

**OFFICE OF THE CITY COUNCIL**

**RESEARCH DIVISION**

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**SPECIAL COMMITTTEE ON RESILIENCY MEETING MINUTES**

**Lynwood Roberts Room, 1st floor, City Hall**

**January 27, 2020**

**2:00 p.m.**

**Location:** Lynwood Roberts Room, 1st floor, City Hall – St. James Building; 117 West Duval Street

**In attendance:** Council Members Matt Carlucci (Chair), Michael Boylan, Aaron Bowman, Randy DeFoor, Garrett Dennis, Joyce Morgan, Scott Wilson

**Also**: Council Member Al Ferraro; Susan Grandin – Office of General Counsel; Phillip Peterson – Council Auditor’s Office; Jeff Clements and Yvonne Mitchell– Council Research Division; Steve Cassada and Carol Owens - Council Staff Services; Bill Killingsworth – Planning and Development Department; Bill Joyce – Public Works Department; Ellen Glasser – Mayor of Atlantic Beach; Cheryl Brown – Council Secretary/Director

**Meeting Convened**: 2:01 p.m.

Council Member Carlucci called the meeting to order and the attendees introduced themselves for the record. Mr. Carlucci thanked Council President Wilson for appointing the committee and the committee members for their willingness to serve. He reviewed the committee’s charge and timeline to report its findings by the summer. A website and an email address have been set up to accept public input; a newsletter will be sent out to attendees who provide their email addresses. Mr. Carlucci said he is exploring the cost and qualifications for a City Chief Resiliency Officer. A wide variety of organizations involved in resiliency activities will be invited to make presentations to the committee over the next few months.

Presentations – Setting the Scene of Climate Change and Sea Level Rise

Glenn Landers of the US Army Corps of Engineers Jacksonville district Planning and Policy Division. Mr. Landers gave a PowerPoint presentation, which he noted as his personal opinion, not the official position of the Corps of Engineers. He noted that sea level has changed substantially over thousands of years depending on the presence or absence of glaciers that bind up or release tremendous amounts of water. Florida faces dangers from hurricanes, fires and less frequent but more intense rainfalls as the world’s climate changes. These factors will impact on flood insurance premiums, water supply, septic tank operation, shoreline damage and retreat, crop production, and others. Two factors cause sea level rise concerns – an increase in the water level and subsidence (sinking) of the land. Corps of Engineers data shows acceleration in sea level rise from 1928 through 2018. The highest rate curve predicts a 1.86 to 2.25-meter rise in sea level at Mayport by 2060. Sea level rise impacts include increased flood risk, salinity change in the river, and saltwater intrusion into drinking water aquifers. One important factor in determining a community’s resilience is to measure potential impacts on public health and safety resources – fire department, police department, hospitals, utilities, city government. Increasing resiliency in advance leads to less damage during and quicker recovery after disasters. The Army Corps of Engineers has begun planning for 100 year lifespans of its projects and evaluating resilience and adaptability costs in initial construction costs (building to be adaptable in the future as conditions change). The Natural Resources Defense Council estimates that every $1 spent on resilience in advance saves $4 to $5 in recovery costs on the back end after an event. Resiliency is the new sustainability.

Council Member Ferraro said the Jacksonville Waterways Commission is looking at Ft. George Inlet silting in, which is caused by the St. Johns River jetty construction over a century ago, and asked about the Corps of Engineers’ stance on dredging to remediate situations caused by human intervention. Mr. Landers said he is not involved in decisions regarding the Jacksonville harbor so will need to convey that question to others in the Corps of Engineers local office for a response. In response to a question from Council Member DeFoor about whether there has there been any ACOR review of tributaries and creeks to determine what kind/amount of dredging is needed, Mr. Landers said that is not his area of expertise and he will need to convey that back to his office to address. In response to a question from Council Member Boylan about whether there are sea level rise projections based on status quo (do nothing), Mr. Landers said there are. Regarding whether the ACOE is developing best practices for how to plan and prepare for the effects of sea level rise, Mr. Landers said that the Corps’ Congressional requires a cost-sharing partner to do studies like that for particular areas. Some study is ongoing of the South Atlantic Coast of the US, but he doesn’t know if it particularly addresses the Jacksonville area.

