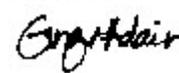


Date: 07/16/2019		AGENDA ITEM				Item: 04	
<input type="checkbox"/> Ordinance		<input type="checkbox"/> Resolution		<input type="checkbox"/> Budget Resolution		<input checked="" type="checkbox"/> Other	
County Goals							
<input checked="" type="checkbox"/>	Thriving Communities	<input checked="" type="checkbox"/>	Economic & Financial Vitality	<input checked="" type="checkbox"/>	Excellence In Government	<input type="checkbox"/>	NA
Department: Growth And Resource Management							
Division: Environmental Management							
Subject: Presentation of the East Central Florida Regional Resiliency Action Plan.							
Clay Ervin Director Growth and Resource Management  Department Approval				Legal Jamie E. Seaman Deputy County Attorney  Approved as to Form and Legality		County Manager's Office Donna de Peyster Deputy County Manager 	
Ginger Adair Director Environmental Services  Division Approval							
Council Action:							
Modification:							
Account Number(s): NA							
Total Item Budget: NA							
Staff Contact(s):				Phone:		Ext.	
Clay Ervin				386 822 5013		1200	
Ginger Adair				386 736 5927		12059	
Summary/Highlights:							
<p>In 2015, section 163.3178, Florida Statutes was amended to require the coastal element of a comprehensive plan to address principles, strategies, and engineering solutions that reduce the flood risk in coastal areas which results from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea-level rise. In 2017, the East Central Florida Regional Planning Council was awarded a grant from the Florida Department of Environmental Protection to develop a Regional Resiliency Action Plan for the coastal counties of Volusia and Brevard.</p> <p>The steering committee for the plan was comprised of federal, state, regional and local agencies and institutions, local communities, and subject matter experts, and met from October 2017 to December 2018. Two subcommittees were created: Sea-level Rise and Stakeholder Engagement. The subcommittees and steering committee assisted in the development of a regional approach to sea-level rise planning and the subsequent technical and guidance section of this plan, developed workshop goals and processes, and provided</p>							

oversight and development of the action plan. The Regional Resilience Action Plan is the result of 6 workshops, 11 Steering Committee calls and meetings, 7 Public Engagement Sub-Committee calls, 4 Sea-level Rise Sub-Committee calls, and numerous agency interviews and feedback sessions. The executive summary is attached and the full document can be accessed at

https://docs.wixstatic.com/ugd/4c4fbd_769e7278bcb742e48a2237391963a849.pdf.

For planning purposes, the Regional Resiliency Action Plan recommends a range of sea-level rise be utilized based upon the vulnerability, allowable risk, projected service life, and the forecasted project "in-service" date of a facility or development. The sea-level rise estimates associated with the NOAA 2017 high rate curve are recommended as the upper bound of the planning scenario and the USACE 2013 high rate curve is recommended as the lower bound of the planning scenario.

New development and facilities that have little risk tolerance and long functional life span should utilize the upper bound of sea-level rise planning and be planned for a minimum rise in sea-level of 1.85 feet by 2040, 4.47 feet by 2070 and 8.48 feet by 2100. The upper bound of sea-level rise planning should consider the local estimate for the forecasted year of facility life expectancy based on in-service date. USACE guidance requires a 100-year potential service life of large infrastructure projects. These projects along with new community development projects should include an approved adaptation strategy prior to construction consistent with the community's adaptation plan.

The lower bound, the USACE 2013 high rate curve, recommends as minimum level of sea-rise for planning of 1.22 feet by 2040, 2.85 feet by 20170 and 5.15 feet by 2100. This minimal planning level is recommended for facilities that are less vulnerable, have a greater risk tolerance to flooding, facilities with little impact in terms of the health, safety and welfare of the community, facilities with a short time-frame of functionality, or facilities that are easily relocated or planned for relocation.

Planning for sea-level rise can also benefit community flood insurance rates. The 2017 update of the FEMA Community Rating System Manual (CRS) placed emphasis impacts of sea-level rise by providing credit for a community that:

- provides information about areas that are predicted to be susceptible to flooding in the future because of sea level rise;
- demonstrates that it has programs that minimize increases in future flooding and uses regulatory flood elevations in the V and coastal A Zones that reflect future conditions, including sea level rise;
- advises prospective property buyers of the potential for flooding due to sea level rise, bases regulatory maps on future-conditions hydrology, including sea level rise, and accounts for sea level rise in managing its coastal A Zones;
- regulates runoff from future development in its stormwater program;
- manages future peak flows in its watershed master plan so that they do not exceed present values;
- addresses impacts of sea level rise in its watershed master plan (coastal communities);
- conducts flood hazard assessment and problem analysis to address areas likely to flood and flood problems that are likely to get worse in the future, including changes in floodplain development and demographics, development in the watershed, and sea level rise.

The Regional Resiliency Action Plan includes four goals to address sea-level rise projections

and an action plan matrix to use for infrastructure planning to reduce flooding and financial losses. The goals, objectives, and actions are attached.

On January 16, 2019, The ECFRPC Board unanimously adopted the East Central Florida Regional Resiliency Action Plan. The River to Sea Transportation Planning Organization approved the plan at its June 26, 2019, meeting. Brevard County, the Space Coast Transportation Planning Organization, and the City of Cocoa have adopted the plan, and the City of Port Orange approval is pending.

Attached is a resolution adopting the East Central Florida Regional Resiliency Action Plan.

Recommended Motion: Adopt resolution.

East Central Florida Regional Resiliency Action Plan



Table of Contents

Acknowledgements	3
Executive Summary	5
Introduction	7
Socio-Economic Profile.....	11
Brevard County	13
Volusia County.....	18
Stakeholder Engagement	22
Regional Planning for Sea Level Rise Recommendation	23
Action Plan Matrix.....	27
Appendices.....	71
Template Resolution for Adoption of the ECF RRAP	72
Policy Integration Survey Summary	76
Stakeholder Engagement Findings	94
Regional Planning for Sea Level Rise Recommendation	116
DEP Grant Resource Guide	124
References	136

List of Tables

Table 1: General Demographics - Brevard County 13
Table 2: Potential Vulnerable Populations - Brevard County 13
Table 3: Environmental Parameters- Brevard County..... 14
Table 4: Most Vulnerable Economic Subsectors by Number of Establishments- Brevard County 15
Table 5: Largest Employers Located within Inundation Area - Brevard County..... 16
Table 6: General Demographics - Volusia County..... 18
Table 7: Potential Vulnerable Populations - Volusia County..... 18
Table 8: Environmental Parameters- Volusia County..... 19
Table 9: Most Vulnerable Economic Subsectors by Number of Establishments- Volusia County 20
Table 10: Largest Employers Located within Inundation Area - Volusia County..... 21

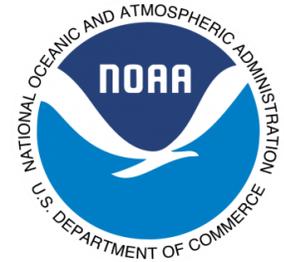
List of Figures

Figure 1: Social Vulnerability to Environmental Hazards - Brevard County..... 14
Figure 2: ECF Regional Resiliency Action Plan Recommended Bounds for Planning for Sea Level Rise 26
Figure 3: All Relative Sea Level Rise Projection Rate Curves 120
Figure 4: ECF Regional Resiliency Action Plan Recommended Bounds for Planning for Sea Level Rise 123

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Acknowledgements

The East Central Florida Regional Planning Council (ECFRPC) would like to thank the Florida Department of Environmental Protection and the National Ocean and Atmospheric Administration for providing the funding to develop the East Central Florida Regional Resiliency Action Plan (ECF RRAP) and engage stakeholders in the resilience conversation across Brevard and Volusia Counties.



Stakeholder and public engagement were a critical and large component of the plan development. The ECFRPC recognizes and thanks all agency, jurisdictional, NGO, educational and business sector representatives, elected officials, and public for your participation in the workshops held in 2018 that provided a forum for resilience education and discussion to formulate the action plan and efforts to move resilience strategies forward across the region.

The ECF RRAP steering committee comprised of agencies listed in the table below were instrumental in helping to guide the process and development the action plan including a regional approach to sea level rise and the engagement of stakeholders across the region. A special thank you goes out to all agency and jurisdictional representatives who served on the committee.

East Central Florida Regional Resiliency Action Plan Steering Committee

Brevard County GIS	Indian River Lagoon National Estuary Program
Brevard County Planning & Development	League of Women Voters Sustainability Committee
Brevard County Public Works	NASA Kennedy Space Center
Brevard Emergency Management	NOAA Office for Coastal Management
Brevard Natural Resource Management	Patrick Air Force Base
Canaveral Port Authority	River to Sea Transportation Planning Organization
City of Cape Canaveral	RWParkinson Consulting, Inc.
City of New Smyrna Beach	Florida Sea Grant
City of Port Orange	St. Johns River Water Management District
City of Rockledge	Space Coast Transportation Planning Organization
City of Satellite Beach	Stetson University
Erin L. Deady, PA	University of Florida GeoPlan Center
East Central Florida Regional Planning Council	UF IFAS Extension Volusia and Brevard
FEMA	U.S. Army Corps of Engineers
Florida Department of Economic Opportunity	U.S. Department of Agriculture
Florida Department of Environmental Protection	Volusia County Emergency Management
Florida Department of Health in Brevard	Volusia County Growth and Resource Management
Florida Department of Health in Volusia	Volusia County Stormwater
Florida Department of Transportation	Volusia County Environmental Management
Florida Fish and Wildlife Conservation Commission	Volusia County Traffic Engineering
Sustainability Program, Florida Institute of Technology	Volusia County Water Resources and Utilities

Executive Summary

The ECFRPC was awarded a Florida Department of Environmental Protection (FDEP) Grant in 2017 to work with stakeholders in Brevard and Volusia Counties to develop the East Central Florida Regional Resiliency Action Plan (ECF RRAP) with the goal to increase the ability of local and regional stakeholders to implement resiliency and climate adaptation strategies across disciplines. The plan development process revolved around guidance from a cross-disciplined steering committee and extensive stakeholder engagement and best practice research.

The Framework for the ECF RRAP was based on the 100 Resilient Cities program of the Rockefeller Foundation which works with cities around the world to help them “become more resilient to the physical, social and economic challenges that are a growing part of the 21st Century”. The action plan incorporates a five-year planning horizon based around four main focus areas of the 100 Resilient Cities program: Leadership and Strategy, Economic and Society, Infrastructure and Environment, and Health and Wellbeing. It is important to note that this action plan encompasses a variety of resiliency aspects and aims to incorporate discussion on infrastructure (water, energy, waste, etc.), health, planning, emergency preparedness, economics and leadership as they revolve around a more environmental “shock and stressor” approach. However, this framework allows for the replicability and refinement of the plan on a local or agency level to incorporate additional actions to address resilience to more shocks and stressors.

The Action Plan not only provides a matrix of actions for various levels of government from local to federal, but also includes actions for partnerships across agencies, not-for-profits, the business sector and other stakeholders. The report provides an in-depth discussion of the plan development process, stakeholder engagement and efforts across the region to implement resilience and sustainability measures and policies.

To guide the development of the RRAP, a steering committee was developed comprised of federal, state, regional and local agencies and institutions, local communities and subject matter experts. The first steering committee meeting, held in October of

2017, resulted in goals and direction for the plan and process. The committee met monthly (virtual and face-to-face) through December 2018. Additionally, two subcommittees were created: Sea Level Rise and Stakeholder Engagement. The subcommittees and steering committee assisted in the development of a regional approach to sea level rise planning and the subsequent technical and guidance section of this plan, developed workshop goals and processes, and provided oversight and development of the action plan itself, especially the goals, objectives and activity items. This East Central Florida Regional Resilience Action Plan is the result of 6 workshops, 11 Steering Committee calls and meetings, 7 Public Engagement Sub-Committee calls, 4 Sea Level Rise Sub-Committee calls and numerous agency interviews and feedback sessions.

In addition to best practice research across Florida and the nation and steering committee expertise, stakeholder engagement was a driving force behind the development of the RRAP. RRAP Listening Sessions took place on May 7th in Volusia County and on May 8th in Brevard County with two workshops occurring in each county: “Collaborating for Resilience” and “Building Economic and Social Resilience”. Additional workshops for Elected Officials, citizen advisory groups and other interested public, were held on August 20th and 21st. Findings from the workshop were incorporated into the ECF RRAP as appropriate. While some actions were outside the immediate scope of the RRAP, they are highlighted in this report to aid in their advancement. Additionally, some resilience gaps identified through stakeholder engagement were addressed by the ECFRPC through collaboration with and connection of appropriate agencies and departments and providing access to various available resources.

A “Plan and Policy Resiliency Integration” survey was conducted to provide insight into the progress of integrating resiliency into various local and regional plans and policies. The survey results facilitated the identification of gaps, needs and actionable items aimed at supporting resilient and sustainable coastal communities in the region. One of the principle conclusions of the survey was a lack of resources in order to conduct the analysis, planning and implementation of resilience strategies and policies across jurisdictions and agencies.

