

# **St. Johns County Local Mitigation Strategy**



**Prepared By:**

**St. Johns County LMS Working Group and St. Johns County  
Emergency Management**

**ST. JOHNS COUNTY  
LOCAL MITIGATION STRATEGY**

*Originally Adopted by the St. Johns County Local  
Mitigation Strategy Working Group*

*2004*

*Most Current Update and Adoption*

*2025*

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## Section I – Planning Process

### A. Local Mitigation Strategy

In the spring of 1998, the Florida Department of Community Affairs initiated a program to assist local governments in developing plans to reduce or eliminate risks to people and property from natural and human caused hazards. This program became known as the Local Mitigation Strategy (LMS). Later, the Disaster Mitigation Act of 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act to require Hazard Mitigation Plans to receive certain federal mitigation grants.

Hazard Mitigation has gained increased attention over the years due to the large number of natural hazards which have occurred throughout the world and in the U.S. A main area of concern is the rapid rise in the costs associated with disaster recovery. Money spent prior to an event to harden the community and reduce the impacts of a disaster can result in substantial savings in life and property following the event.

The primary objective of the LMS is to remove, if possible, otherwise limit the loss of life and property due to a disaster. The advantages of developing a local LMS program are numerous including collaboration among community partners; identifying priority projects and programs for funding; and increasing the likelihood of federal and state funding for hazard mitigation projects.

### B. LMS Working Group

The LMS Working Group membership currently includes:

- **St. Johns County:** Board of County Commission, Emergency Management, Engineering Department, Fire Rescue, Growth Management, Health and Human Services, Animal Control, Public Works, Road and Bridge Department, Sheriff's Department, Utilities Department, Building Department, Community Redevelopment Agency
- **City of St. Augustine:** Administration, City Commission, Fire Department, Planning and Building Department, Utilities and Public Works, Police Department
- **City of St. Augustine Beach:** Public Works/Engineering, Building and Zoning
- **Other:** St. Johns County School District, Flagler Estates, UF Health St. Johns, Florida Forest Service, St. Johns River Water Management District, Northeast Florida Regional Council, University of Florida – IFAS Extension, Beaches Energy, Taylor Engineering, Florida Department of Transportation, Florida Division of Emergency Management (FDEM), St. Johns River State College, National Park Service, Florida School for the Deaf and Blind, Florida Department of Environmental Protection, Northeast Florida Regional Airport, Flagler College, St. Johns County Housing Partnership, Council on Aging, plus additional private sector businesses and interested residents.

The Working Group has nine (9) official voting positions. The Executive Committee members are nominated and voted in their positions annually. Each municipality and the school district are required to have a member on the Executive Committee. The current positions serving the executive committee are as follows:

1. Chair- St. Johns County Emergency Management- Coordinator
2. Vice Chair- St. Johns County Emergency Management- Deputy Director
3. Municipality- City of St. Augustine Beach- Building Official
4. Municipality- City of St. Augustine- Chief Resilience Officer
5. School District- Director of Facilities and Construction
6. St. Johns County Sheriff's Office- Emergency Manager
7. St. Johns County Utilities- Environmental Division Manager
8. St. Johns County Floodplain Management- Floodplain Manager
9. St. Johns County Chamber of Commerce- Senior Vice President of Economic Development

The official members of the voting group, also known as the Executive Committee, vote on all items at meetings that require action. Typical items that require actions include adding projects to the priority project list, approving project scores, and approving meeting minutes. Each municipal representative is responsible for ensuring LMS updates are adopted by their respective governing boards. Voting members are required to attend at least 50% of meetings. The LMS Working Group and Executive Committee are governed by the LMS Bylaws, which can be found in Appendix C.

### **C. Community Participation**

The LMS planning process requires opportunities for public participation throughout the update process and documentation of solicitation for public involvement. All LMS Working Group Meetings are advertised in a newspaper of general circulation and on the St. Johns County Emergency Management website at least 10 days prior to the date of the meeting. Copies of the public meeting advertisements can be found in each meeting's documents in Appendix B.

