to provide incentives for the deployment of infrastructure to complement transit oriented corridors. Preferred and/or reduced parking fees should be a consideration for riders accessing transit facilities by electric or other alternative fuel vehicles. Transit facilities should develop plans to establish electric vehicle charging infrastructure.</p> <p>c. Work with relevant stakeholders to streamline permitting processes associated with charging equipment to encourage the safe and expeditious installation on customer premises and elsewhere.</p> <p>d. Coordinate monetary and non-monetary incentives available to the general public and organizations purchasing electric vehicles.</p> <p>e. Support regional efforts to establish a framework for siting/locating public electric vehicle charging stations.</p>	Both	Yes	In Progress
EF-8	<p>Develop a strategy to promote the development of truck parking with electrification facilities and the use of auxiliary power units to reduce extended idling by trucks.</p> <p>a. Survey state, local and regional transportation agencies for existing studies identifying trucking patterns and needs.</p> <p>b. Identify strategic locations for truck parking facilities and seek competitive funding opportunities as a region.</p>	Regional	No	N/A
RR-1	<p>Perform vulnerability analysis to identify and quantify the economic value of regional infrastructure at risk under various sea level rise scenarios and other climate change scenarios utilizing inundation mapping, modeling, and other appropriate tools. While the initial regional vulnerability assessment completed by the Compact Counties for use in this Regional Climate Action Plan has yielded important new insights on regional risk, additional and ongoing analysis is required to further refine our current understanding and to monitor changes in Southeast Florida's risk profile over time.</p>	Regional	No	N/A
RR-2	<p>Evaluate and improve adaptation responses for communities at risk, to include:</p> <ul style="list-style-type: none"> • Development and implementation of methodologies for the assessment and evaluation of evacuation and relocation options • Development of model evacuation policies and procedures for communities at increased risk of flooding • Development of model relocation policies for affected communities. 	Regional	No	N/A
RR-3	<p>Incorporate climate change adaptation into the relevant Local Mitigation Strategy (LMS) to reduce or eliminate long-term risk to human life and property from disasters. Within the LMS, update local risk assessments to include climate change in the hazard analysis and vulnerability assessment section. Develop strategies for hazard mitigation and post-disaster redevelopment planning.</p>	Both	Yes	Not Started

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Number	Recommendation	Regional, Local or Both	Direct Action by the City Required?	City Implementation
RR-4	<p>Identify transportation infrastructure at risk from climate change in the region, and determine whether, when, where, and to whom projected impacts from climate change might be significant. Employ inundation mapping, modeling and other appropriate tools to assess the vulnerability of transportation infrastructure to the projected impacts of climate change under various sea level rise and other climate change scenarios. At a minimum, assess the vulnerability of the following transportation infrastructure:</p> <ul style="list-style-type: none"> • local transportation networks of the Compact Counties • the Regional Transportation Network designated by the Southeast Florida Transportation Council composed of interconnected, strategic corridors (roadway, rail line, waterway), hubs (airports, seaports, intermodal terminals, freight terminals, passenger rail and intercity bus terminals) and connectors critical to the mobility of people and freight and the region’s economic competitiveness and quality of life (map included in Appendix D); and evacuation routes adopted under the Statewide Regional Evacuation Corridor Program. 	Both	Yes	Not Started
RR-5	<p>Enforce Coastal Construction Control Line and build upon goals, objectives and policies related to Coastal High Hazard Area designations in Comprehensive Plans.</p>	Local	Yes	In Progress
RR-6	<p>Adopt consistent plans at all levels of regional government that adequately address and integrate mitigation, sea level rise and climate change adaptation. The following plans must all be consistent: disaster recovery and redevelopment plans, comprehensive plans, long-range transportation plans, comprehensive emergency management plans, capital improvement plans, economic development plans, Local Mitigation Strategy, Climate Change Action Plan, and Future Land Use Plan.</p>	Both	Yes	In Progress
RR-7	<p>Continue to implement and enforce strong building codes that require new construction and substantial improvements to existing structures to mitigate against the impacts of flooding, severe winds, and sea level rise, and which are consistent with Climate Change Adaptation policy.</p>	Both	Yes	In Progress