Information on the action plan and its process can be found here: <https://www.perilofflood.net/ecfresiliency>

*Goal 1: **Leadership & Strategy** - Promote leadership, education and empowerment both in government, and public and private sectors to foster the implementation of resiliency strategies across disciplines and communities.*

LS1: Incorporate resiliency into local and regional plans, policies and objectives.

LS2: Plan fiscally to implement resilient and sustainable solutions to long-term impacts.

LS3: Implement strategies to promote adaptive measures that keep people and property safe from natural hazards.

LS4: Engage and educate private sector stakeholders, elected officials and other members of the community about strategies to increase resilience in the built, natural, and social environment

*Goal 2: **Economic & Society** - Provide opportunities and strategies to foster economic prosperity and improve social equity and justice in preparation for and recovery from stressors and shocks.*

ES1: Protect high-value assets from natural hazards.

ES2: Educate business about access to funding and financing services related to resiliency and sustainability.

ES3: Facilitate and support the efficient recovery of business operations after an event.

ES4: Increase skilled labor force.

ES5: Improve social equity and justice in decision making process.

*Goal 3: **Infrastructure & Environment** - Encourage development of cross-disciplinary plans, policies and strategies to protect the health, safety and economic welfare of residents, businesses and visitors through recognition that natural disasters, changes to climate, and human manipulation require careful consideration of when and how to develop infrastructure, natural resources and a built environment that can withstand and adapt to these changes.*

IE1: Prioritize the use of Green Infrastructure as a first line of defense.

IE2: Promote interconnectivity of natural lands for habitat migration.

IE3: Enhance stormwater systems to be more resilient.

IE4: Improve water quality in surface water bodies.

IE5: Incorporate resiliency into local and regional plan, policies and objectives.

IE6: Preserve and adapt the built environment to keep people safe from and mitigate current and future natural hazards.

IE7: Improve community mobility while improving vulnerable transportation infrastructure.

*Goal 4: **Health & Well Being** - Create resilient communities by facilitating programs, opportunities, and community-wide education pertaining to local sustainability, disaster response, and climate change mitigation strategies.*

HW1: Improve capacity of jurisdictions to better respond to hazard events.

HW2: Improve capacity of medical facility operations to prepare for and recover from natural disasters and future conditions.

HW3: Promote sustainable practices in government owned facilities.

HW4: Engage residents and business owners with locally relevant information about expected future changes in natural hazards and sustainable practices.

HW5: Improve access to resources for the homeless, special needs, elderly, low income, and English-limited residents.

Goal	Objective	Action	Agency or Department	Task	Year	Related Plans
Leadership & Strategy	LS1: Incorporate resiliency into local and regional plans, policies and objectives.	LS1.1	ECFRPC All Jurisdictions	Work with experts, agencies, public, stakeholders and elected officials across the region to develop the framework of a regional collaborative to focus on resilience.	1	
		LS1.2	ECFRPC	Evaluate existing programs as related to regional resilience action programs and plans.	1	
		LS1.3	Planning Department Sustainability Board Brevard County Sustainability Working Group	Create a jurisdiction-wide Sustainability/Resiliency Plan through the recommendations of the Sustainability Board, if applicable.	2	Sustainability Plan
		LS1.4	ECFRPC All Jurisdictions	Formalize the framework of the regional resilience collaborative through resolution.	2	
		LS1.5	All Jurisdictions	Secure a Chief Resiliency and/or Sustainability Officer to coordinate with private and public sectors.	2	
		LS1.6	All Jurisdictions All Agencies	Prioritize the review of all plans, policies and procedures to assess inclusion of resilience strategies or impediments, if not already completed.	3	
		LS1.7	All Jurisdictions All Agencies	Participate in a county-wide workshop to share best practices, needs and progress of local planning in regards to implementing the action plan and other resilience strategies (local level).	4	
		LS1.8	ECFRPC All Jurisdictions	Reassess existing framework and goals of the regional resilience collaborative.	5	
		LS1.9	All Jurisdictions	Reassess indicators established in the local Sustainability/Resiliency Plan.	5	

Goal	Objective	Action	Agency or Department	Task	Year	Related Plans
Leadership & Strategy	LS2: Plan fiscally to implement resilient and sustainable solutions to long-term impacts.	LS2.1	All Local Government Commission All Jurisdictional Departments Public	Assess CIP to ensure inclusion of sustainable and resilient projects.	1	Capital Improvement Plan/Element
		LS2.2	Public Works Department All Local Government Commission	Procure funding and staff/contractor to update all stormwater system facilities in a master GIS database.	1	
		LS2.3	Local Government Commission Jurisdictional Departments Public Natural Resources Department Watershed Management Program	Conduct budgeting workshops and surveys to determine appropriate ways to build reserves and adjust budgets to include specific line items to be proactive in creating and maintaining sustainable and resilient communities.	2	
		LS2.4	All Local Government Commission All Jurisdictional Departments Public	Conduct survey of stakeholders to assess priority and funding of conservation lands and green infrastructure.	3	
		LS2.5	All Local Government Commission	Investigate and develop innovative long-term funding and revenue generators.	4	
		LS2.6	All Local Government Commission	Implement reserve building strategies incrementally to be proactive in creating sustainable and resilient communities.	4	
		LS2.7	All Local Government Commission All Jurisdictional Departments	Reassess budgeting and CIP involving resilient and sustainable projects to ensure continuing inclusion.	5	Capital Improvement Plan/Element
		LS2.8	SJRWMD Natural Lands Programs Natural Resource Department FDEP 1000 Friends of Florida NGOs	Evaluate strategies and alternative analysis for longer term funding for acquisition / management program.	5	

Goal	Objective	Action	Agency or Department	Task	Year	Related Plans
Leadership & Strategy	LS3: Implement strategies to promote adaptive measures that keep people and property safe from natural hazards.	LS3.1	Natural Resources Department Planning Department SJRWMD UF IFAS Extension Natural Resources Conservation Service (USDA)	Assess and update LDC as necessary to allow private land owners to implement native vegetation programs, or other efforts that allow water to be treated on site.	1	
		LS3.2	Planning Department	Research appropriate parking standards for the community, and identify parking lots that can potentially be downsized to include green infrastructure and permeable surfaces as well as strategies to mitigate the heat island effect.	1	
		LS3.3	Natural Resources Department Planning Department	Streamline the permit process in order to allow private land owners to implement native vegetation programs, or other efforts that allow water to be treated on site.	2	Department Permitting Handbook
		LS3.4	Sustainability Boards All Jurisdictions ECFRPC	Ensure passing of information and infographic templates to and from agencies and jurisdictions through websites to better relay information.	2	
		LS3.5	Planning Department	Update parking standards within Land Development Regulations to allow for additional space to include green infrastructure, permeable surfaces and other strategies that mitigate the heat island effect.	2	Land Development Regulations
		LS3.6	Planning Department Public Works Department	Prioritize public and private parking lots that can be retrofitted to include more permeable surface to reduce stormwater loads and treat water on-site.	3	
		LS3.7	Utilities Department Emergency Management Public Works Department	Add stormwater mitigation efforts in parking lots to the stormwater management plan, LDRs, CIE where necessary and find best areas for retrofitting opportunities.	4	Stormwater Management Plan Comprehensive Plan Land Development Regulations
		LS3.8	Utilities Department Public Works Department	Reassess improvements to stormwater run off and quality in areas of new projects.	5	

Goal	Objective	Action	Agency or Department	Task	Year	Related Plans
Leadership & Strategy	LS4: Engage and educate private sector stakeholders, elected officials and other members of the community about strategies to increase resilience in the built, natural, and social environment.	LS4.1	ECFRPC All Jurisdictions	Find champions and strong advocates both elected and non-elected to participate in the regional resilience collaborative and locally.	ongoing	
		LS4.2	All Local Government Commission All Jurisdictional Departments ECFRPC Florida Sea Grant	Conduct new leadership orientation.	ongoing	
		LS4.3	ECFRPC	Create a regional education plan/tool box for use across the region for all levels and sectors both private and public as well as citizens.	1	
		LS4.4	Sustainability Board Planning Department Economic Development Commission UF IFAS Extension	Hold workshops or one-on-one meetings with private sector stakeholders to educate and train them on sustainable practices.	1	
		LS4.5	All Local Government Commission	Assess applicability of a Sustainability Board and develop goals for the board with a diverse group of stakeholders.	1	
		LS4.6	Sustainability Board	Create a social media account for the Sustainability Board.	1	
		LS4.7	Sustainability Board Planning Department UF IFAS Extension	Develop sustainability trainings for elected officials, boards, and staff that includes information on hazard mitigation and sustainability principles.	1	Sustainability Plan
		LS4.8	Sustainability Board Planning Department Economic Development Commission UF IFAS Extension	Hold workshops or one-on-one meetings with elected officials to inform them on sustainable practices.	1	
		LS4.9	Natural Resource Department UF IFAS Extension	Create workshops and info graphics to educate the public and elected officials about economic and mitigation benefits of ecosystem services.	2	
		LS4.10	RAPP Steering Committee ECFRPC	Host a Regional Climate Summit.	2	

Goal	Objective	Action	Agency or Department	Task	Year	Related Plans
		LS4.11	Sustainability Board Planning Department Economic Dev't Commission Natural Resource Department UF IFAS Extension	Develop an educational outreach plan with all appropriate departments to ensure stakeholders and elected officials are continuously engaged and educated about resilience at important junctures.	3/ on-going	
		LS4.12	Natural Resource Departments Sustainability Boards UF IFAS Extension	Conduct the series of natural resource workshops for the public and elected officials to educate them about economic and mitigation benefits of conservation lands etc.	3	
		LS4.13	Planning Department Sustainability Board RRAP Steering Committee ECFRPC UF IFAS Extension Regional Stakeholders	Provide outreach and educational opportunities to residents to learn about the importance of developing away from the natural hazard zones.	3	
		LS4.14	Sustainability Board Planning Department UF IFAS Extension	Develop volunteer initiatives based off of the educational opportunities in order to continue learning through hands-on activity.	4	
		LS4.15	Sustainability Board Planning Department Economic Dev't Commission Natural Resource Department UF IFAS Extension	Re-evaluate workshops and educational materials to determine gaps and lessons learned.	4	
		LS4.16	Sustainability Board Planning Department Economic Development Commission UF IFAS Extension Natural Resource Department	Using findings from LS4.15, update educational outreach plan, programs and materials.	5	
		LS4.17	Sustainability Board UF IFAS Extension Planning Department	Reassess engagement techniques and areas that would benefit from more participation/education of the community.	5	

Goal	Objective	Action	Agency	Task	Year	Related Plans
Economic & Society	ES2: Educate business about access to funding and financing services related to resiliency and sustainability.	ES2.1	Sustainability Board Chambers of Commerce	Research funding and financing services for pre/post post disaster needs and sustainable practices. Determine role of jurisdiction in the implementation of financing mechanisms.	1	
		ES2.2	Sustainability Board Chambers of Commerce UF IFAS Extension Florida Sea Grant	Conduct a workshop with business owners to determine needs, wants and constraints as related to implementing resilient and sustainable practices.	1	
		ES2.3	Emergency Management Economic Dev't Commission Chambers of Commerce	Create/update disseminate an educational infographic for businesses with funding and financing services for pre/post- disaster needs and sustainable practices.	2	Business Resiliency Action Plan County COOP Plan
		ES2.4	Chambers of Commerce	Determine the feasibility and functionality of a program to help impacted businesses with rent deferment.	3	
		ES2.5	Sustainability Board Chambers of Commerce Brevard County Sustainability Working Group	Include in a sustainability plan actions to help community businesses implement sustainable practices.	3	
		ES2.6	Sustainability Board Chambers of Commerce	Reassess efforts and programs to fill identified gaps.	4	
Economic & Society	ES3: Facilitate and support the efficient recovery of business operations after an event.	ES3.1	Emergency Management Economic Development Commission Chambers of Commerce Port Canaveral	Develop a process for businesses to coordinate with the EOC for review and execution of Business Continuity Plans.	1	Business Resiliency Action Plan County COOP Plan
		ES3.2	Chambers of Commerce Workforce Agencies	Research available templates for business and employee preparedness plans and create outreach proposal for businesses to update these templates.	1	
		ES3.3	Economic Development Commission Tourism Development Council	Create a tourism marketing program to implement after a disaster event to bring tourists back by showcasing that the area is "Open for Business". Create PSA's and other materials.	1	
		ES3.4	Economic Development commission	Identify "point person" in local government to act as a liaison between the business community and the local government for resiliency.	1	
		ES3.5	Chambers of Commerce Emergency Management EOC	Develop a section on agency website focused on disaster preparedness and include links to business continuity plan and employee disaster plan templates.	2	