The LMS Working Group Chair maintains the list of LMS Working Group members including all participating jurisdictions, neighboring counties, interested community members, local businesses, relevant state agencies, community organizations, academia, private businesses and more. Individuals on the contact list receive meeting invites, meeting minutes and relevant programmatic updates. The list contains representatives from the County's Community Redevelopment Agency (CRA) and community liaisons for the underserved communities and vulnerable populations. Several people on the list also represent the Volunteer Organizations Active in Disaster (VOAD), which is comprised of community organizations that help the underserved population daily. The Council on Aging (COA) provides services to the vulnerable aging population and has recently rejoined the working group. Anyone wishing to be added to the contact list may request to be added. The most recent contact list, including names, organizations and titles of participating individuals can be found in Appendix A.

The LMS has two additional participating entities which qualify as "jurisdictions" according to FEMA's definition- Beaches Energy and St. Johns County School District. Beaches Energy is a non-profit power and natural gas provider that serves the City of Jacksonville Beach and a small segment of Ponte Vedra Beach and the Palm Valley area. Beaches Energy is part of the City of Jacksonville Beach government. They participate in and adopt the Duval County

LMS and the St. Johns County LMS. Beaches Energy has limited infrastructure in St. Johns County.

Minutes of each meeting are maintained by St. Johns County Emergency Management and have been included in Appendix B. Efforts are made to solicit ideas, comments, and information from the public including providing the LMS via the St. Johns County Emergency Management website, allowing the public an opportunity to comment at regular Working Group meetings, public information workshops, and presentations at Commission Meetings. Feedback received from those meetings and workshops is presented to the LMS Working Group for review and inclusion into the updated LMS.

#### **D. 2025 Update Planning Process**

St. Johns County Emergency Management serves as the lead agency for the update process. Staff from Emergency Management fill the roles of LMS Chair and Vice Chair. The Chair, and in the absence of the Chair, the Vice Chair assures meetings are conducted quarterly, working group members remain aware and engaged throughout the updated process, and all revisions meet federal and state requirements.

Working Group members provide specific information to Emergency Management staff for inclusion related to the following topics:

- Changes to the community profile since the previous update
- Identification of potential hazards affecting the community
- Identification of people and infrastructure vulnerable to hazards
- Identification of new or removed critical facilities
- Mitigation initiatives (projects)
- Funding sources.

Once relevant data is collected, St. Johns County Emergency Management performs the analysis and revisions to the LMS. Each section of the LMS is reviewed by the Working Group, revised as necessary, and then brought forth for final discussions, edits and approval.

The 2025 LMS update process kicked off at the February 15, 2024, LMS Meeting with a brief overview of the proposed timeline and process as well as some suggested changes. At this time feedback was also solicited from the members present. Revisions to the plan took place as time permitted throughout 2024. Some of the key milestones and changes are as follows:

- February 15, 2024 – kickoff meeting
- February – May – Plan update process, community profile and hazard profile revisions
- May 16<sup>th</sup> – (public) LMS meeting- overview of changes to date presented; input sought from members on various sections and goals
- May – August – revisions continued with the hazard and vulnerability section
- August 15<sup>th</sup> – (public) LMS meeting- revisions presented to working group
- September 11<sup>th</sup> – (public) LMS sub-committee meeting to discuss project prioritization methodologies
- November 1<sup>st</sup> – a draft of the LMS was distributed to the LMS Working Group for review

- November 21<sup>st</sup> – (public) LMS Meeting- plan is presented to the Working Group and members from the public.
- February 13<sup>th</sup> – (public) LMS Meeting- the plan with revisions resulting from the review process were presented.

To date, no public feedback has been received. Additional opportunities for feedback will occur at the public meetings when the LMS is presented to the governing boards for official approval. The LMS is a living document, and public feedback may result in minor changes to the plan at any point in time. St. Johns County, City of St. Augustine, City of St. Augustine Beach, the School District, and Beaches Energy will each adopt the plan by resolution upon approval by FDEM and the Federal Emergency Management Agency (FEMA).

## **E. Capabilities and Integration**

The purpose and success of the LMS is strengthened when existing planning mechanisms are in line with the LMS. Existing documents are used as references and incorporated into the LMS. Some of the existing planning mechanisms integrated into the LMS include the following:

- County and municipal comprehensive plans
- Strategic plans
- Land development regulations
- City codes
- State statutes
- Emergency management plans
- Vulnerability and adaptation plans required by the Florida Department of Environmental Protection for the Resilient Florida Grant Program.