Council Member Bowman said there are two basic responses to sea level rise: 1) harden your existing built resources, and 2) build smarter to prevent future problems from occurring. He asked if the ACOE has models or experience that can inform what Jacksonville should do to prepare. Mr. Landers said their data includes information on other jurisdictions that have been studying longer because they face more immediate problems. Council Member Morgan asked about the role artificial reefs play and whether they are helpful. Mr. Landers said they break up wave energy offshore and help dissipate that energy before it hits the shore or buildings, so they are helpful. That’s why beach restoration is useful. Ms. Morgan also noted that septic tanks are a huge problem in Jacksonville and likely to be a bigger problem as sea level rises. Mr. Landers said septic tanks are an even bigger problem in South Florida with all of its canals and water management facilities being impacted by the pollutants released by the tanks in high water areas. Council Member Boylan asked if the ACOE is looking at salt water intrusion along the river in Jacksonville. Mr. Larson said it is, in conjunction with the harbor dredging project. Habitat is changing due to higher salinity further upriver.

In response to a question from Council Member DeFoor about whether there are identified solutions that should be undertaken immediately, Mr. Larson said a government needs to do a comprehensive risk assessment (surveys, seawall and bulkhead elevations, facility locations, etc.) first to find out its vulnerabilities and develop a plan to react and protect itself. The survey needs to be comprehensive because the solution can’t just be to build higher seawalls in some places and not others – the water will just flow around the ends and create more erosion. Council Member Ferraro asked what can be done about existing neighborhoods built to lower design standards years ago that never had a problem but do now as sea level rises. Mr. Larson agreed that it’s a big challenge and in some cases low-lying properties won’t be sustainable in the long term. In South Florida they’re raising seawalls and installing pumps as a short term response, but that only gets you so far, and who pays for it? Do people on high ground pay to protect people on low ground? Houston and Miami Beach have adopted new regulations to require rebuilt structures to raise their floor elevations substantially. In response to a question from Council Member Boylan about the value of protective natural systems, Mr. Larson said they are a good practice, involving items such as beach renourishment, mangroves, living shorelines, etc.

Whitney Gray – Florida Department of Environmental Protection’s Office of Resilience and Coastal Protection

Ms. Gray said she’s happy to see Jacksonville and Northeast Florida thinking about resilience and being proactive. Flooding is a statewide problem due both to sea level rise and to increasingly severe storm events. She described what the state is doing to prepare itself and help local governments prepare for sea level rise. The Community Resilience Initiative began in 2011 as a partnership effort of many agencies and the Florida Resilience Coastline Program was developed in 2017. FDEP offers a Florida Adaptation Planning Guidebook, grant funding, and a Quarterly Coastal Resilience Forum for sharing ideas with governments in a similar situation. She proposed a series of actions steps for resiliency planning: 1) do a vulnerability assessment to identify weaknesses and challenges; 2) figure out what you can do about those vulnerabilities, with lots of community input and buy-in; 3) prioritize and implement the strategies. FDEP offers technical assistance with computer models, data sets and advisory personnel. Funding comes through the Coastal Partnership Initiative, Adaptation Action Area initiative, and departmental grants. Grants are available for: 1) compliance with the Peril of Flood statute (tied to Comprehensive Plan Coastal and Conservation Elements); 2) Development of Adaptation Action Areas and associated Goals, Objectives and Policies; 3) Vulnerability Assessments, Adaptation Plans or Resilience Plans other than what's necessary for compliance with Peril of Flood Requirements (i.e. such as those for historic resources or stormwater management systems); and 4) Regional collaboration efforts. All the projects FDEP funds are public information available to everyone for ideas and guidance. FDEP doesn’t really recommend solutions because every situation and jurisdiction is so different, but they have a collection of practical experiences from which to draw.

Types of adaptation strategies include: 1) protection – eliminate the water; 2) accommodation – build to tolerate some water; 3) managed retreat – evacuate away from the water; 4) avoidance – don’t build in wet areas to start with. The strategies have to be applied to the whole community to achieve the fullest benefit – remediating or protecting one property at a time doesn’t get the job done and can make things worse for adjoining properties.

In response to a question, Planning and Development Director Bill Killingsworth said the City’s Adaptation Action Area (AAA) map depict Velocity Zones 1, 2 and 3 and the 500 year flood plain and identifies the areas most at risk through the 2060 planning horizon.