Goal	Objective	Action	Agency	Task	Year	Related Plans
		ES3.6	Emergency Management Chambers of Commerce Workforce Agencies	Develop "one-pager" with best practices and links for responding to and preparing for hazard events. Create/update and disseminate an educational infographic for businesses with emergency information to access for post disaster needs.	2	
		ES3.7	Emergency Management Economic Development Commission Chambers of Commerce	Begin to work with businesses and partners to develop Business Continuity Plans and provide to the EOC for exercising review.	2	Business Resiliency Action Plan County COOP Plan
		ES3.8	Emergency Management	Work with the identified local critical facility businesses to determine resources needed to aid in timely recovery efforts such as generators, mitigation projects, etc.	2	
		ES3.9	Florida Department of Children Services School Districts Childcare Centers	Hold a workshop with day cares and school districts to determine a feasible approach to share resources for care for children under the age of 12 after a disaster.	3	
		ES3.10	Incubator Facilities	Add "Business Continuity" to programs at incubator facilities.	3	
		ES3.11	Florida Department of Children Services School Districts Childcare Centers	If deemed feasible, develop a plan to provide child care services when schools are closed for longer than a week.	4	
		ES3.12	Chambers of Commerce	Reassess efforts and update plans and programs to fill identified gaps.	5	
		ES3.13	Chambers of Commerce	Consider implementing a long-term recovery plan for businesses to retain employees as soon as possible following a storm event.	5	
Economic & Society	ES4: Increase skilled labor force.	ES4.1	Workforce Agencies Community Colleges School Districts Economic Development Commissions	Collaborate with workforce and educational stakeholders to create a working group to facilitate the sustainable training of high school and tech school students in skilled labor.	1	
		ES4.2	Workforce Agencies Community Colleges School Districts Economic Development Commissions	Implement/expand apprenticeship programs in high schools with partner businesses.	2	

Goal	Objective	Action	Agency	Task	Year	Related Plans
		ES4.3	ECFRPC Economic Development Commission Chambers of Commerce	Assess economic development plans, CRA plans, etc. for diversification and identify adaptive measures to economic vulnerabilities.	2	
		ES4.4	ECFRPC Economic Development Commission Chambers of Commerce	Create/update and disseminate an educational infographic for businesses with emergency information to access for post disaster needs.	2	Business Continuity of Operations Plan County COOP Plan
		ES4.5	Workforce Agencies School Districts Higher Education/Tech Schools Community Colleges Economic Development Commissions	Work with local colleges and tech schools to create programs to cross train manufacturing and installation sectors to create streamlined, sustainable job sectors with new titles.	3	
		ES4.6	Workforce Agencies School Districts Higher Education/Tech Schools Community Colleges Economic Development Commissions	Develop baseline data and benchmarks to assess success of approach and growth in skilled labor force.	3	
		ES4.7	Workforce Agencies School Districts Community Colleges Higher Education/Tech Schools Economic Development Commissions	Reassess efforts and update plans and programs to fill identified gaps.	4	
		ES4.8	Workforce Agencies School Districts community Colleges Higher Education/Tech Schools Economic Development Commissions	Implement/increase activities to fill gaps identified in task ES4.7.	5	
		ES4.9	Workforce Agencies School Districts Economic Development Commissions	Add "makerspace" facilities based on identified needs.	5	
Economic & Society	ES5: Improve social equity and justice in decision making process.	ES5.1	All Jurisdictions	Host community meetings in underserved, low income communities to discuss projects within and just outside the community.	on-going	
		ES5.2	All Jurisdictions	Partner with local organizations and faith-based organizations to provide feedback concerning needs and opportunities specific to a project or program.	on-going	
		ES5.3	All Jurisdictions	Conduct health impact assessments when considering projects that may affect underserved, low income communities, and determine benchmark health outcomes.	on-going	

Goal	Objective	Action	Agency	Task	Year	Related Plans
		ES5.4	Emergency Management All Jurisdictions	Host specific community meetings in underserved, low income communities to discuss resilience and disaster response.	1	
		ES5.5	Planning Departments UF IFAS Extension Communications Departments	Engage with communities to identify gaps and priorities in the decision making process to improve social equity and justice.	1	
		ES5.6	Economic Development Chambers of Commerce Small Businesses	Connect communities with non-profit and faith based organizations to address post-disaster issues such as the ability to return to the workforce after hazard events.	2	
		ES5.7	Planning Departments Communications Departments UF IFAS Extension	Create an outreach plan to involve all communities in an engaging opportunity to be a part of local decisions. Utilize priorities and findings from ES5.5.	3	
		ES5.8	Economic Development Chambers of Commerce Small Businesses UF IFAS Extension	Work with employers and employees to implement findings, processes, etc. determined from ES5.5.	3	
		ES5.9	Planning Departments Communications Departments	Implement the outreach plan.	4	
		ES5.10	Communications Department	Reassess the gaps that remain in community involvement outcomes.	5	

Goal	Objective	Action	Agency	Task	Year	Related Plans
Infrastructure and Environment	IE1: Prioritize the use of Green Infrastructure as a first line of defense.	IE1.1	Public Works Department Natural Resource Department Environmental Department SJRWMD FDEP	Conduct an audit of coastal areas to identify locations for living shorelines and prioritize areas for implementation. (Example: UCF Study in Brevard, Gulf of Mexico Alliance Living Shoreline Study for Tampa Bay Region)	1	
		IE1.2	Transportation Department Engineering Department Public Works Department TPO FDOT	Include narrative to include use of green infrastructure to create "green streets" to mitigate stormwater impacts where feasible in project prioritization and programming.	1	Long Range Transportation Plan TPO Priority Project Listing
		IE1.3	Public Works Department Natural Resource Department SJRWMD FDEP Florida Sea Grant	Create/implement/expand a program or partnership to educate property owners about the benefits of living shorelines and assist with installation.	2	
		IE1.4	Planning Department Sustainability Board	Conduct an audit to improve urban tree canopy cover in jurisdiction and develop an Urban Canopy Plan.	2	Sustainability Plan
		IE1.5	Planning Department Natural Resource Department Environmental Department	Assess comprehensive plan, LDRs and process applications for barriers to implementing green infrastructure and to prioritize natural solutions versus engineered engineering projects.	2	Comprehensive Plan Land Development Regulations
		IE1.6	FDEP SJRWMD Natural Resource Department Environmental Department NEE	Develop a Restoration Plan(s) to prioritize the restoration of tidal wetlands, dunes and salt marshes and create living shorelines to soften the impacts of wave-induced erosion in high risk areas. Include indicators to measure success and return on investment.	3	Restoration Pain
		IE1.7	Planning Department Sustainability Board	Prioritize areas to improve urban tree canopy and develop action plan for implementation.	3	Sustainability Plan
		IE1.8	Planning Department Natural Resource Department Environmental Department	Update comprehensive plans, LDRs and process to address barriers to implementing green infrastructure and make it a priority to assess natural solutions as a first step prior to engineering solutions based on findings in IE1.5.	3	Comprehensive Plan Land Development Regulations
		IE1.9	Planning Department Natural Resource Department Environmental Department	Develop incentives for residents, businesses, and developers to use living shorelines and other green infrastructure techniques as a priority.	4	

Goal	Objective	Action	Agency	Task	Year	Related Plans
		IE1.10	Natural Resource Department Environmental Department	Create partnerships with colleges, NGOs, contractors and others to install and maintain green infrastructure.	4	
		IE1.11	Planning Department Natural Resource Department Environmental Department	Analyze funding sources to move projects and programs forward that focus on Green Infrastructure. (ex: Brevard Living Shoreline Program)	5	
		IE1.12	Planning Department Natural Resource Department Environmental Department	Conduct assessment on green infrastructure projects based on indicators established in the plan to measure success and ROI.	5	
		IE1.13	Planning Department Natural Resource Department Environmental Department	Reassess plans, procedures, programs and policies to improve on any lessons learned.	5	Comprehensive Plan Land Development Regulations Sustainability Plan Restoration Plan
Infrastructure & Environment	IE2: Promote interconnectivity of natural lands for habitat migration.	IE2.1	SJRWMD Natural Lands Program Natural Resource Department FFWCC FDEP 1000 Friends of Florida	Work continuously with advocacy groups to inform the public on development strategies that support biodiversity and interconnectivity.	on-going	
		IE2.2	SJRWMD Natural Lands Program Natural Resource Department FFWCC FDEP USACE 1000 Friends of Florida	Assess coastal nesting areas based on future conditions to develop preservation strategies viability of these areas.	1	
		IE2.3	Natural Lands Program ECFRPC SJRWMD FFWCC FDACS USDA Natural Resource Department FDEP 1000 Friends of Florida	Assess undeveloped lands, agricultural lands, natural lands and migrating habitats to determine future priority corridors and properties for acquisition based on future conditions. Utilize the SLAMM model or other models as appropriate.	1	

Goal	Objective	Action	Agency	Task	Year	Related Plans
		IE2.4	SJRWMD Natural Lands Program Natural Resource Department FFWCC FDEP USACE 1000 Friends of Florida	Further develop preservation strategies for coastal nests (birds, turtles, etc.) to ensure the ecological and economic viability of the coastline and incorporate into related plans.	2	
		IE2.5	Natural Lands Program ECFRPC SJRWMD FFWCC FDACS USDA Natural Resource Department FDEP 1000 Friends of Florida	Conduct a regional exercise with stakeholders to discuss the findings of IE2.3 and work to establish a regional plan to protect the priority corridors.	3	Conservation and Acquisition Plan Regional Natural Lands Corridor Plan
		IE2.6	Local Government Commission Jurisdictional Departments Public FFWC FWS	Conduct survey of stakeholders to assess priority and funding of conservation lands for acquisition and maintenance.	3	
		IE2.7	Natural Resource Department FDEP SJRWMD FWC FWS	Re-evaluate and update conservation and acquisition plans to implement findings from future corridor assessment and prioritization plan.	4	Conservation and Acquisition Plan
		IE2.8	Planning Departments	Update comprehensive plan and other plans/codes with appropriate language to prevent future development from infringing on these priority corridors.	4	Comprehensive Plan Land Development Regulations

Goal	Objective	Action	Agency	Task	Year	Related Plans
		IE2.9	SJRWMD Natural Lands Program Natural Resource Department FDEP 1000 Friends of Florida NGOs FFWCC	Evaluate strategies and alternative analysis for longer term funding for acquisition / management program.	5	
Infrastructure & Environment	IE3: Enhance stormwater systems to be more resilient.	IE3.1	Planning Department Public Works Department Natural Resources Stormwater Management	Consider stormwater master plan designs that utilizes an interconnected system of green infrastructure to reduce stormwater impacts.	on-going	Stormwater Master Plan Mobility Master Plan
		IE3.2	Public Works Department All Local Government Commission ECFRPC	Procure funding and staff/contractor to update all stormwater system facilities in a master GIS database.	1	
		IE3.3	Transportation Department Engineering Department Public Works Department TPO FDOT	Consider future inundation and nuisance flooding to determine areas of flood impacts to roadway stormwater infrastructure.	1	Long Range Transportation Plan TPO Priority Listing
		IE3.4	Public Works Department Environmental Department Natural Resource Department	Evaluate existing green space for stormwater retention and evaluate findings based on future conditions.	1	
		IE3.5	Public Works Department Stormwater Management Department	Develop strategies to prioritize and implement the use of green space in stormwater management.	2	
		IE3.6	Public Works Department Stormwater Management Department	Assess stormwater system facilities to vulnerabilities to future inundation and erosion including elevations of outfalls into surface water bodies.	2	Stormwater Master Plan Vulnerability Analysis Studies
		IE3.7	Public Works Department Stormwater Management Department	Prioritize areas of critical vulnerable stormwater infrastructure. Review other projects to determine if improvement projects can be addressed simultaneously for a greater cost benefit.	3	Stormwater Master Plan
		IE3.8	Public Works Department Environmental Department Natural Resource Department Stormwater Management Department	Prioritize areas for green space to be utilized in design for stormwater management.	3	