These documents are used to develop and evaluate the goals, objectives and policies. Data from county/city GIS departments, the National Weather Service (NWS), National Oceanic and Atmospheric Administration (NOAA) and the Federal Emergency Management Agency (FEMA) were also integrated to complete the risk assessment. These same planning mechanisms are updated based on analysis from the LMS.

Integrating the LMS into other plans and programs enhances the purpose of the LMS. To reduce duplication of effort and streamline information, the County's Comprehensive Emergency Management Plan (CEMP) will now, as of the 2025 update, utilize the LMS for its risk assessment and community profile. The LMS will be an appendix to the CEMP. All changes made to the CEMP will be officially adopted by resolution by the St. Johns County Board of County Commissioners. The School District, City of St. Augustine, and City of St. Augustine Beach will adopt the CEMP via letters of promulgation along with other partner/supporting response agencies.

Currently, St. Johns County and the Cities of St. Augustine and St. Augustine Beach are active participants in the National Flood Insurance Program (NFIP). St. Johns County joined the NFIP on July 6, 1973, the City of St. Augustine joined October 11, 1972, and the City of St. Augustine Beach joined September 29, 1972. For a county or municipality to participate in

the NFIP, they must adopt a local flood damage prevention ordinance that requires jurisdictions to follow established minimum building standards in the floodplain. These standards require that all new buildings and substantial improvements to existing buildings be protected from damage by a 100-year flood event, and that new development in the floodplain does not exacerbate existing flood problems or increase damage to other properties. Each jurisdiction must continue to enforce codes and regulations compliant with requirements of the NFIP as to not jeopardize their good standing. At a minimum, St. Johns County, the City of St. Augustine and St. Augustine Beach will continue their commitment to NFIP in the following ways:

- Adopt, implement and enforce the local floodplain ordinance, which regulates and permits development in the Special Flood Hazard Area (SFHA) and designates a floodplain manager.
  - In the cities, the Building Official is identified as the Floodplain Administrator.
  - In St. Johns County, the Floodplain Manager is an authorized position in the Department of Growth Management.
- Maintain elevation certificates on file for all new construction in the SFHA or for substantial improvements to properties in the SFHA.
- Maintain public records and make the records available for review.
- Adopt the most recent Flood Insurance Rate Map (FIRM). (Most recent maps are effective as of December 7, 2018.)
- Maintain records pertaining to Letters of Map Amendments (LOMAS) and Letters of Map Revision (LOMR).
- Provide information related to flood hazards, flood maps, and other flood-related tools/data/resources to the public upon request.
- Continue to update the public and enable their participation in the flood remapping project.
- Maintain flood hazard publications at the main branch of the library.
- Where feasible, identify and acquire land in the SFHA for open space preservation.
- Promote flood hazard mitigation and flood insurance.
- Continue drainage maintenance and drainage system improvement projects.
- Conduct community outreach efforts for compliance with the Community Rating System (CRS) program.
- Continue floodplain management activities with the goal of maintaining CRS ratings of 5's (City of St. Augustine and St. Johns County) and 8's (St. Augustine Beach).
- Implement and enforce the following substantial improvement and substantial damage determination procedures:
  - For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the floodplain administrator, in coordination with the building official, shall:
    - (1) Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or

structure shall be the market value before the damage occurred and before any repairs are made

(2) Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure

(3) Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; the determination requires evaluation of previous permits issued for improvements and repairs as specified in the definition of "substantial improvement" and

(4) Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the Florida Building Code and this article is required.

The LMS has been used extensively with the CRS and is used to satisfy the 510-Floodplain Management Plan criteria for all jurisdictions represented in the LMS, including City of St. Augustine, St. Augustine Beach, and St. Johns County. The incorporation of the LMS into the CRS has assisted St. Johns County and the City of St. Augustine with receiving Class 5 CRS ratings.

