RESILIENT JACKSONVILLE



The Official Newsletter for the Special Committee on Resiliency



October Newsletter: Introducing the Subcommittees of the Special Committee

Featuring Council Members Randy DeFoor, Joyce Morgan, Garrett Dennis, Matt Carlucci & Michael Boylan











Published September 2020. Prepared by Sean Lahav, Resiliency Coordinator, Northeast Florida Regional Council (NEFRC).

Message from Special Committee Chair

Dear Community Members,

Following the aftermaths of hurricanes Matthew and Irma in 2016 and 2017, citizen perspectives on flooding, storm surge and sea level rise were heard loud and clear. Recognizing how many of my own constituents had been impacted by these devastating storms, I made a personal commitment to address these issues when I first became a member of Jacksonville City Council.

In January of 2020, under the leadership of Council President Scott Wilson, City Council established a Special Committee on Resiliency that would be chaired by Council Member Matt Carlucci. The committee was continued by President Hazouri to be chaired by me. Since that time, the City of Jacksonville has made a significant amount of progress in better understanding what steps need to be taken to make our city more resilient to environmental hazards.



Between January and May of 2020, we heard from Federal, state and local government agencies, and subject matter experts about lessons that have already been learned. Meetings featured perspectives from the Florida Department of Environmental Protection, U.S. Army Corps of Engineers and City Departments. In a short period of time, we established an inventory of what was known so far and drafted steps that needed to be taken immediately moving forward.

In the summer, following the onset of the coronavirus pandemic, leadership announced that three subcommittees would be established with the objective of involving more expert perspectives from the local community. The subcommittees established included the: (1) Subcommittee on Infrastructure & Continuity of Operations for Essential Services; (2) Subcommittee on Education, Protection of Local Neighborhoods & Community Outreach; and (3) Subcommittee on Environmental Planning. Since that time, each of the subcommittees have been hard at work in activities relating to data analysis and research, strategy development and the development of policy recommendations.

Throughout this entire process, what I have been most impressed with is the dedication and commitment of Duval County community members who have volunteered their personal time to meeting community objectives. My vision for the Special Committee on Resiliency is to finalize conclusions and recommendations by the Spring of 2021. Once these recommendations are developed, and a Chief Resilience Officer is appointed, the next step in the process will be working across departments and agencies on components related to implementation. There is still a long road ahead, but through collaboration and community involvement, we are positioning the City of Jacksonville for a stronger, equitable and more resilient future.

Randy DeFoor | District 14

Subcommittee on Infrastructure, and Continuity of Operations for Essential Services

This group would focus its attention on critical infrastructure within Duval County, such as bridges, hospitals, grocery stores, roadways, and drainage systems. The focus of this discussion would also be on maintaining continuity of operations before, during, and after a disaster. Such a subcommittee will more likely attract a technical crowd of audience members who can speak to the specifics.

Randy DeFoor - Committee Chair Garrett Dennis - Subcommittee Chair Randy DeFoor - Subcommittee Co-Chair

Angela DeMonbreun - Subject Matter Expert Bruce Fouraker - Subject Matter Expert Sandra Fradd - Subject Matter Expert Mark Green - Subject Matter Expert Lisa King - Subject Matter Expert Joe Loretta - Subject Matter Expert Amanda Polematidis - Subject Matter Expert Jim Robinson - Subject Matter Expert Jim Seaton - Subject Matter Expert Nikole Ward - Subject Matter Expert

Subcommittee on Education, Protection of Local Neighborhoods & Community Outreach

This group would focus its attention on ways where the City of Jacksonville can better inform its citizens. Ideas for community engagement will be discussed. An online location of the information: a one-stop-shop for all information related to Resiliency, should be created. This would also include links to other websites where the science and policy documents are housed. Opportunities for education will be thought out. The needs of vulnerable populations will also be addressed here.