PO-1	<p>Provide outreach to residents, stakeholders and elected officials on the importance of addressing climate change adaptation and preparedness and develop a program to educate specific interest groups about the Compact, Regional Climate Action Plan, and the benefits of Adaptation Action Area. Consider utilizing the Academy concept to educate elected leaders, academic interests and other decision makers.</p>	Local	Yes	In Progress
PO-2	<p>Collaborate among counties, municipalities and appropriate agencies to develop and carry out outreach/educational programs to increase public awareness about hazards exacerbated by climate change, mitigation efforts, and adaptation strategies to minimize damage and risk associated with climate change.</p>	Both	Yes	In Progress
PO-3	<p>Provide education and improve communications on energy conservation and available technologies with a focus on both short-term and life-cycle economic benefits, and incentives available within the region.</p>	Local	Yes	In Progress
PO-4	<p>Modify existing and encourage new public outreach, education and messaging programs associated with natural areas including upland, wetland, marine, coastal and nearshore environments and the Everglades to include climate change mitigation and adaptation messaging and volunteer opportunities to create awareness about the impacts of climate change on the environment.</p>	Local	Yes	In Progress

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Number	Recommendation	Regional, Local or Both	Direct Action by the City Required?	City Implementation
PO-5	Initiate a regional public education campaign to educate residents, business owners, and policy makers on the merits of preserving open land as an “insurance policy” for adaptation to sea level rise in Southeast Florida.	Regional	No	N/A
PO-6	Develop early warning systems and social media applications to both inform residents and visitors of extreme high-tide events and to raise overall awareness on sea level rise and climate change issues. Also consider roadway signage for tidal flooding zones.	Local	Yes	In Progress
PO-7	Leverage resources for campaign and promotional advertisements by coordinating public transportation messaging in the region to attract non-transitdependent (choice) riders. Messages should focus on making riding transit “cool.”	Both	Yes	In Progress
PO-8	Deploy social media applications, to facilitate use of transit including access to realtime information such as arrival times.	Regional	No	N/A
PO-9	Develop strategies to promote fuel efficient driving habits, including anti-idling practices, and to raise awareness of rules and safety practices for sharing the road with bicyclists and pedestrians. Conduct best practice research on existing campaigns and look for opportunities to integrate tools into existing high school, county and municipal driver education courses, traffic school curriculum, truck driver training, and fleet associations. Also include messaging on the benefits of purchasing fuel efficient vehicles.	Both	Yes	In Progress
PO-10	Coordinate outreach efforts with states, regions and counties that are subject to the impacts of climate change with special emphasis on coastal entities experiencing sea level rise and coastal flooding to create a national Climate Adaptation Coalition for the purpose of impacting public policy and influencing appropriations requests.	Regional	No	N/A
PO-11	Create a working group to expand marketing efforts such as Redland Raised to promote local organic and sustainable agriculture and economy by connecting farmers with local users such as restaurants, grocers, and farmers markets and encourage the establishment of farm-to-school initiatives and community supported agriculture programs.	Regional	No	N/A
PP-1	Compact Partners will continue the support for the core Compact policies and the role of joint advocacy as provided for in Sections 1 – 4 of the Compact calling for changes to federal law that better recognize the unique vulnerabilities of Southeast Florida to climate change and for providing appropriations based on vulnerabilities, with special attention to funding infrastructure projects to adapt to sea level rise.	Both	Yes	In Progress
PP-2	Compact partners will continue to develop state and federal legislative programs on a yearly basis that will serve as guidance for advocacy in Tallahassee and Washington, D.C. Regional programs will be considered for inclusion into Compact partners’ legislative packages and joint advocacy in Tallahassee and Washington, D.C., is encouraged when appropriate.	Both	Yes	In Progress
PP-3	Continue to seek the support of other municipal and county jurisdictions including the Leagues of Cities, Florida Association of Counties (FAC), etc. within Florida and the National Association of Counties (NACo) and other entities that influence national policy for the purpose of building coalitions, sharing resources, and influencing state and national policy on mutual climate related issues through joint advocacy.	Both	Yes	In Progress