Goal	Objective	Action	Agency	Task	Year	Related Plans
		IE3.9	Planning Department Public Works Department Stormwater Department	Develop prioritization process and funding mechanisms for infrastructure projects in Adaptation Action Areas. Incorporate into Stormwater master plan.	3	Stormwater Master Plan
		IE3.10	Public Works Department Stormwater Management Department	Identify feasible improvements, mitigation or adaptation strategies to address vulnerable stormwater system areas. Update stormwater master plan for implementation and add to Capital Improvement Plan; other project plans; or seek funding to implement the projects.	4	Stormwater Master Plan
		IE3.11	Planning Department Public Works Department Stormwater Department	Conduct a risk-based cost-benefit analysis for mitigation strategies of stormwater infrastructure identified as part of the natural hazard vulnerability assessment.	4	
		IE3.12	Planning Department Public Works Department Stormwater Department	Update stormwater master plan with updated project list based on cost-benefit analysis.	5	
		IE3.13	Public Works Department Stormwater Management Department	Reassess outfall and infrastructure elevation data to determine any gaps in data collection and analysis.	5	
		IE3.14	Planning Department Public Works Department Transportation Engineering Departments FDOT TPO	Identify a process or mechanism to determine what infrastructure/areas may not be upgraded or mitigated at a certain time or impact. Reference previous data/information developed on stormwater and cost/benefit analysis in this analysis in order to help create a legal justification of decisions.	5	All previous vulnerability analysis, master plans and cost benefit studies.
Infrastructure and Environment	IE4: Improve water quality in surface water bodies.	IE4.1	Indian River Lagoon Council All Local Jurisdiction Commission FDEP SJRWMD	Continue financial/staff support of programs and projects to improve water quality.	on-going	
		IE4.2	Indian River Lagoon Council FDEP SJRWMD UF IFAS Extension Public Works Department	Identify and educate communities about best management practices (BMP's) for reducing nutrient loads flowing into surface waters via residential, commercial, industrial and agricultural lands.	on-going	
		IE4.3	FDACS USDA UF IFAS Extension	Educate agriculture land owners on fertilizer best practices as well as the ecological resources their property provides in regards to resilience and mitigation.	on-going	
		IE4.4	FDEP SJRWMD Colleges/Universities ECFRPC	Identify projects and programs aimed at improving water quality and conduct a gaps analysis.	1	
		IE4.5	FDEP SJRWMD Indian River Lagoon Council	Review current total maximum daily load (TMDL) requirements and recommend new targets.	2	

Goal	Objective	Action	Agency	Task	Year	Related Plans
		IE4.6	Marine Resource Council ECFRPC UF IFAS Extension	Evaluate existing fertilizer ordinances and successfulness. Conduct gap analysis to determine a regional approach.	2	
		IE4.7	FDEP SJRWMD Colleges/Universities ECFRPC	Evaluate policies or ordinances for enhancing septic tank standards along waterways.	2	
		IE4.8	Planning Department All Local Jurisdiction Commission	Develop and adopt a fertilizer ordinance.	2	
		IE4.9	FDACS USDA UF IFAS Extension	Re-assess/prioritize areas of agricultural run-off.	2	
		IE4.10	FDACS USDA UF IFAS Extension	Evaluate existing outreach programs and enhance where necessary to work with property owners to reduce runoff in agriculture priority areas from ES4.9.	3	
		IE4.11	FDOT TPOs	Assess procedures and requirements for design alternatives to promote resilience of natural lands and waterway health.	3	
		IE4.12	Marine Resource Council ECFRPC	Develop and implement steps to promote the adoption of fertilizer ordinances region wide in areas where they do not exist.	4	
		IE4.13	Indian River Lagoon Council FDEP Marine Resource Council Public Works Department Planning Department SJRWMD FDACS Public Works Department	Reassess success of programs and policies aimed to improve water quality in surface water bodies.	5	
		IE4.14	Indian River Lagoon Council FDEP SJRWMD Public Works Department	Investigate financial strategies to continue programs into the future.	5	

Goal	Objective	Action	Agency	Task	Year	Related Plans
Infrastructure & Environment	IE5: Incorporate resiliency into local and regional plans, policies, processes and objectives	IE5.1	NASA Port Canaveral Patrick Air Force Base All Jurisdictions FDOT TPOs	Utilizing input gathered from the RRAP Sea Level Rise Steering Committee, update policies, plans and procedures with the RRAP recommendation for planning for sea level rise and for use in the geographic delineation of an "Adaptation Action Area" where appropriate.	1	Comprehensive Plan Land Development Regulations Long Range Transportation Plan TPO Priority Project Methodology Local Mitigation Strategy Others
		IE5.2	Planning Department	Determine if Adaptation Action Area designation and policies are appropriate for the jurisdiction. If determined appropriate, develop policies and maps to identify the area, purpose and other related policies.	1	Comprehensive Plan
		IE5.3	All Jurisdictions	Create cross-discipline review committees to assist in the audit of various plan goals policies and strategies as they relate to resilience and review impacts of new projects and developments in regards to resilience.	1	All plans
		IE5.4	All Local Jurisdiction Commission All Jurisdictions	Adopt an "Adaptation Action Area" that includes the 100-year floodplain, the adopted sea level rise hazard zone, and the Coastal High Hazard Zone (Category 1 Storm Surge).	2	Comprehensive Plan Land Development Regulations
		IE5.5	Planning Department	Assess other plans to reference Adaptation Action Areas and incorporate language as appropriate.	2	
		IE5.6	Planning Department Sustainability Board	Audit Comprehensive Plan to ensure that resiliency strategies are adequately addressed and policies are compatible in all applicable sections. Add/adjust appropriate language where needed.	2	Comprehensive Plan
		IE5.7	Planning Department Sustainability Board Emergency Management Public Works	Audit Comprehensive plan against other plans (i.e. CRA plans, Downtown Development Plans, Economic Development Plans, LDRs, PDRP) to ensure compatibility of addressing resiliency and future development based on future conditions.	2	Comprehensive Plan CRA plan Downtown Development Plans Economic Development Plans Sustainability Plans Stormwater Plans Post Disaster Redevelopment Plans
		IE5.8	Planning Department Sustainability Board ECFRPC	Develop a Sustainability and/or Resiliency Plan if deemed appropriate by stakeholders and previous efforts.	2	Sustainability Plan Resilience Plan
		IE5.9	Planning Department Sustainability Board ECFRPC UF IFAS Extension FDEP SJRWMD	Adopt changes in all necessary plans to reduce the volume of nutrient loads and fertilizers from public and private property flowing into the Indian River Lagoon utilizing the research developed by FDEP and the SJRWMD derived from action IE4.4.	2	Land Development Regulations Comprehensive Plan

Goal	Objective	Action	Agency	Task	Year	Related Plans
		IE5.10	Emergency Management LMS Working Group ECFRPC	Update the County FMP/LMS to include the future vulnerability analysis of public facilities.	2	
		IE5.11	Emergency Management LMS Working Group	Update mitigation prioritization process to include Adaptation Action Area proximity, future conditions and other criteria identified by the LMS Working Group.	2	
		IE5.12	FDOT TPO	Implement the requirement that alternative analysis of future conditions and consideration for long-term resilience and health of natural systems be included in planning and engineering of projects.	3	
		IE5.13	Planning Department Sustainability Board ECFRPC	Add and adopt policies to Comprehensive Plan, and other plans, that result from the recommendations identified in the Resiliency/Sustainability Plan and comp plan audit.	3	Comprehensive Plan Other Plans as appropriate
		IE5.14	Public Works Department	Update stormwater master plan to include future flooding and inundation findings; priorities and projects where possible.	3	Stormwater Master Plan
		IE5.15	Planning Department Sustainability Board ECFRPC	Update/Enhance/Develop Design Guidelines within Land Development Regulations that protect and buffer structures from the impact of hazards. These guidelines should address sea level rise, storm surge, flooding, wind damage, and the urban heat island effect.	3	Land Development Regulations Sustainability Plan
		IE5.16	Planning Department Sustainability Board ECFRPC	Enhance/Develop an energy code to encourage property owners and government facilities to reduce carbon emissions and mitigate the urban heat island effect.	3	Land Development Regulations Sustainability Plan
		IE5.17	Planning Department Sustainability Board ECFRPC	Create Florida Green Building Codes or LEED-accreditation benchmarks for new and existing buildings, including public facilities, within the Land Development Code and Energy Code.	3	Land Development Regulations Sustainability Plan
		IE5.18	Planning Department Sustainability Board ECFRPC	Update Land Development Regulations and the Comprehensive Plan to set new parking and stormwater standards, utilizing the information derived from LS3.2.	3	Comprehensive Plan Land Development Regulations
		IE5.19	Planning Department Sustainability Board ECFRPC	Establish policies and practices for area-wide metrics such as net density requirements that cluster development away from high hazard areas.	4	Comprehensive Plan Land Development Regulations
		IE5.20	Planning Department Sustainability Board ECFRPC	Update Land Development Regulations to alter coastal setback codes utilizing the information obtained from vulnerability analysis and task IE1.9 and IE2.4.	4	Land Development Regulations
		IE5.21	Public Works Department Planning Department ECFRPC	Update CIP to implement priority projects identified through vulnerability analysis and appropriate mitigation projects.	5	Comprehensive Plan

Goal	Objective	Action	Agency	Task	Year	Related Plans
Infrastructure and Environment	IE6: Preserve and adapt the built environment to keep people safe from and mitigate current and future natural hazards.	IE6.1	Planning Department Public Works Department Natural Resource Department Emergency Management	Conduct assessment to determine vulnerabilities to sea level rise, storm surge, coastal erosion and flooding for the built environment, natural resources and undeveloped properties.	2	Vulnerability Assessment
		IE6.2	Planning Department Public Works Department LMS Working Group TPO	Create (or add where one exists) a checklist for the planning, prioritization and funding of green and gray infrastructure projects to include assessment of vulnerabilities and if/how the project addresses long-term resiliency.	3	
		IE6.3	Planning Department; Building Department; Public Works	Assess community owned vulnerable or damaged coastal properties and determine best long term approach for each property.	2	
		IE6.4	Planning Department Public Works Department LMS Working Group TPO	Prioritize public infrastructure within Adaptation Action Areas for adaptation/mitigation strategies to the effects of high winds, storm surge, flooding and wave velocity.	2	
		IE6.6	Planning Department Building Department	Review best practices for updating coastal setback and building rebuild codes that mitigate the potential effects of coastal erosion.	2	
		IE6.7	Planning Department	Develop incentives for developers to build outside vulnerable areas or build in a resilient/sustainable way in vulnerable areas.	2	
		IE6.8	Planning Department	Develop policies and strategies to reduce heat island effects through new projects, redevelopment and other opportunities.	2	
		IE6.9	Planning Department Building Department	Develop incentives to developers that use methods consistent with Low Impact Development (LID) standards, Florida Green Building Coalition, and techniques to reduce the heat island effect.	2	LDRs Comprehensive Plan
		IE6.10	All Local Jurisdiction Commission Emergency Management	Provide dedicated funding for annual tree maintenance near power lines to help prevent storm damage and allow access for electricity providers to fix broken power lines in an efficient manner following a natural disaster.	2	County COOP Plan City COOP Plan Debris Management Plan
		IE6.11	Planning Department Public Works Department LMS Working Group TPO	Review other projects to determine if improvement projects can be addressed simultaneously for a greater cost benefit.	3	
		IE6.12	Planning Department	Research potential strategies addressing undeveloped parcels located within the Adaptation Action Area.	3	

Goal	Objective	Action	Agency	Task	Year	Related Plans
		IE6.13	FDEP SJRWMD Public Works Department	Develop a risk assessment to determine wellfields, groundwater and underground infrastructure at risk to saltwater intrusion.	3	Groundwater Asset Risk Analysis
		IE6.14	Planning Department Public Works Department LMS Working Group TPO	Develop possible mitigation strategies of at-risk public infrastructure identified as part of the natural hazard vulnerability assessment.	3	
		IE6.15	Planning Department Public Works Department TPO	Develop prioritization process and funding mechanisms for infrastructure projects in Adaptation Action Areas. Incorporate into CIP, stormwater master plan, long range transportation plan, and other appropriate plans and procedures.	4	Comprehensive Plan Stormwater Master Plan LRTP
		IE6.16	Planning Department Public Works Department LMS Working Group TPO	Conduct a risk-based cost-benefit analysis for mitigation strategies of at-risk public infrastructure identified as part of the natural hazard vulnerability assessment.	4	
		IE6.17	Planning Department	Implement incentives to developers to build outside of vulnerable areas.	4	
		IE6.18	Planning Department Building Department	Implement incentives to developers that use methods consistent with Low Impact Development (LID) standards and Florida Green Building Coalition.	4	
		IE6.19	FDOT TPO	Conduct a vulnerability analysis for all vulnerable causeways and bridges identified in the 2017 Sea Level Rise Vulnerability Analysis using high resolution LIDAR data. Prioritize improvements based on the results of this assessment.	4	Long Range Transportation Plan TPO SLR Vulnerability Analysis Causeway Vulnerability Assessment
		IE6.20	FDOT TPO Colleges & Universities	Create a research committee consisting of FDOT, the TPO and a academia and environmental experts to develop standards for causeway designs that use innovative techniques to limit the impacts of sea level rise, flooding and storm surge and improve water quality and natural resource resilience.	4	Causeway Vulnerability Assessment
		IE6.21	Planning Department Public Works Department LMS Working Group TPO Emergency Management	Evaluate success of implemented actions and gaps to be addressed.	5	
Infrastructure & Environment	IE7: Improve community mobility while improving vulnerable transportation infrastructure	IE7.1	Emergency Management Transit Agencies	Update evacuation plans to represent newest data of areas that are transportation dependent that will need assistance in evacuation and re-entry.	1	
		IE7.2	ECFRPC FDOT TPOs	Host a workshop focused on green infrastructure and multi-modal transportation highlighting tools and concepts to accomplish it.	2	