Randy DeFoor - Committee Chair Joyce Morgan - Subcommittee Chair Michael Boylan - Subcommittee Co-Chair

Mike Bonts - Subject Matter Expert John Burr - Subject Matter Expert Josh Gellers - Subject Matter Expert Ashantae Green - Subject Matter Expert Barbara Gubbin - Subject Matter Expert Bill Hoff - Subject Matter Expert Joey McKinnon - Subject Matter Expert Kelly Rich - Subject Matter Expert John Sapora - Subject Matter Expert Jason Harrah - Subject Matter Expert

Subcommittee on Environmental Planning

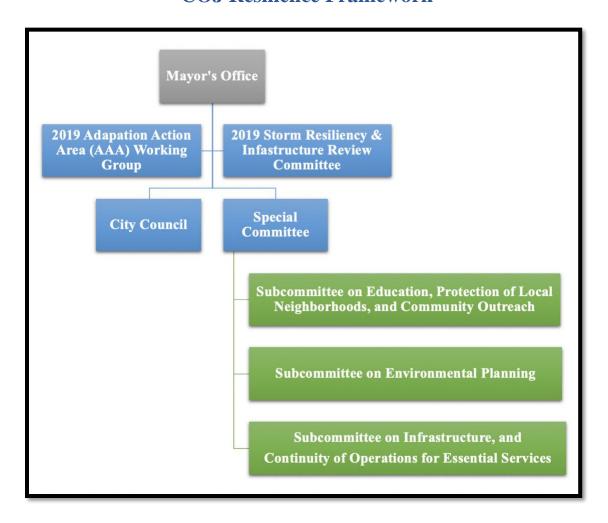
This group would focus its attention on environmental shocks (hurricanes, storm events), and stresses (sea level rise), and would provide input related to how Jacksonville can better protect local communities in relation to those hazards. Discussion would cover living shorelines, green infrastructure, wetland preservation, protecting the existing tree canopy, and planting more trees for stormwater resilience, and other related topics.

Randy DeFoor - Committee Chair Matt Carlucci - Subcommittee Chair

Brooks Andrews - Subject Matter Expert
Adam Hoyles - Subject Matter Expert
Bill Bishop - Subject Matter Expert
Sarah Boren - Subject Matter Expert
J. Logan Cross - Subject Matter Expert
Bruce Fouraker - Subject Matter Expert
Ashantae Green - Subject Matter Expert
Patrick Krechowski - Subject Matter Expert

Mark Middlebrook - Subject Matter Expert
Kevin O'Halloran - Subject Matter Expert
Joshua Rosenberg - Subject Matter Expert
Adam Rosenblatt - Subject Matter Expert
Todd Sack MD - Subject Matter Expert
Jim Schwarz - Subject Matter Expert
Guillermo Simon - Subject Matter Expert
Steve Swann - Subject Matter Expert
Dr. Quinton White - Subject Matter Expert
James Richardson - Subject Matter Expert
Shannon Blankinship - Subject Matter Expert

COJ Resilience Framework



External Special Committee Support Partners







What is Resilience?

Resilience is the ability of a community to "bounce back" to normal conditions after losing function because of an uncontrollable event. Resilient communities have the capacity to quickly respond to, withstand and recover from adverse situations such as hurricanes and high-intensity flooding events. From a long-term perspective, resilient communities find ways to adapt to changing conditions so that future losses are minimized and continuing stresses such as ageing infrastructure and sea level rise are managed.

What has the City done to address issues related to coastal flooding, sea level rise and environmental justice?

In addressing community challenges related to resilience in Duval County, there have been several stakeholder engagement frameworks utilized to better inform both short-term and long-term decision-making processes. The bulleted list below represents an inventory of resilience-related planning activities that have taken place in Jacksonville recently:

- 2019 Storm Resiliency & Infrastructure Review Committee
- 2019 Adaptation Action Area (AAA) Working Group
- 2020-2021 City Council Special Committee on Resiliency
- 2020-2021 Resiliency Subcommittees
- 2020-2021 Public Works Vulnerability Assessment [CDM Smith/FDEP]

These efforts have presented a wealth of knowledge relating to areas of strengths and weaknesses in City plans, policies and regulations. This includes the Local Hazard Mitigation Plan, the Comprehensive Plan and future land use policies, plans for capital improvements, building codes and zoning codes and plans related to Jacksonville's participation in FEMA's Community Rating System.

Recognizing how much has already been accomplished at the planning level in Duval County, the objective moving forward is to leverage these existing plans and recommendations so that the City can start implementing solutions.