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Number	Recommendation	Regional, Local or Both	Direct Action by the City Required?	City Implementation
PP-4	<p>Counties, municipalities, regional agencies and other appropriate government and private sector partners should integrate consideration of climate change impacts and adaptation strategies into existing and future systemwide planning, operations, policies, and programs. The guiding principles developed by the Interagency Task Force on Climate Change Adaptations for federal agencies should be incorporated by entities when designing and implementing adaptation strategies:</p> <ul style="list-style-type: none"> • Prioritize the most vulnerable • Use best-available science • Build strong partnerships • Apply risk-management methods and tools • Apply ecosystem-based approaches • Maximize mutual benefits • Continuously evaluate performance 	Both	Yes	In Progress
PP-5	<p>Advocate for new authorization of the federal surface transportation programs with increased priority for funding public transit and non-motorized travel and integrated regional and local planning as means to reduce the greenhouse gas emissions from the transportation sector. Such a federal program should explicitly incorporate climate change and shift priorities toward programs that encourage reinvestment in existing infrastructure and communities ("fix-it-first" programs), support public transportation and transit-oriented development, and address congestion management through means other than new road building.</p>	Both	Yes	In Progress
PP-6	<p>Support federal actions to reform transportation models and enhance the National Environmental Policy Act (NEPA) processes to integrate climate change analysis. The essential purpose of NEPA is to ensure that environmental factors are weighted equally when compared to other factors in the decision making process. NEPA processes are central to highway and transit project investment analysis.</p>	Regional	No	N/A
PP-7	<p>Advocate for stronger Corporate Average Fuel Economy (CAFE) Standards and other initiatives to promote clean fuel alternatives and encourage more stringent vehicle emission standards in recognition of the value of these initiatives to mitigate the impacts of climate change by reducing greenhouse gas emissions.</p>	Regional	No	N/A
PP-8	<p>Support and advocate for continued implementation and funding on the state and federal levels for the Comprehensive Everglades Restoration Plan (CERP) in recognition of the important role of CERP in climate adaptation planning and local water resource management related to regional water storage and aquifer recharge, important under variable climate conditions and sea level rise.</p>	Regional	No	N/A
PP-9	<p>Advocate to interests in Tallahassee for the preservation of the authority and resource capacity of the Water Management Districts in support of their continued participation in integrated water resource planning, particularly in Southeast Florida where climate change and sea level rise pose additional challenges to the complex issues of alternative water supply development, Everglades restoration, salt water abatement, and drainage and flood control operations.</p>	Regional	No	N/A
PP-10	<p>Encourage federal support for research and investigations of potential energy efficiencies in pumping and water treatment processes necessary for meeting energy reduction goals concurrent with a growing reliance on pumps and advanced treatment technologies for drainage and flood control, water production and wastewater operations.</p>	Regional	No	N/A

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Number	Recommendation	Regional, Local or Both	Direct Action by the City Required?	City Implementation
PP-11	Urge Congress to provide recognition of an "Adaptation Action Area" designation in federal law for the purpose of prioritizing funding for infrastructure needs and adaptation planning, with special attention to modifications in law that enhance funding opportunities through USACE and EPA appropriations processes, as requested by members of Congress.	Regional	No	N/A
PP-12	Urge Congress to pass legislation that would create a permanent funding source to finance infrastructure projects to adapt to the impacts of climate change with emphasis on investments in areas such as water management, water supply, transportation and other projects that serve to reduce risks to urban infrastructure from extreme weather events and rising sea levels.	Regional	No	N/A
PP-13	Urge Congress to pass legislation that removes federal barriers posed by the Federal Housing Finance Agency to Property Assessed Clean Energy (PACE) residential initiatives that are intended to assist property owners to finance energy efficiency and renewable energy improvements.	Regional	No	N/A