Goal	Objective	Action	Agency	Task	Year	Related Plans
		IE7.3	FDOT TPO Planning Department Public Works Department	Prioritize and implement mitigation efforts on trails within the Adaptation Action Area and other vulnerable areas.	3	L RTP
		IE7.4	TPO Planning Department Public Works Department	Identify areas where bicycle and pedestrian improvements can be included in transportation projects that mitigate roadways vulnerable to natural hazards (green streets). Utilize Safe Routes to School.	4	
		IE7.5	Emergency Management Transit Agencies ECFRPC FDOT TPO Planning Department Public Works Department	Evaluate success of implemented actions and gaps to be addressed.	5	

Goal	Objective	Action	Agency	Task	Year	Related Plans
Health & Well Being	HW1: Improve capacity of jurisdictions to better respond to hazard events.	HW1.1	Emergency Management Votran SCAT	Update evacuation plans to represent newest data of areas that are transportation dependent that will need assistance in evacuation and re-entry.	on-going	Evacuation Plans Special Needs Registry
		HW1.2	Emergency Management Votran SCAT	Identify/update, within the countywide COOP and transit plans, a listing of priority transit routes for operation after a natural hazard event - as needed.	on-going	County Post-Disaster Recovery Plans CEMP Annex
		HW1.3	Emergency Management	Identify staging areas for fueling trucks pre and post disaster for efficient evacuation and re-entry.	on-going	County COOP Plans
		HW1.4	Public Works Department Emergency Management Planning Department	Assess potable water supplies and infrastructure from natural disaster impacts such as sewage infiltration.	on-going	
		HW1.5	Emergency Management All Jurisdictional Departments	Update plans to include information gathered from Hurricane Irma After Action Reports.	1	
		HW1.6	Emergency Management	Identify and prioritize critical facilities, including storm/wastewater, waste management, transportation, etc. with generator needs and add to the appropriate funding list (i.e. LMS, CIP, etc.).	1	LMS CEMP COOP
		HW1.7	Public Works Department Emergency Management CERT	Investigate the feasibility of and needs associated with alternative energy fleet vehicles for emergency response use.	2	County COOP Plans Capital Improvement Plan/Element
		HW1.8	Emergency Management USDA Florida Department of Agriculture	Work with ranchers and farmers to determine gaps and needs associated with livestock and farming preparedness and recovery, especially, excessive long-term flooding.	2	
		HW1.9	ECFRPC Economic Development Commission Chambers of Commerce	Assess economic development plans, CRA plans, etc. for diversification and identify adaptive measures to economic vulnerabilities. (CDBG)	3	
		HW1.10	Emergency Management Department of Health United Way IFAS	Assess food insecurity in vulnerable populations to prepare for hazard events.	3	
		HW1.11	Emergency Management ECFRPC	Develop/Re-convene long-term care working group with the goal to create a county-wide model for preparedness and recovery and coordinate and determine an agency responsible.	4	

Goal	Objective	Action	Agency	Task	Year	Related Plans
		HW1.12	Emergency Management	Identify funding to secure generators for facilities identified in HW1.7.	4	LMS CEMP COOP
		HW1.13	Emergency Management Department of Health United Way IFAS	Work with food pantries and other resources to close the gaps identified in analysis HW1.10.	4	
		HW1.14	Public Works Department Emergency Management Planning Department	Reassess gaps in response to hazard events and address those gaps in future plans.	5	
Goal	Objective	Action	Agency	Task	Year	Related Plans
Health & Well Being	HW2: Improve capacity of medical facility operations to prepare for and recover from natural disasters and future conditions.	HW2.1	Emergency Management Medical Facilities	Hold training workshops at medical facilities that test response and evacuations from a hazard event.	on-going	Facility COOP plans Facility Evacuation/Response Plans
		HW2.2	Emergency Management Planning Department Medical Facilities	Assess vulnerability to medical facilities (hospitals, hospices, dialysis centers, assisted living facilities, nursing homes, etc.), helicopter pads and access points from sea level rise, flooding and storm surge impacts.	1	TPO and Local Vulnerability Analyses
		HW2.3	Emergency Management Medical Facilities	Develop or update plans for natural disasters such as strong hurricanes and tornadoes.	2	Facility COOP plans Facility Evacuation/Response Plans
		HW2.4	Emergency Management Medical Facilities	Provide county and City emergency management with current response and evacuation plans (and as updated).	3	
		HW2.5	Planning Department Medical Facilities	Determine mitigation/adaptation strategies for identified vulnerabilities to medical facilities and develop implementation plan.	3	
		HW2.6	Planning Department Building/Zoning Department Sustainability Board	Assess and update future land use and zoning codes to limit or mitigate the placement of medical facilities in vulnerable areas.	4	
		HW2.7	Emergency Management Medical Facilities	Reassess/update COOP and other plans with findings from the workshop in Action HW2.1	5	Facility COOP plans Facility Evacuation/Response Plans

Goal	Objective	Action	Agency	Task	Year	Related Plans
Health & Well Being	HW3: Promote sustainable practices in government owned facilities.	HW3.1	Planning Department	Reassess budgets to determine for proactive resiliency and sustainability funding.	on-going	
		HW3.2	Planning Department	Assess feasibility of a sustainability program within the City and audit existing programs in other Cities as well as incentive programs such as Florida Green Building Coalition and the LEED program.	1	
		HW3.3	Planning Department	Develop priorities, actions and goals in a local government section of a Sustainability Plan to include a focus on government owned facilities. (where applicable)	2	
		HW3.4	Planning Department	Identify locations for electric charging stations, especially near/at publicly-owned properties and high employment areas.	2	
		HW3.5	Planning Department	Update local codes and policies to promote sustainable and Low Impact Development practices for government owned facilities.	3	Comprehensive Plans Land Development Codes
		HW3.6	Planning Department Building/Zoning Department Sustainability Board	Develop programs to install community gardens and green roofs on public buildings and on buildings within the community (where applicable).	3	Sustainability Plan
		HW3.7	GIS Department Sustainability Board	Conduct energy audit within jurisdiction and develop strategies to mitigate the effects.	3	Sustainability Plan
		HW3.8	School Board Planning Department	Work with the school board to maximize the use of green building techniques and sustainable practices to support the local government Sustainability Plan and to provide hazard mitigation opportunities.	3	Sustainability Plan
		HW3.9	Planning Department Building/Zoning Department Sustainability Board	Assess and update future land use and zoning codes to limit or mitigate the placement of government buildings in vulnerable areas, including areas projected to be significant impacted by sea level rise by 2100.	4	
		HW3.10	Planning Department Building/Zoning Department Sustainability Board	Reassess sustainability plan and metrics associated with the implementation of sustainable building practices in government facilities.	5	
Health and Wellbeing	HW4: Engage residents and business owners with locally relevant information about expected future changes in	HW4.1	Emergency Management All Jurisdictions	Develop and implement campaign to include in hurricane preparedness season to communicate dangers of do-it-yourself tasks and home generators with residents.	on-going	CEMP

Goal	Objective	Action	Agency	Task	Year	Related Plans
	natural hazards and sustainable practices.	HW4.2	Planning Department Building Department Sustainability Board	Evaluate existing programs in other jurisdictions and agencies aimed at educating residents and business owners about imminent natural hazards and sustainable practices, such as the City of Orlando Greenworks, FGBC, PACE.	on-going	Sustainability Plan
		HW4.3	Sustainability Boards IFAS Non-profits	Work with volunteers like religious institutions, clubs, schools etc. for beach clean-up, tree planting, bioswale creation, urban farming and other hands-on events.	ongoing	
		HW4.4	FEMA Sustainability Boards Emergency Management	Conduct in-depth community outreach events outside of the storm season to identify needs and barriers associated with resource accessibility and disaster response.	on-going	CEMP
		HW4.5	Planning Department Building Department Sustainability Programs Public Schools	Create a working group of staff and sustainability board to collaborate on the best approach for educating residents and business owners about imminent natural hazards, sustainable practices, and the heat island effect.	1	Sustainability Plan
		HW4.6	Planning Department Building Department Sustainability Board Chambers of Commerce	Develop a "Resilient Homes" program or encourage participation in an existing program based on findings from program evaluation in HW4.2.	2	Sustainability Plan
		HW4.7	Emergency Management	Education about early warning systems that inform residents via reverse-911 and social media outlets of high tide or coastal flooding events.	2	County COOP Plan
		HW4.8	Health Departments	Engage in public outreach related to the heat island effect and the risks associated with heat exhaustion and increased local temperatures.	2	
		HW4.9	Planning Department Building/Zoning Department Sustainability Board	Develop indicators and begin tracking data to develop a baseline for future assessments.	3	Sustainability Plan
		HW4.10	Planning Department Building Department Sustainability Board Chambers of Commerce	Develop or utilize existing incentives to increase the energy efficiency and resilience of homes and businesses.	3	Sustainability Plan
		HW4.11	Planning Departments Sustainability Board	Educate and engage community in improving tree canopy through plantings on residential properties as well as events (Florida Friendly Landscaping / Energy Efficiency).	4	Sustainability Plan
		HW4.12	Planning Department Building Department Sustainability Board	Develop "Return on Investment" Infographic on various resilient and sustainable strategies for homeowners and businesses.	4	Sustainability Plan

Goal	Objective	Action	Agency	Task	Year	Related Plans
		HW4.13	Planning Department Building Department Sustainability Board	Distribute infographic via website, social, board/committees, etc.	4	Sustainability Plan
		HW4.14	Planning Department Building/Zoning Department Sustainability Board	Reassess sustainability plan and metrics associated with the implementation of sustainable and resilient programs and incentives in the community.	5	Sustainability Plan
Health & Well Being	HW5: Improve access to resources for the homeless, special needs, elderly, low income, and English-limited residents.	HW5.1	Emergency Management	Continue to provide preparedness and storm-related information/alerts for English-limited populations including spanish and creole in all formats (in compliance with Title VI and ADA guidelines).	on-going	CEMP
		HW5.2	Emergency Management PIN and JINC	Continue “primary” social media account relays all disaster-related information.	on-going	CEMP
		HW5.3	Emergency Management Faith based organizations Non-profits	Continue to utilize pre-registration to identify shelters for special needs and seniors within the community.	on-going	
		HW5.4	Emergency Management Faith based organizations Non-profits	Prioritize and utilize the Idignity Program to ensure residents have essential documents before disasters.	on-going	
		HW5.5	Emergency Management Faith based organizations	Conduct in-depth community outreach events outside of the storm season to identify needs and barriers associated with resource accessibility and disaster response.	on-going	
		HW5.6	Emergency Management	Reassess marketing and registration process for special needs registration and determine how to fill gaps and better reach the special needs community.	1	
		HW5.7	Transit Agencies	Reassess transit routes and stops based on new development, resources, jobs, and transit dependent communities.	2	
		HW5.8	Emergency Management	Implement improvements to the marketing and registration process for special needs registration as found in HW 5.6.	2	
		HW5.8	Planning Department Housing and Human Services Zoning Department	Identify areas outside vulnerabilities to encourage/incentivize the development of affordable housing.	2	Comprehensive Plan

Goal	Objective	Action	Agency	Task	Year	Related Plans
		HW5.9	Planning Department Housing and Human Services	Assess plans and policies to encourage development of future affordable housing choices outside of vulnerable areas and with access to transit, jobs, and resources.	3	Comprehensive Plan
		HW5.10	All Jurisdictional Departments	Reassess plans and procedures to determine remaining gaps and success of implemented procedures.	5	

REGIONAL RESILIENCY ACTION PLAN



What is Resiliency?