Other existing planning mechanisms also help define each jurisdiction's capabilities to be a more resilient community. Items that contribute to the resiliency and mitigation capabilities include the adoption of building codes, participating in the NFIP, and having multiple plans and programs that address local hazards. Additionally, dedicated grant staff and resiliency positions have proven to be beneficial capabilities to reduce risk. One capability of each of the cities and the county is that they have the ability to hire contractors to assist when work exceeds the capabilities and workload of staff, which has proven beneficial when applying for mitigation grants.

Table 1: Mitigation Related Planning Mechanisms and Capabilities provides a summary of other relevant local plans, ordinances, programs, and staffing capabilities within the county and the cities that promote mitigation efforts.

*Table 1: Mitigation Related Planning Mechanisms and Capabilities*

Plan/Ordinance/Capability	St. Johns County	City of St. Augustine	City of St. Augustine Beach	School District
<b>Comprehensive Plan</b>	X	X	X	C
<b>Land Development Code</b>	X	X	X	C
<b>Florida Building Code</b>	X	X	X	X
<b>Building Code Effectiveness Grading Schedule (BSEGS) Rating (Commercial / Residential)</b>	3/4	3 / 4	2 / 3	n/a
<b>Stormwater management program</b>	X	X	X	C

<b>Site plan review requirements</b>	X	X	X	X
<b>Capital Improvement Plan</b>	X	X	X	X
<b>CEMP</b>	X	X	X	X
<b>Flood Insurance Study or other flood study requirements</b>	X	X	X	C
<b>Participates in the NFIP</b>	X	X	X	n/a
<b>Participates in the CRS</b>	X	X	X	n/a
<b>Post-Disaster Redevelopment Plan</b>				
<b>FDEP Vulnerability Assessment</b>	X	X	*	C
<b>FDEP Adaptation Plan</b>	*	*	*	
<b>Designated resiliency position</b>	X	X		
<b>Dedicated grant staff</b>	X	X		
<b>Ability to contract with subject matter experts to augment staffing levels</b>	X	X	X	X
<b>Participates in Resilient First Coast initiative</b>	X	X	X	
* - indicates “under development”				
X - indicates currently “in place”				
C – indicates it’s covered by another jurisdiction’s requirements				

St. Johns County, the City of St. Augustine, and St. Augustine Beach are in various stages of developing Adaptation Plans under the Resilient Florida Grant Program. The Adaptation Plan includes an expanded capabilities assessment. The St. Johns County draft Adaptation Plan has been included as Appendix G. As participating cities complete their adaptation plans and capability assessments, they will be included with St. Johns County’s.

After the development of the 2020 LMS, the City of St. Augustine and St. Augustine Beach found ways to utilize the information to create new mitigation related policies. Utilizing the information from the risk assessment, the City of St. Augustine sought ways to reduce flooding to existing developed areas because of impacts from new development. The city created a Building Code Taskforce which recommended two new building permit requirements—a grading and drainage plan and a maximum impervious surface ratio. This process was such a success that it will be resurrected in 2025 to address bulkheads/seawalls and fill limits for new construction.

Subsequent to the last LMS update, the City of St. Augustine Beach identified the need for stormwater utility implementation to provide a dedicated funding source for stormwater management projects which help mitigate flooding and increase community resilience. As a result, the city developed a non-ad valorem special assessment (NAVSA). The NAVSA is of a tiered rate structure and applies to SFR, SFA, MFR and NSFR parcels within the City of St. Augustine Beach city limits. Additionally, the special assessment helps fund the City’s stormwater system:

- Operation and Maintenance Program
- Capital Improvement Project Plan; and
- Reserves for:
  - Future projects



- Mizell Stormwater Management Facility operations and maintenance

This funding program will be evaluated in the next update to better understand how it helped reduce flooding in the City’s jurisdiction.

St. Johns County’s Comprehensive Plan is in the process of being updated. The Evaluation and Appraisal Review (EAR) component of the plan is updated every seven years. The county is in the process of updating the plan currently and hopes to have it approved by August 2025. The Coastal Management Element of the plan states, “As developments occur in the Coastal Management Area, the County will consider potential impacts on (but not limited to): natural resources, water-dependent or water-related uses, public facilities, emergency evacuations and shelters, and drainage. Consideration will also be given to the property’s potential for impacts from storm surge, sea level rise, and other coastal flood-related issues.” St. Johns County Emergency Management staff intends to meet with the consultants preparing the plan updates to incorporate the LMS where appropriate.