SUBCOMMITTEE ON INFRASTRUCTURE AND CONTINUITY OF OPERATIONS FOR ESSENTIAL SERVICES

Objectives:

- 1. Establish Priorities for Public Works Department
- 2. Develop Infrastructure Recommendations for Chief Resilience Officer
- 3. Identify Funding & Finance Opportunities
- 4. Prioritize Projects in Capital Improvements Plan (CIP)

Lessons Learned:

- 1. The City's resiliency needs are huge and it will take a long time to rectify the problems, starting with small steps.
- 2. Public Works said that the projects on the City CIP list are being designed to address immediate problems but are able to be expanded or elevated depending on the results of the study currently underway to assess flooding potential.
- 3. The City's Capital Improvement Program identified \$47.8M in resiliency projects in FY20-21, followed by \$54.7M in FY21-22 and \$69.5M in FY22-23, then reduced funding in the following 2 years.

Subcommittee Testimonial



"If we don't do something now in correcting resiliency, it's going to continue to pile up and pile up and it's going to get to a point where we can't afford it."

City Councilman Garrett Dennis

Subcommittee Tip of the Month

Be aware of natural hazard risk and exposure when purchasing a commercial or residential property. Purchase flood insurance, invest in mitigation upgrades and develop a disaster plan.

Prioritizing Resilience in Capital Improvements Plan (CIP)



The subcommittee is planning to hear from Public Works Director John Pappas about his "wish list" of needed projects that could be incorporated into the Capital Improvement Program (CIP) if money were no object. Council Member DeFoor said that federal funding will be

vital to meeting all of the community's needs and she thinks that the City has to get itself into the federal water projects authorization bill when it is next considered by Congress. The Mayor is on board with that process as is Congressman John Rutherford, so the City should be ready for its next opportunity.

Leveraging Local, State & Federal Financing Opportunities



There are several funding sources that might be tapped to meet resiliency needs; including the property acquisition process, from appraisals through home buyouts to relocation of residents to replacement housing. There are also FEMA grants, including a new BRIC (Building Resilient Infrastructure and Communities) grant

opportunity, and state grants as well, including a new CDBG-MIT (Community Development Block Grant Mitigation) grant opportunity. The City has an additional half cent sales tax for infrastructure available, requiring voter referendum approval.

Breaking Down Silos Between Departments & Agencies



JEA has commissioned a resilience study and risk assessment of its water and wastewater facilities. Hurricane impacts in recent years identified weaknesses including power failures that knocked out pumping and treatment facilities and caused sewage overflows. A consultant was hired to study the system,

identify weaknesses, and develop remediation plans. The most important facilities to be protected are the major wastewater treatment plants, followed by major pumping stations and several potable water wells. Some of the identified top priority projects are already in JEA's capital improvement program and planning has begun on some of those projects.

SUBCOMMITTEE ON EDUCATION, PROTECTION OF LOCAL NEIGHBORHOODS & COMMUNITY OUTREACH

Objectives:

- 1. Synthesize the work of the 3 subcommittees into an easily digestible form
- 2. Build consensus around an official COJ definition for "resilience"
- 3. Develop an inventory of community assets
- 4. Ensure that strategies related to equity are considered and implemented
- 5. Develop strategies for community engagement and public education

Lessons Learned:

- 1. Jacksonville is a very diverse city and needs to get information out in many different ways to inform people in the way they prefer to receive it.
- 2. NEFRC's "Regional Resilience Exposure Tool," which is available to governments and to the general public, has many data layers of technical information that can be overlaid with social and economic factors to see who is most impacted by environmental challenges.
- 3. Working draft list of community assets: Public Works Department, Planning and Development Department, Grants Office, City Council, Special Committee on Resiliency, Resilient Jax, Duval COAD (Community Organization Active in Disasters), Northeast Florida Regional Council, University of North Florida, Jacksonville University, Edward Waters College, St. Johns Riverkeeper, LISC, neighborhood-based organizations (CPACS)...

Subcommittee Testimonial



"It's really important that we get to a space where we can really get out there and market it and promote and not be cumbersome, because if we are, we are going to get shot down. I mean, nobody's going to listen except the ones that know exactly what it is."

City Councilwoman Joyce Morgan

Subcommittee Tip of the Month

Develop a Business Continuity Plan! Without a plan, 75% of impacted businesses will fail within 3 years of a natural disaster.