2

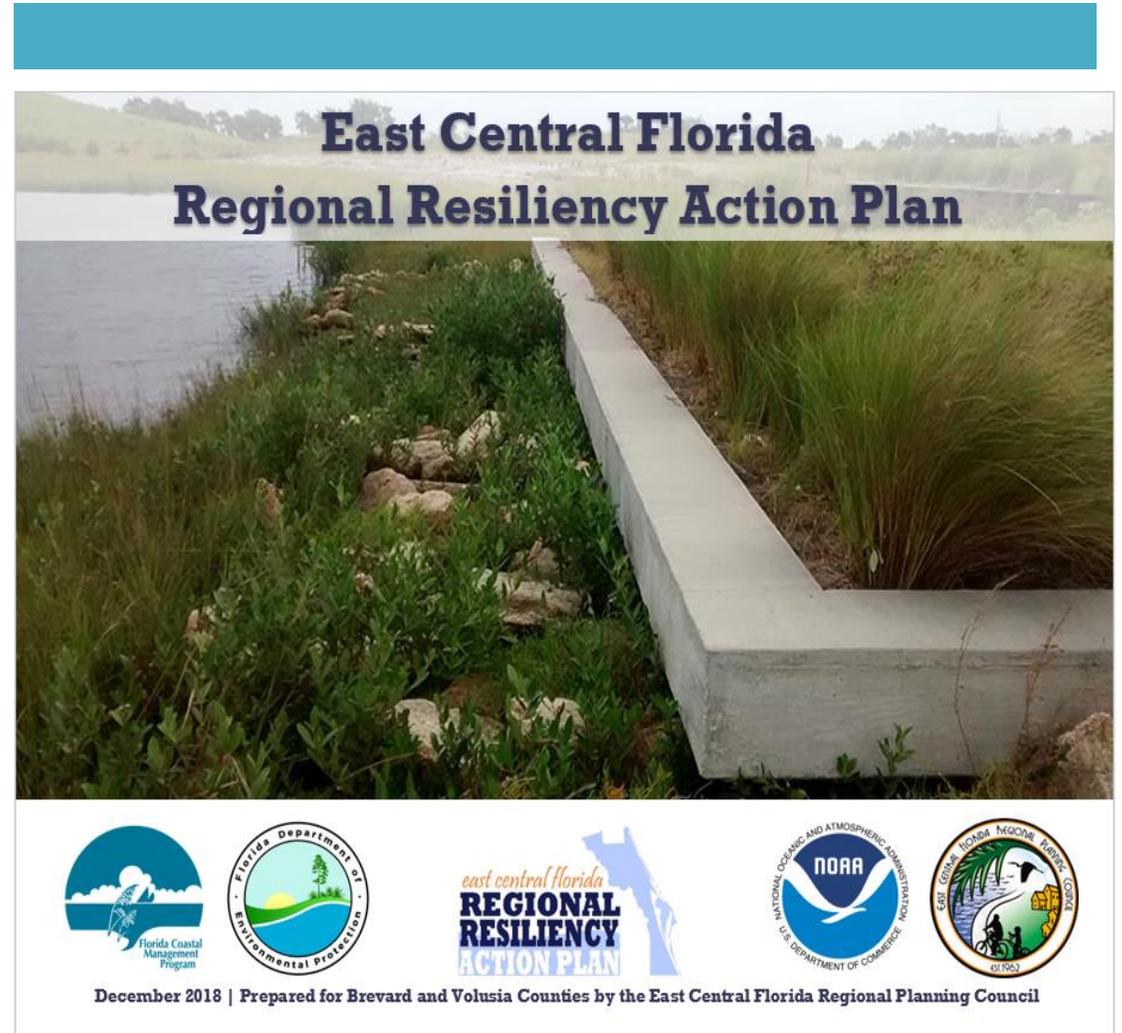


The capacity of individuals, communities, institutions, businesses, and systems within a region to plan, sustain, adapt, recover, improve and grow collaboratively—regardless what kind of **chronic stresses** and **acute shocks** they experience — through specific actions and implementation strategies geared to address specific vulnerabilities.

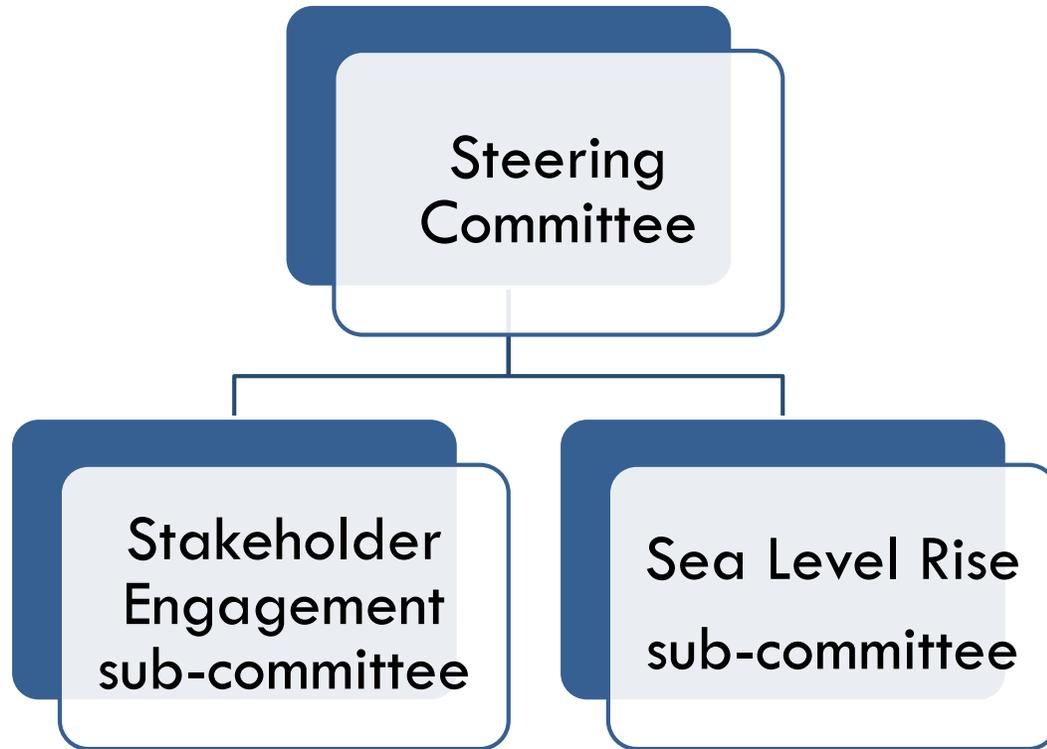
East Central Florida Regional Resiliency Action Plan

3

In 2017, the East Central Florida Regional Planning Council (ECFRPC) was awarded grant funding from the Florida Department of Environmental Protection to develop a non-regulatory regional action plan for Volusia and Brevard counties that focused on resiliency and sustainability.



Organization



East Central Florida Regional Resiliency Action Plan Steering Committee	
Brevard County GIS	Indian River Lagoon National Estuary Program
Brevard County Planning & Development	League of Women Voters Sustainability Committee
Brevard County Public Works	NASA Kennedy Space Center
Brevard Emergency Management	NOAA Office for Coastal Management
Brevard Natural Resource Management	Patrick Air Force Base
Canaveral Port Authority	River to Sea Transportation Planning Organization
City of Cape Canaveral	RWParkinson Consulting, Inc.
City of New Smyrna Beach	Florida Sea Grant
City of Port Orange	St. Johns River Water Management District
City of Rockledge	Space Coast Transportation Planning Organization
City of Satellite Beach	Stetson University
Erin L. Deady, PA	University of Florida GeoPlan Center
East Central Florida Regional Planning Council	UF IFAS Extension Volusia and Brevard
FEMA	U.S. Army Corps of Engineers
Florida Department of Economic Opportunity	U.S. Department of Agriculture
Florida Department of Environmental Protection	Volusia County Emergency Management
Florida Department of Health in Brevard	Volusia County Growth and Resource Management
Florida Department of Health in Volusia	Volusia County Stormwater
Florida Department of Transportation	Volusia County Environmental Management
Florida Fish and Wildlife Conservation Commission	Volusia County Traffic Engineering
Sustainability Program, Florida Institute of Technology	Volusia County Water Resources and Utilities

Stakeholder Engagement

5

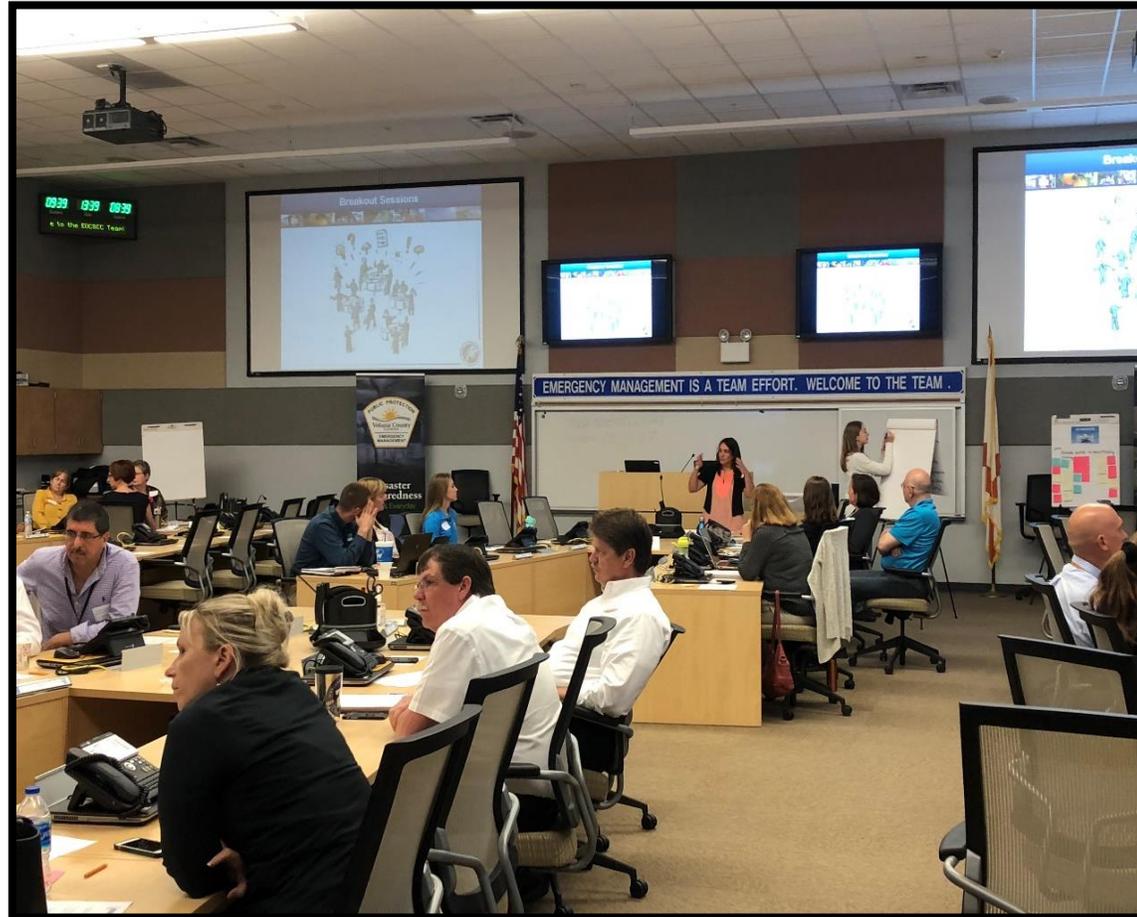
6 workshops

4 listening sessions

Over 200 stakeholders representing:

Federal, State and Local govt.

Businesses, non-profits, service agencies, citizens



east central Florida REGIONAL RESILIENCY ACTION PLAN

BUILDING ECONOMIC AND SOCIAL RESILIENCY
A Regional Resiliency Action Plan Listening Session

Join us for a listening session to guide the development of the Regional Resiliency Action Plan for Brevard and Volusia Counties.

Monday, May 7, 2018 | Volusia County EOC | 3825 Tiger Bay Rd Daytona Beach
Tuesday, May 8, 2018 | FDOH - Bill Posey Conference Center | 2555 Judge Fran Jamieson Way, Viera
Attend Either Date. Time: 1:30 pm - 4:00 pm
Register here: <https://www.surveymonkey.com/r/RRAPWorkshops>

RESILIENCY:
The capacity of individuals, communities, institutions, businesses, and systems within a region to plan, sustain, adapt, recover, improve and grow collaboratively—regardless what kind of chronic stresses and acute shocks they experience—through specific actions and strategies geared to address specific vulnerabilities.
(adapted from 100 Resilient Cities for the Regional Resiliency Action Plan)

"Resiliency" has become the new norm for communities as they plan for and respond to increasing disasters, flooding, sea level rise, and other potential vulnerabilities. Understanding the challenges, opportunities and trends for private and public organizations in preparing and planning for resiliency can be overwhelming. With support from the Department of Environmental Protection, the East

east central Florida REGIONAL RESILIENCY ACTION PLAN

Save the Date
Collaborating for Resilience
A Regional Resiliency Action Plan Listening Session

Monday, May 7, 2018 | Volusia County EOC | 3825 Tiger Bay Rd Daytona Beach
Tuesday, May 8, 2018 | FDOH - Bill Posey Conference Center | 2555 Judge Fran Jamieson Way, Viera
Attend Either Date. Time: 9:00 am - 11:30 am
Register here: <https://www.surveymonkey.com/r/RRAPWorkshops>

LISTENING SESSION GOALS

Join us for a listening session to guide the development of the Regional Resiliency Action Plan for Brevard and Volusia Counties

RESILIENCY:
The capacity of individuals, communities, institutions, businesses, and systems within a region to plan, sustain, adapt, recover, improve and grow collaboratively—regardless what kind of chronic stresses and acute shocks they experience—through specific actions and implementation strategies geared to address specific vulnerabilities.
(adapted from 100 Resilient Cities for the Regional Resiliency Action Plan)

"Resiliency" has become the new norm for communities as they plan for and respond to increasing disasters, flooding, sea level rise, and other potential vulnerabilities. Understanding the roles, responsibilities and opportunities for local jurisdictions and agencies in preparing and planning for resiliency can be overwhelming. With support from the Department of Environmental Protection, the East Central Florida Regional Planning Council is working with stakeholders to develop a Regional Resiliency Action Plan to "Increase the ability of local and regional stakeholders to implement resiliency and climate adaptation strategies across disciplines."