As previously mentioned, Beaches Energy is a part of the City of Jacksonville Beach’s government organization. Beaches Energy serves a segment of St. Johns County with power, but their operation is affiliated with the City of Jacksonville Beach. Beaches Energy is actively engaged in the St. Johns County LMS and seeking to mitigate their infrastructure located in St. Johns County. However, they do not have the ability to create new planning or land development regulations within St. Johns County.

The St. Johns County School District has 51 total schools. The district has been steadily building new schools throughout the whole county to keep up with a growing demand. Due to the proximity of St. Johns County to the Atlantic Ocean, schools are already required to be built to a strong building code. The School District is responsible for following all applicable building codes and for permitting their own structures. They participate in the development of other plans like the Vulnerability Assessments and the Comprehensive Plan. Programs like the NFIP, CRS and BSEGS are only available to municipalities, not governmental entities with limited jurisdiction. Other regulations are applied and implemented based on where the individual schools are located.

St. Johns County Emergency Management and the School District work closely to ensure there is adequate hurricane evacuation shelter space available to meet the growing population demand. While schools are built to endure a high wind load, evacuation shelters have even higher standards. It is more cost effective to build new schools to meet the shelter design standards than retrofit older schools. Planned schools are evaluated for shelter suitability based on demand and location relative to other hazards (floodplains, evacuation zones, etc.). Schools built to shelter standards have reduced vulnerabilities and contribute to the community’s resilience.

St. Johns County has some considerations and recommendations for redevelopment in the Coastal Management Element of the Comprehensive Plan. No comprehensive Post-Disaster Redevelopment Plan exists in the County or the cities. In the future, the jurisdictions and LMS

Working Group partners should work together to develop a countywide plan that would reduce future vulnerabilities to the many identified natural hazards.

## **F. Plan Monitoring, Evaluation and Future Updates**

The St. Johns County Emergency Management Coordinator, who also serves as the LMS Chairperson, is responsible for monitoring and evaluating the plan. The Chair will monitor any changes throughout St. Johns County and make sure the information is promptly and properly conveyed within the LMS. The Plan, including project implementation status, is monitored on an ongoing basis and any necessary changes are presented to the LMS Working Group via email or at the next quarterly public meeting.

The plan will be evaluated annually as a part of the Florida Administrative Code 27P-22 update, which is due by the last working day of January or following a disaster. Items that will be considered during the evaluation process include the following:

- Are the goals and objectives still relevant?
- Are there any gaps in the goals and objectives?
- Has there been any changes in development that could impact our risk or vulnerabilities?
- Are there any changes to our Repetitive Flood Loss lists?
- Are there any changes to our critical facilities?
- Are we successfully implementing projects?
- Have there been any shifts or trends with the typical funding mechanisms? Are there new ones?

Over the five-year implementation timeframe of the LMS, the Working Group will continue to meet quarterly. All meetings will continue to be advertised to the public via the LMS website and local newspaper. The LMS also serves as the Floodplain Management Plan for the City of St. Augustine, St. Augustine Beach and St. Johns County under the CRS program. As a part of the annual CRS recertification, each community must provide the following information publicly:

1. Describe where a copy of the credited Floodplain Management Plan or Repetitive Loss Area Analysis can be obtained
2. Describe how this annual progress report was prepared and how it was submitted to the governing body, released to the media, and made available to the public
3. Updates to the implementation to flood-related action items (projects).

These updates are shared with local media, elected officials and posted to the County's website for the public to access.

After major disaster declarations the LMS Working Group harnesses the assistance of FEMA representatives canvassing the community and at Disaster Recovery Centers. The LMS Chair is responsible for meeting with FEMA Leads to help spread accurate messages about mitigation in the community and becoming involved with the LMS. This process helps the community become aware of funding options and how they can be involved. Public interest

in the LMS and mitigation funds is high after a disaster and there is usually an increase in public participation at LMS meetings for a few quarters.