Ms. Gray provided the link to FDEP’s Resilient Coastlines Program and all the information available there: Floridadep.gov/rcp/florida-resilient-coastlines-program

In response to a question from Council Member Morgan about how long a vulnerability study takes, Ms. Gray said that FDEP gives grants that are for 1 year, and it takes about 6 months to do a good study. Ms. Morgan asked if AAA plans typically recommend having a chief resilience officer and if that is important. Ms. Gray said that resilience officers are very helpful for a city to have a central clearinghouse/ coordinator to unify the efforts of lots of different departments and offices (Public Works, Planning, Parks and Recreation, etc.). They also tend to engage a lot with other coordinators around the state and bring back good ideas from other places. Ms. Morgan asked if FDEP funds resiliency officers, to which Ms. Gray replied that they have not funded personnel and distribute their funds based on competitive grants, so you couldn’t count on getting it from year to year to support a position.

In response to a question from Council Member Boylan about whether FDEP is looking at habitat impacts of sea level rise, Ms. Gray said The Nature Conservancy is the biggest actor in that area. FDEP does have resources, including a SLAM (sea level assessment model). Council Member Bowman asked about how to develop specifications for a chief resilience officer. Ms. Gray said that Orlando and Tampa have hired or are soon hiring them and could provide job specs. Also the Association of Climate Change Officers (ACCO) and American Society of Adaptation Professionals (ASAP) are good resources. Chairman Carlucci noted that Jacksonville’s St. Johns River tributaries have a nutrient problem resulting from failing septic tanks and asked how important that issue is. Ms. Gray said she’s not a water quality expert but FDEP’s Blue-Green Algae Task Force identified septic tanks as an issue and the DeSantis administration is proposing funding to phase them out. Opportunities may be available in that area.

Public Comment

Barbara Ketcham represents the recently-formed Resiliency and Climate Change Coalition of many resilience-related organizations (including Groundwork Jax, St. Johns Riverkeeper, Scenic Jacksonville, Garden Club of Jax, Riverside Avondale Preservation, Green Chamber of Commerce, and more). Their two 2 priorities are: 1) community engagement, 2) advocate for hiring a chief resiliency officer.

Larry Roberts thanked the committee for taking on this important task and made 2 requests: 1) consider the impact of river dredging on the river; 2) consider prioritizing septic tank elimination.

Shannon Blankenship of the St. Johns Riverkeeper thanked the committee for its work. Every flooding event is an unmitigated pollution event for the St. Johns River. Rising water creates a bad problem for septic tanks and sewer pump stations. Please support the AAA implementation.

Mary Tappouni of the North Florida Green Chamber of Commerce thanked the committee for its work and offered the resources of the Green Chamber to the effort. Their policy committee has developed job specs for a resilience officer and has a catalog of similar efforts in the Northeast Florida area.

John Nooney said that the Sidney Geffen Park kayak launch needs to be redesigned and elevated. The Charter Revision Commission is currently meeting and he has asked them numerous times for a Charter amendment requiring the DIA and all CRAs and independent authorities to mandate public access to waterways for any publicly funded project. Ordinance 2013-384-E would have given the Armory to a developer with no water access requirement.

Anna Dooley of Greenscape thanked the committee for its work and for the good speakers today. They’ve planted over 350,000 trees over the last 40 years. Trees can be part of the solution to climate change and stormwater abatement. They are pursuing a grant opportunity for resiliency by tree planting in low-income communities and she solicited council member ideas for places that could use projects.

Ted Mikalsen thanked the committee for stepping up in the area of resilience.

David Bruderly said he is a career water quality scientist. The scientific community has long known about the problems of greenhouse gases and their effects on climate change but the political world has been slow to respond. We need to include carbon metrics into the resilience planning process and figure out how to mitigate for it. We also need to have a statewide conversation about what to do about greenhouse gases. The US and Europe have produced more than 50% of the world’s greenhouse gases. The time is ripe to make JEA part of the climate change solution.

Barry Cotter said he has sampled water in tributaries all over the City and has seen the effects of sea level rise in the conversion of treed areas to marshland - it’s a real phenomenon. The greenest form of transportation is bicycling, so that needs to be encouraged in future plans.

Council Member Bowman said that Governor DeSantis has hired the first State Resilience Officer. He has met with the Consul General of the Netherlands in the US and she offered to share that nation’s expertise in handling water, with which they have a long history.

Council Member Dennis said the budget preparation process is rapidly approaching and asked if the special committee should prepare a budget request relating to the committee’s work. Chairman Carlucci felt a request for a resilience officer was warranted. Mr. Dennis suggested that there is “low-hanging fruit” that could be easily tackled with some funding, such as improving storm drain inlets. Mr. Carlucci said the administration has pledged to work with the committee and the Council and the Council has the power of the purse to fund what it thinks is important.

**Meeting adjourned:** 4:00 p.m.

Minutes: Jeff Clements, Council Research Division

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