Collaborate with other local jurisdictions and agencies to discuss the roles, responsibilities, opportunities and barriers to promoting resilience based on the following four parameters:

- Leadership and Strategy
- Infrastructure and Environment
- Health and Wellbeing
- Economy and Society

LISTENING SESSION GOALS

- Identify actionable items for local and regional staff to better prepare, plan and implement resiliency.
- Discuss barriers to implementation and identify solutions.
- Identify appropriate department and agencies roles and responsibilities for actionable items.
- Increase the ability of local and regional stakeholders to implement resiliency and climate adaptation strategies across disciplines.

Stakeholder Engagement

6



You're Invited to
A Regional Resiliency Action Plan
Workshop



Collaborate with elected officials, agency directors and public stakeholder groups to discuss community and regional resilience.

With support from the Department of Environmental Protection, the East Central Florida Regional Planning Council is working with stakeholders to develop a Regional Resiliency Action Plan for Brevard and Volusia Counties to *"Increase the ability of local and regional stakeholders to implement resiliency and climate adaptation strategies across disciplines."*

Date: Tuesday, August 21, 2018

Location: FDOH Volusia County- 1845 Holsonback Drive | Daytona Beach 32117

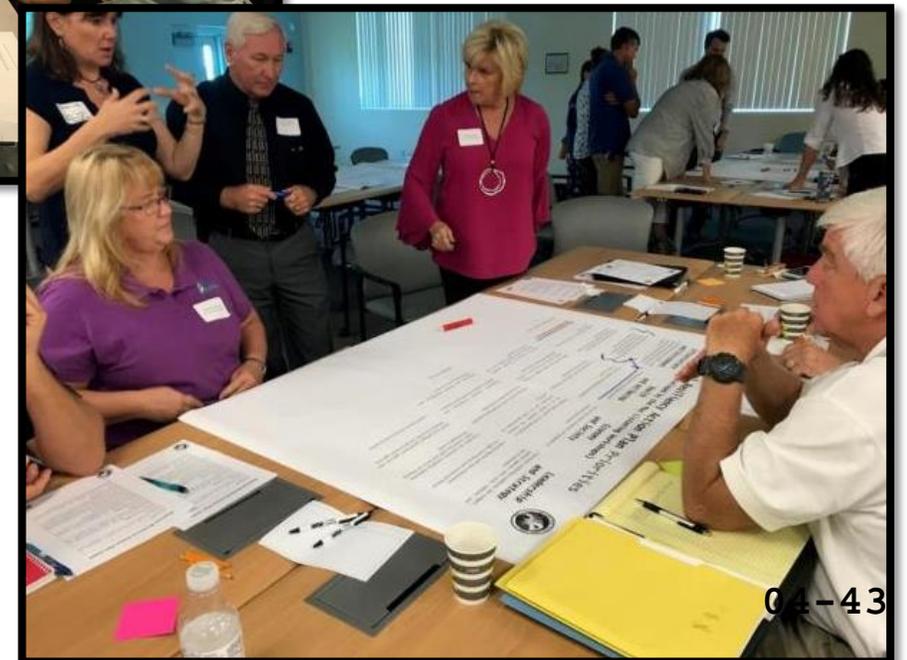
Time: 9:30 am- 11:30 am

Register Here: <https://www.surveymonkey.com/r/VCRRAP>



Image Courtesy of uCF

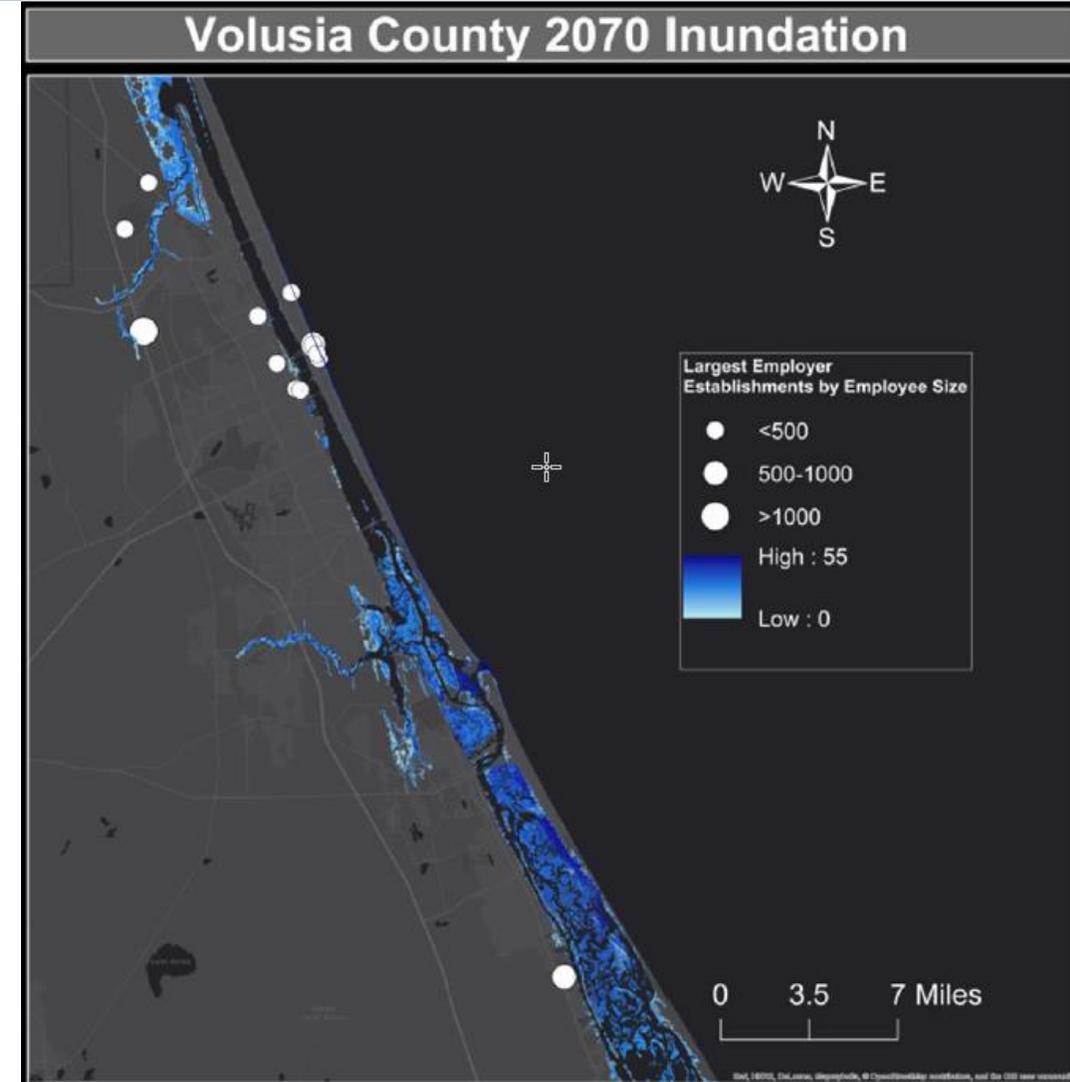
Image Courtesy of Volusia County



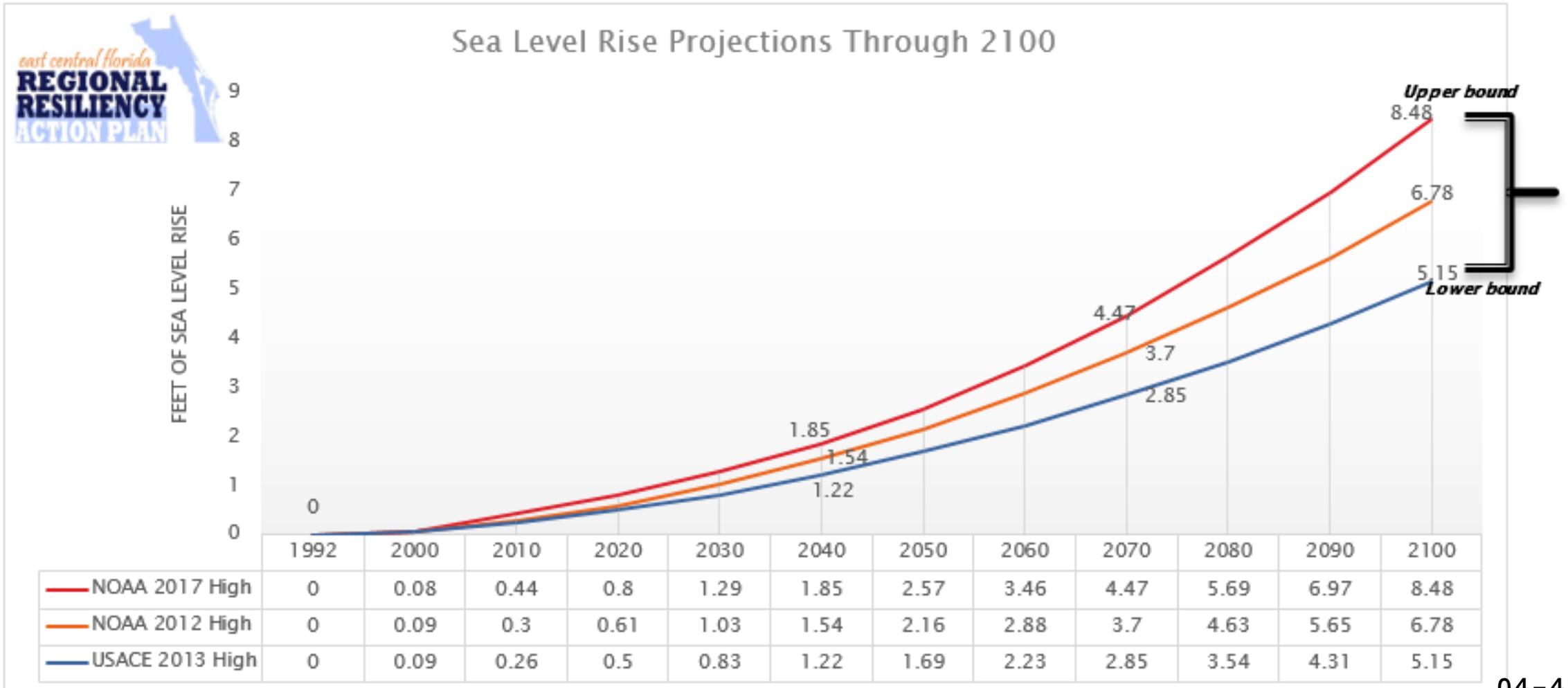
Creating common ground

7

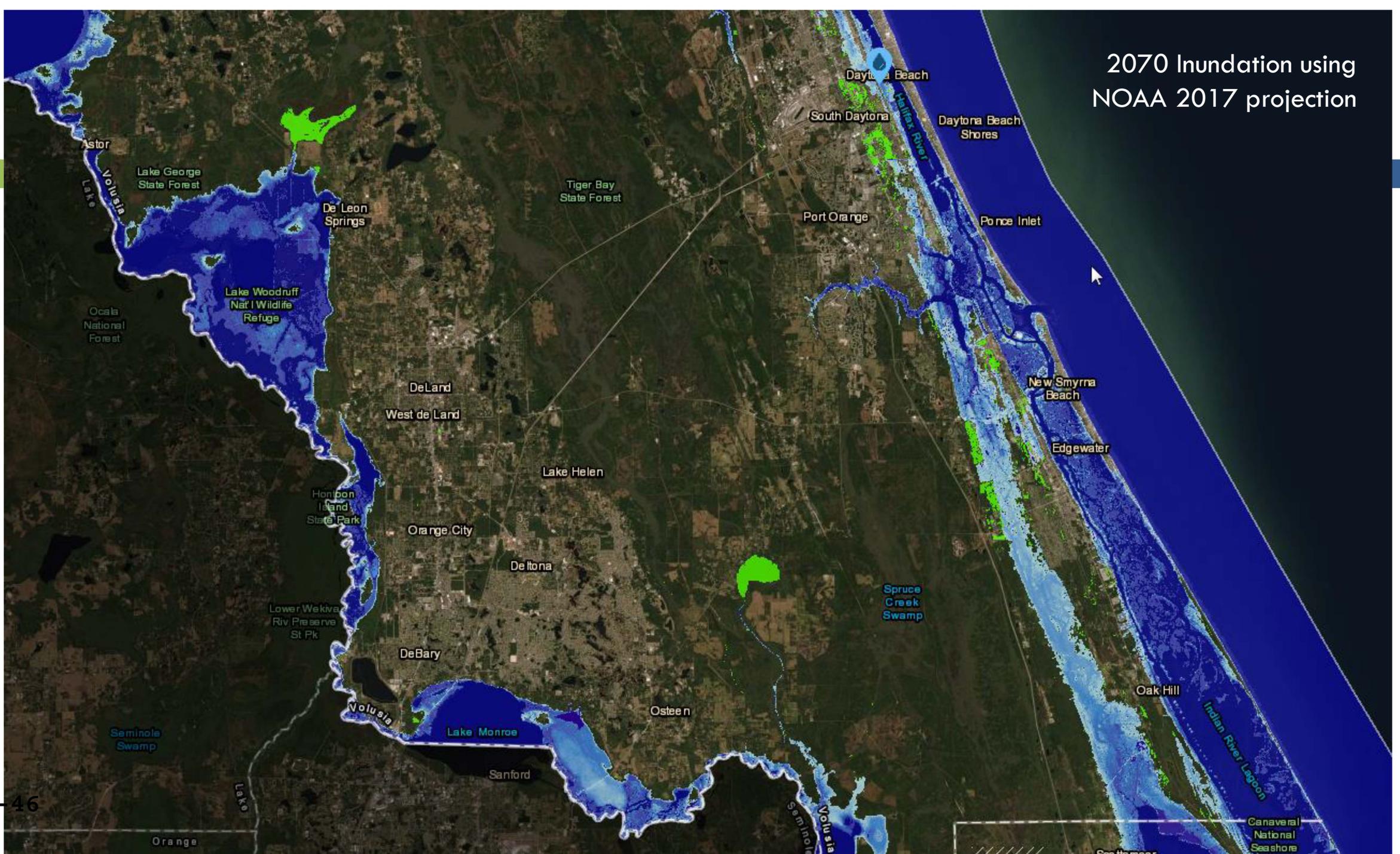
- The stakeholders identified the need for a regional, coordinated approach to identify potential risks to infrastructure, plan for future land uses, and determine appropriate mitigation and adaptation measures to minimize the risks of future flooding and inundation.
- Local governments can plan more effectively if they agree upon sea level rise projections.