A comprehensive update will be conducted every five years. The full update will begin approximately 18 months prior to expiration. LMS Working Group members will receive email notifications and will be asked to contribute to portions of the plan that directly affect their respective jurisdictions. In addition, the Working Group will be asked to review and contribute to portions of the plan that affect all participating jurisdictions. The LMS Chair will be responsible for ensuring the five-year update is completed in a timely fashion. The draft plan will be posted online for public comment alongside the currently approved plan for comparison. The Working Group will then hold at least one public workshop along with its regularly scheduled meetings for public input. The plan will be submitted to the State's Mitigation Planning Unit approximately six months prior to expiration for their review and approval. Once the plan is approved by the State's Mitigation Planning Unit it will go before each jurisdiction's governing board for adoption and then forwarded to FDEM and the Federal Emergency Management Agency (FEMA) for final approval.

Once the LMS is approved by the State of Florida and the FEMA, the role of St. Johns County Emergency Management Staff is to review and adjust accordingly per the monitoring and evaluation outlined above.

## **Section II - Goals**

### **A. Goals**

The LMS Working Group developed five overarching goals to help keep the whole community better protected from future hazard impacts. There have been no substantial changes in the levels of risk from the identified hazards, no major shift in the mission of the Mitigation Working Group, and no change in direction from the jurisdiction's leadership between the 2020 and the 2025 plan. The LMS Working Group reviewed as a part of the 2025 plan update and determined to still be adequate, valid and consistent with other plans.

- 1. Protect the lives of the residents of St. Johns County and its municipalities.**
- 2. Protect property to ensure that its intrinsic value is preserved.**
- 3. Protect infrastructure so that it is available during and after a disaster.**
- 4. Protect business activities so that they continue to provide economic strength to the community.**
- 5. Protect the natural environment to ensure that quality of life and economic wellbeing are preserved.**

These goals are used as part of the project prioritization methodology. Projects recommended by Working Group members must first meet one of the goals to be considered.

## Section III – Community Profile

### A. County Description

St. Johns County is a rapidly growing county situated in the northeast Florida region, bounded by the Atlantic Ocean with approximately 42 miles of Atlantic Ocean shoreline on the east and the St. Johns River on the west. St. Johns County has a land area of 601 square miles, the longest shoreline in northeast Florida, and 221 square miles of water. The average elevation in St. Johns County is estimated at 15 feet.

There are two incorporated municipalities in St. Johns County – the City of St. Augustine and the City of St. Augustine Beach. Other notable unincorporated areas include Hastings, Ponte Vedra, Ponte Vedra Beach, Vilano Beach, St. Johns, Crescent Beach, Butler Beach, Fruit Cove, and Elkton. The county seat, St. Augustine, is the oldest permanent settlement in the United States. The City’s historic resources, downtown area and special events attract millions of tourists annually.

### Population and Housing

According to the US Census the total population in 2010 was 190,039. In 2020 the population increased to 273,425 (37.8% increase). The population has continued to increase and according to 2023 population estimates from the University of Florida’s Bureau of Economic and Business Research (BEBR), there are now more than 315,000 individuals living in St. Johns County.

The City of St. Augustine has a population of 15,307 people (2023 BEBR) and a land area of 9.43 square miles. St. Augustine Beach has a 2023 population estimate of 6,953 people.

The population of St. Johns County’s median age is 43.3- slightly older than the 41.8 years old of Florida. The population under age 65 accounts for nearly 82% of the population. Approximately 6.8% of people under the age of 65 have a disability.

*Table 2: St. Johns County Population Distribution by Age*

Population Distribution by Age	
Under 18	22.1%
18-21	4.81%
22-39	18.8%
40-64	36.2%
65+	18.1%

Source: <https://statisticalatlas.com/county/Florida/St-Johns-County/Age-and-Sex>

According to 2023 estimated Census data, 87.2% persons spoke only English at home and 12.6% spoke a language other than English at home in St. Johns County. These numbers only consider the population aged 5 years or older.