Establishing an Inventory of Community Assets



Subcommittee members are in the process of developing a method of prioritizing what is most important by focusing on how many people are impacted by a condition and for how long it has been recognized as a problem. Community leaders should have input into the process to broaden the perspective beyond that of just City employees and elected officials.

In this process, the subcommittee is also developing a recommendation for a timeline focused on how the City could leverage its initial resilience efforts to make substantial improvements over the course of the next 5 to 10 years.

Developing Community Outreach Strategies



The subcommittee is developing a vehicle to communicate info on a weekly basis through the coj.net web site, the media and town hall meetings to reach the public. The focus is on both short-term and long-term actions. Information being publicized will mention the root causes of current issues and the long-term solutions. A framework, focused on how to disseminate information

and publicizing the work of the Special Committee, is also being developed.

Neighborhood Engagement & Social Equity



Council Member Michael Boylan said he has been a member of the Northeast Florida Long Term Recovery Organization and has seen firsthand the impact that hurricanes and flooding have had on Jacksonville, which tells him that the city is not properly prepared to prevent and recover from such disasters. In a "Regional Survey on Resilience" conducted by the Northeast Florida Regional Council (NEFRC) in 2019, Jacksonville

residents showed strong support for sustainable development, green infrastructure and social equity as highly ranked opportunity areas.

SUBCOMMITTEE ON ENVIRONMENTAL PLANNING

Objectives:

- 1. Develop a list of adverse consequences of sea/river level rise, coastal surge and extreme tides that are within our control or may be reversed.
- 2. Focus on saving existing tree canopy to continue to take up stormwater and reduce heat.
- 3. Focus on intentional addition to the county's tree canopy to enhance storm water uptake and reduce heat.

Lessons Learned:

- 1. Findings and recommendations from the COJ Adaptation Action Area Working Group offer a valuable roadmap for areas where specific environmental solutions can be vetted and implemented.
- 2. There is a wide array of data and research that has already been conducted in Jacksonville and Northeast Florida.
- 3. The U.S. Army Corps of Engineers (USACE) is currently in the process of conducting the South Atlantic Coastal Study (SACS).

Subcommittee Testimonial



"Some of the solutions won't be expensive, some of them may be expensive, but it won't be near as expensive as if we don't do something. If we don't do anything, that's where it will be hugely expensive."

City Councilman Matt Carlucci

Subcommittee Tip of the Month

The National Mitigation Investment Strategy identifies nature-based solutions as a cost-effective approach to keep natural hazards from becoming costly disasters. The promise of nature- based solutions comes from the many benefits they offer and the many partners they can draw to the table (FEMA 2020).

Preparing for Long-Term Threat of Sea Level Rise



The Sea/River Level Rise Working Group was tasked with finalizing a list of impaired tributaries and then to develop a prioritized list of adverse consequences of sea/river level rise that the City can impact with changes within its control (zoning, development regulations, etc.). The group has identified lists that already exist or that need to be created to unify the work and data of many different City departments and other agencies into a single comprehensive database

for planning and mitigation purposes. The group also discussed the need to identify undeveloped lands for public acquisition to prevent their development as a means of water retention for prevention of flooding.

Building Resilience to Extreme Rainfall & Flooding



The Extreme Precipitation/Rain Patterns Working Group was tasked with identifying areas where trees could be utilized to offset stormwater impacts. This group is also looking at other tree canopy issues. The group discussed the 18-item list provided to it to establish priorities for proposing legislation. The working group is also considering recommendations from 'Trees to Offset

Stormwater Study' to mitigate hazards. Questions that have presented so far include: Does the current policy need to be strengthened to protect existing tree canopy? How do we collaborate with developers and builders for a positive outcome?

Protecting City from Increasing Temps & Extreme Heat



The Climate Change/Temperature Rise and Heat Waves Working Group was assigned the task to identify where the use of tree mitigation funds could be used to expand the tree canopy. This group is also looking at strategies for planting more trees in the right locations for stormwater control and heat reduction purposes. This group discussed public relations opportunities with Arbor Day and other holidays to promote tree

planting, especially in underserved neighborhoods. They also discussed the need for the City to have a real, long-term greenhouse gas remediation plan.