Sea Level Rise Projections



2070 Inundation using
NOAA 2017 projection



Framework for the plan

10



- 4 Goals
- Objectives and Action Steps created for each goal

Plan Focus Areas

*Goal 1: **Leadership & Strategy** - Promote leadership, education and empowerment both in government, and public and private sectors to foster the implementation of resiliency strategies across disciplines and communities.*

LS1: Incorporate resiliency into local and regional plans, policies and objectives.

LS2: Plan fiscally to implement resilient and sustainable solutions to long-term impacts.

LS3: Implement strategies to promote adaptive measures that keep people and property safe from natural hazards.

LS4: Engage and educate private sector stakeholders, elected officials and other members of the community about strategies to increase resilience in the built, natural, and social environment

*Goal 2: **Economic & Society** - Provide opportunities and strategies to foster economic prosperity and improve social equity and justice in preparation for and recovery from stressors and shocks.*

ES1: Protect high-value assets from natural hazards.

ES2: Educate business about access to funding and financing services related to resiliency and sustainability.

ES3: Facilitate and support the efficient recovery of business operations after an event.

ES4: Increase skilled labor force.

ES5: Improve social equity and justice in decision making process.

Goal 3: Infrastructure & Environment - Encourage development of cross-disciplinary plans, policies and strategies to protect the health, safety and economic welfare of residents, businesses and visitors through recognition that natural disasters, changes to climate, and human manipulation require careful consideration of when and how to develop infrastructure, natural resource and a built environment that can withstand and adapt to these changes.

IE1: Prioritize the use of Green Infrastructure as a first line of defense.

IE2: Promote interconnectivity of natural lands for habitat migration.

IE3: Enhance stormwater systems to be more resilient.

IE4: Improve water quality in surface water bodies.

IE5: Incorporate resiliency into local and regional plan, policies and objectives.

IE6: Preserve and adapt the built environment to keep people safe from and mitigate current and future natural hazards.

IE7: Improve community mobility while improving vulnerable transportation infrastructure.

Goal 4: Health & Well Being - Create resilient communities by facilitating programs, opportunities, and community-wide education pertaining to local sustainability, disaster response, and climate change mitigation strategies.

HW1: Improve capacity of jurisdictions to better respond to hazard events.

HW2: Improve capacity of medical facility operations to prepare for and recover from natural disasters and future conditions.

HW3: Promote sustainable practices in government owned facilities.

HW4: Engage residents and business owners with locally relevant information about expected future changes in natural hazards and sustainable practices.

HW5: Improve access to resources for the homeless, special needs, elderly, low income, and English-limited residents.

Plan Matrix – Leadership and Strategy

Goal	Objective	Action	Agency or Department	Task	Year	Related Plans
Leadership & Strategy	LS1: Incorporate resiliency into local and regional plans, policies and objectives.	LS1.1	ECFRPC All Jurisdictions	Work with experts, agencies, public, stakeholders and elected officials across the region to develop the framework of a regional collaborative to focus on resilience.	1	
		LS1.2	ECFRPC	Evaluate existing programs as related to regional resilience action programs and plans.	1	
		LS1.3	Planning Department Sustainability Board Brevard County Sustainability Working Group	Create a jurisdiction-wide Sustainability/Resiliency Plan through the recommendations of the Sustainability Board, if applicable.	2	Sustainability Plan
		LS1.4	ECFRPC All Jurisdictions	Formalize the framework of the regional resilience collaborative through resolution.	2	
		LS1.5	All Jurisdictions	Secure a Chief Resiliency and/or Sustainability Officer to coordinate with private and public sectors.	2	
		LS1.6	All Jurisdictions All Agencies	Prioritize the review of all plans, policies and procedures to assess inclusion of resilience strategies or impediments, if not already completed.	3	
		LS1.7	All Jurisdictions All Agencies	Participate in a county-wide workshop to share best practices, needs and progress of local planning in regards to implementing the action plan and other resilience strategies (local level).	4	
		LS1.8	ECFRPC All Jurisdictions	Reassess existing framework and goals of the regional resilience collaborative.	5	
		LS1.9	All Jurisdictions	Reassess indicators established in the local Sustainability/Resiliency Plan.	5	



Plan Matrix – Leadership and Strategy

Goal	Objective	Action	Agency or Department	Task	Year	Related Plans
Leadership & Strategy	LS4: Engage and educate private sector stakeholders, elected officials and other members of the community about strategies to increase resilience in the built, natural, and social environment.	LS4.1	ECFRPC All Jurisdictions	Find champions and strong advocates both elected and non-elected to participate in the regional resilience collaborative and locally.	On-going	
		LS4.2	All Local Government Commission All Jurisdictional Departments ECFRPC Florida Sea Grant	Conduct new leadership orientation.	On-going	
		LS4.3	ECFRPC	Create a regional education plan/tool box for use across the region for all levels and sectors both private and public as well as citizens.	1	
		LS4.4	Sustainability Board Planning Department Economic Development Commission UF IFAS Extension	Hold workshops or one-on-one meetings with private sector stakeholders to educate and train them on sustainable practices.	1	
			All Local Government Commission	Assess applicability of a Sustainability Board and develop goals for the board with a diverse group of stakeholders.		
		LS4.5	All Local Government Commission	Assess applicability of a Sustainability Board and develop goals for the board with a diverse group of stakeholders.	1	
		LS4.6	Sustainability Board	Create a social media account for the Sustainability Board.	1	
LS4.7	Sustainability Board Planning Department UF IFAS Extension	Develop sustainability trainings for elected officials, boards, and staff that includes information on hazard mitigation and sustainability principles.	1	Sustainability Plan		



Plan Matrix – Health and Wellbeing

Goal	Objective	Action	Agency	Task	Year	Related Plans
Health & Well Being	HW1: Improve capacity of jurisdictions to better respond to hazard events.	HW1.1	Emergency Management Votran SCAT	Update evacuation plans to represent newest data of areas that are transportation dependent that will need assistance in evacuation and re-entry.	on-going	Evacuation Plans Special Needs Registry
		HW1.2	Emergency Management Votran SCAT	Identify/update, within the countywide COOP and transit plans, a listing of priority transit routes for operation after a natural hazard event - as needed.	on-going	County Post-Disaster Recovery Plans CEMP Annex
		HW1.3	Emergency Management	Identify staging areas for fueling trucks pre and post disaster for efficient evacuation and re-entry.	on-going	County COOP Plans
		HW1.4	Public Works Department Emergency Management Planning Department	Assess potable water supplies and infrastructure from natural disaster impacts such as sewage infiltration.	on-going	
		HW1.5	Emergency Management All Jurisdictional Departments	Update plans to include information gathered from Hurricane Irma After Action Reports.	1	
		HW1.6	Emergency Management	Identify and prioritize critical facilities, including storm/wastewater, waste management, transportation, etc. with generator needs and add to the appropriate funding list (i.e. LMS, CIP, etc.).	1	LMS CEMP COOP
		HW1.7	Public Works Department Emergency Management CERT	Investigate the feasibility of and needs associated with alternative energy fleet vehicles for emergency response use.	2	County COOP Plans Capital Improvement Plan/Element



What does the resolution include:

Direct staff to work towards the implementation of relevant actions in the ECF RRAP, over the next five years, to further the following objectives:

Action	Existing Resources	New resources
Incorporate resilience into local and regional plans, policies and objectives;	Y	
Plan fiscally to implement resilient and sustainable solutions to long-term impacts;	Y	
Implement strategies to promote adaptive measures that keep people and property safe from natural hazards;	Y	
Engage and educate stakeholders and elected officials about strategies to increase resilience in the built, natural, and social environment;	Y	
Protect high-value assets from natural hazards;		Y
Educate business about access to funding and financing services related to resiliency and sustainability;	Y	
Facilitate and support the efficient recovery of business operations after an event;		Y 04-53

Action	Existing Resources	New resources
Increase skilled labor force;		Y
Improve social equity and justice in decision making process;	Y	
Prioritize the use of Green Infrastructure as a first line of defense;	Y	
Promote interconnectivity of natural lands for habitat migration;	Y	
Enhance stormwater systems to be more resilient;		Y
Improve water quality in surface water bodies;	Y	
Preserve and adapt the built environment to keep people safe from and mitigate current and future natural hazards;		Y
Improve community mobility while improving vulnerable transportation infrastructure;		Y
Improve capacity of jurisdictions to better respond to hazard events;		Y
Improve capacity of medical facility operations to prepare for and recover from natural disasters and future conditions;		Y
Engage residents and business owners with locally relevant information about expected future changes in natural hazards and sustainable practices;	Y	
Improve access to resources for the homeless, special needs, elderly, low income, and English- limited residents.	Y	

Who has adopted?

18

- East Central Florida Regional Planning Council
- Brevard County
- City of Cocoa
- Space Coast Transportation Planning Organization
- River to Sea Transportation Planning Organization
- City of Port Orange, pending
- Volusia County, pending



Questions and Direction

RESOLUTION 2019-

A RESOLUTION OF THE COUNTY COUNCIL OF VOLUSIA COUNTY, FLORIDA, ADOPTING THE EAST CENTRAL FLORIDA REGIONAL RESILIENCY ACTION PLAN; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, there is an increasing need for resiliency against future threats, such as elevated levels of flooding and erosion, changes in storm intensity and frequency, heat impacts, and sea-level rise, which calls for action at every level of government and in the private and not-for-profit sectors; and

WHEREAS, fostering resilience is a long-term effort and requires holistic planning and preparation to increase resilience in the built, natural and social environment; and

WHEREAS, action, leadership and education of and by local governments and partners to improve resilience across disciplines provide multiple benefits; and

WHEREAS, these benefits include the implementation of green and gray infrastructure, protecting the natural environment, improving health and wellbeing, and increasing economic and societal opportunities; and

WHEREAS, the East Central Florida Regional Resiliency Action Plan (ECF RRAP) was formulated for and by local governments, federal, regional and state agencies, educational institutions, NGOs and other stakeholders; and

WHEREAS, the ECF RRAP recognizes the clear relationship between emergency management, planning, health & safety, and economic development and aims to continue to fill gaps within the region and pursue initiatives that will achieve measurable improvements in risk reduction and the building of resilience in the region; and

WHEREAS, the Fixing America's Surface Transportation (FAST) Act calls for transportation planning to consider and implement resiliency in their planning and to reduce vulnerability in existing infrastructure; and

WHEREAS, the success of the ECF RRAP depends on the participation of and collaboration with all local jurisdictions and partners, and a commitment to work together towards common goals.

NOW THEREFORE BE IT RESOLVED BY THE COUNTY COUNCIL OF VOLUSIA COUNTY, FLORIDA, IN OPEN MEETING DULY ASSEMBLED IN THE THOMAS C. KELLY ADMINISTRATION CENTER, DELAND, FLORIDA THIS ____ DAY OF _____, 2019, AS FOLLOWS:

SECTION 1. The County of Volusia agrees to adopt the East Central Florida Regional Resiliency Action Plan to advance the direct implementation of activities aimed to improve

safety, long-term resilience and sustainability in (name of jurisdiction/agency) across sectors, expand economic sustainability and response to vulnerabilities within the community; and

SECTION 2. EFFECTIVE DATE. This resolution shall take effect immediately upon its adoption.

DONE AND ORDERED IN OPEN MEETING.

**COUNTY COUNCIL
VOLUSIA COUNTY, FLORIDA**

ATTEST: _____
George Recktenwald
County Manager

BY: _____
Ed Kelley
County Chair