Important Announcement

Ordinance 2020-526

FY 20-21 Florida Resilient Coastlines Program Resilience Planning Grant

Scope of Cooperative Agreement

The Florida Resilient Coastlines Program (FRCP) through the Florida Department of Environmental Protection (FDEP) has awarded the City of Jacksonville a FY 20-21 Resilience Planning Grant (RPG) for \$60,000. Grant funding will be used to procure a planning consultant to engage the public through several workshops at which sea level rise and flooding scenarios will be presented along with the ongoing resiliency analysis being performed by the Department of Public Works and recommendations from the Adaptation Action Area (AAA) Workgroup, approved via Resolution 2019-893. Workshops may be held virtually due to COVID-19. The intent of these workshops is to increase awareness of neighborhood and community vulnerability to sea level rise and coastal flooding under both near-term and long-term horizons and to discover community priorities. The grant project period ends on April 30, 2021. This is a reimbursement grant, and no local match is required.

Target Area

A key recommendation from the City's AAA Workgroup is to expand the current AAA boundary to include areas that are within the Category 3 storm surge zone and those contiguous FEMA 500-year flood plains, and implement adaptation strategies commensurate with the storm and flood risks. The recommended, expanded AAA boundary (attached) includes approximately 107,859 acres and touches properties within all Planning Districts.

Public Engagement Workshops

The grant will fund a workshop in each of the six (6) Planning Districts and a final workshop for elected officials and community leaders. Consistent with the environmental justice priority of the funding agency, the cultural resources and historic significance of the Riverside-Avondale Historic District will be a specific topic of focus for the workshop conducted in the Northwest Planning District as the majority of Riverside-Avondale is within that Planning District. Additionally, the Urban Core Planning District ranks high on the Centers for Disease Control's Social Vulnerability Index, and as such, this workshop will focus on adaptive capacity in relation to transportation, housing, disability, and socioeconomics. Deliverables include, but are not limited to, an evaluation or analysis of each workshop and a summary document of the entire project.

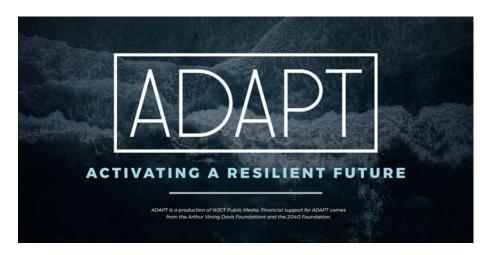
Please contact the Planning and Development Department for additional information.

Kristen Reed, Chief of Community Planning – 255-7837 / <u>KReed@coj.net</u> Susan Kelly, City Planner III – 255-7827 / <u>KSusan@coj.net</u>

Upcoming Event

ADAPT: Activating a Resilient Future

Join us for a conversation addressing issues related to coastal & river flooding, sea level rise, environmental justice, & related policies.



ABOUT THIS EVENT

WJCT, the Northeast Florida Regional Council (NEFRC) and the Jacksonville Environmental Protection Board (JEPB) invite you to join us for a virtual community conversation featuring two panels of local elected officials and subject matter experts. Issues addressed will be related to coastal & riverine flooding, sea level rise, environmental justice, and related policies.

Part 1: Science, Law & Policy (35 minutes)

Moderator: Sean Lahav, Resiliency Coordinator, Northeast Florida Regional Council

- Council Member Randy DeFoor, JD District 14, City of Jacksonville;
- TBA

Part 2: Environmental Justice & Community Engagement (35 minutes)

Moderator: Brendan Rivers, Reporter, WJCT Public Media

- Ashantae Green, Ex-Officio Member, COJ Special Committee Subcommittees
- Council Member Joyce Morgan, District 1, City of Jacksonville
- Todd Sack, MD, Ex-Officio Member, COJ Subcommittee on Environmental Planning

Date & Time: Wednesday, October 7, 2020 7:00 pm - 8:30 pm

https://www.eventbrite.com/e/adapt-activating-a-resilient-future-tickets-121762160901

HOW TO STAY SAFE

WHEN A FLOOD THREATENS





Sign up for your community's warning system. The Emergency Alert System (EAS) and National Oceanic and Atmospheric Administration (NOAA) Weather Radio also provide emergency alerts.

If flash flooding is a risk in your location, monitor potential signs such as heavy rain.

Learn and practice evacuation routes, shelter plans, and flash flood response.

Gather supplies in case you have to leave immediately or if services are cut off. Keep in mind each person's specific needs, including medication. Don't forget the needs of pets. Obtain extra batteries and charging devices for phones and other critical equipment.

Obtain flood insurance. Homeowner's policies do not cover flooding. Get flood coverage under the National Flood Insurance Program (NFIP).

Keep important documents in a waterproof container. Create password-protected digital copies.

Protect your property. Move valued items to higher levels. Declutter drains and gutters. Install check valves. Consider a sump pump with a battery.



Depending on where you are, and the impact and the warning time of flooding, go to the safe location that you have identified.

If told to evacuate, do so immediately. Never drive around barricades. Local responders use them to safely direct traffic out of flooded areas.

Listen to EAS, NOAA Weather Radio, or local alerting systems for current emergency information and instructions.

Do not walk, swim, or drive through flood waters. Turn Around. Don't Drown.® Just six inches of fastmoving water can knock you down, and one foot of moving water can sweep your vehicle away.

Stay off of bridges over fast-moving water. Fast-moving water can wash bridges away without warning.

If your vehicle is trapped in rapidly moving water, stay inside. If water is rising inside the vehicle, seek refuge on the roof.

If trapped in a building, go to its highest level. Do not climb into a closed attic. You may become trapped by rising floodwater. Go on the roof only if necessary. Signal for help.





Listen to authorities for information and instructions.

Avoid driving, except in emergencies.

Be aware that snakes and other animals may be in your house. Wear heavy gloves and boots during clean up.

Avoid wading in floodwater, which can contain dangerous debris and be contaminated. Underground or downed power lines can also electrically charge the water.

Use a generator or other gasolinepowered machinery ONLY outdoors and away from windows.

Be aware of the risk of electrocution. Do not touch electrical equipment if it is wet or if you are standing in water. If it is safe to do so, turn off the electricity to prevent electric shock.

Take an Active Role in Your Safety

Go to **ready.gov** and search for **flood**. Download the **FEMA app** to get more information about preparing for a **flood**. Find Emergency Safety Tips under Prepare.



COMMUNITY RESILIENCE

RESILIENCE is the ability of a community to "bounce back" to normal conditions after losing function because of an uncontrollable event. Resilient communities have the capacity to quickly respond to, withstand, and recover from adverse shocks such as hurricanes and high-intensity flooding events. From a long-term perspective, resilient communities find ways to adapt to changing conditions so that future losses are minimized and continuing stresses such as ageing infrastructure and sea level rise are managed.

SHOCKS - Sudden events that cause community to immediately lose function:



- Hurricanes
- Flooding Events
- Tornadoes

STRESSES - Take place over time and weaken the fabric of a community:



- Sea Level Rise
- Ageing Infrastructure
- Nuisance Flooding

How can a community better understand its vulnerabilities?

EXPOSURE – The geographic location of assets (i.e. homes, businesses, public facilities) in relation to hazards (i.e. storm surge, sea level rise):

• Properties located on the Atlantic Ocean or St. Johns River will be more exposed to the impacts of sea level rise than inland properties located on higher ground.

SENSITIVITY – The reactive tendencies of assets in relation to hazards:

 Oceanfront homes that are elevated will suffer less damage from storm surge than neighboring oceanfront homes that are built at ground-level.

ADAPTIVE CAPACITY - The ability to adapt and make resilient changes:

- Purchasing flood insurance coverage and maintaining coverage
- Investments in mitigation upgrades (storm shutters, roof tie downs)

How can we DECREASE our vulnerability and INCREASE our resilience?

PROTECTION – Establish a hardened defense to protect an asset from a hazard:

- Sea walls that protect coastal communities from the impacts of storm surge
- · Hurricane shutters to protect home or business from wind damage

ACCOMMODATION – Allow asset to come in contact with hazard up to a certain extent:

Living shorelines that slow down wave energy and absorb wave impacts

MANAGED RELOCATION & AVOIDANCE – Move assets away from vulnerable areas; and change land use policies so that new construction is not built in high-risk locations:

- Voluntary buyout programs that remove repetitive loss properties from housing stock
- Being aware of hazards and exposure when purchasing property!

Fact Sheet Created by Northeast Florida Regional Council (NEFRC)

Check the Exposure of a Local Property at: buildcommunityresilience.com/northeastflorida