Table 3: Other Vulnerable Populations

Population Type	Location	Number
Special Medical Needs	Throughout County	458 registered with Emergency Management
Transients/homeless	Throughout County	442
SJC Detention Center (Inmates)	4500 Avenue D St. Augustine	664 at max capacity
Deep Creek Youth Academy	765 East St. Johns Ave. Hastings	64
SJC Community Work Release Center	4500 Avenue D St. Augustine	100 beds

Like other coastal counties of the State, a large portion of the population is concentrated along the county's main bodies of water: the Atlantic Ocean, Atlantic Intracoastal Waterway, and along the St. Johns River. These are areas most vulnerable to the effects of hurricane storm surge, wind, and freshwater flooding. Development along the ocean and the resulting vulnerability of that population to natural hazards is a major concern of emergency management planners.

The growing population is the leading requirement for more houses to accommodate the population.

Table 4: Household and Persons per Households per Year according to BEBR

Number of Households and Persons per Household (PpHh)						
	2010		2020		2023 (estimate)	
	Households	PpHh	Households	PpHh	Households	PpHh
St. Johns County	75,338	2.49	104,640	2.58	119,966	2.59

A concern of emergency managers is mobile home communities and scattered mobile homes located throughout the county. In 2000, there were 7,688 mobile homes which accounted for 13.3% of dwelling units. According to the American Community Survey as of 2023 the number of mobile homes in St. Johns County decreased to 5,051, accounting for 4.22% of all dwelling units. Occupants of mobile homes account for approximately 13,300 individuals that could potentially be affected by hazardous weather.

The value of property in St. Johns County has risen significantly over the last 4 years. Table 5 below illustrates the total value of property in St. Johns County from 2024. The average value of residential property went from \$228,702 to nearly \$450,000 while agriculture rose from \$57,111 to \$822,466.

Table 5: St. Johns County Property Types and Values - 2024

	Total Parcels	Just Value (\$)	Average Value (\$)
Residential	145,214	65,139,962,299	448,579
Commercial	4,546	5,330,127,539	1,172,487
Industrial	567	789,794,127	1,392,934
Government	1,704	2,241,897,528	1,288,446
Institutional	440	1,056,240,027	2,400,545
Agricultural	1,661	1,366,116,424	822,466
<b>TOTAL</b>	<b>154,132</b>	<b>75,924,137,944</b>	

## Economy

St. Johns County is a high tourism area. The City of St. Augustine, St. Augustine Beach and Ponte Vedra Beach draw millions of visitors each year. Tourism is one of St. Johns County's primary economic engines. Visitors are spending more than \$2.4 billion in the county annually. The largest employment industries in St. Johns County include health services and education, professional and business services, finance, insurance, and real estate.

Table 6: Employment by Major Sector

Industry	Number of Employees	Percent
Agriculture, forestry, fishing and hunting, and mining	557	0.4%
Construction	8,113	5.3%
Manufacturing	8,709	5.7%
Wholesale trade	3,816	2.5%
Retail trade	17,983	11.8%
Transportation and warehousing, and utilities	7,548	4.9%
Information	2,246	1.5%
Finance and insurance, and real estate and rental and leasing	22,317	14.6%
Professional, scientific, and management, and administrative and waste management services	21,849	14.3%
Educational services, health care and social assistance	30,398	19.9%
Arts, entertainment, recreation, and accommodation and food services	15,659	10.3%
Other services, except public administration	7,803	5.1%
Public administration	5,752	3.8%
<b>TOTAL</b>	<b>152,750</b>	<b>100%</b>

Source: US Census Bureau, American Community Survey, 2020

Table 7: Labor Statistics

St. Johns County Labor Force Statistics - 2023	
Civilian Labor Force	177,831
Employed	138,059
Unemployed	4,048
Unemployment Rate	2.2%
Armed Forces	773
Not in Labor Force	35,724

Source: US Census Bureau, American Community Survey, 2023

### Income and Earnings

Per capita personal income in St. Johns County was estimated at \$52,096 while the state's average is \$38,850. The Median Household Income is estimated to be \$105,153. However, 6.0% of the St. Johns County population was classified as living below the poverty level (American Community Survey 2023 estimates).

### Environmentally Sensitive Areas

St. Johns County is part of the Atlantic Coastal Plain that is comprised of a diverse mixture of land cover that ranges from coastal marshes to upland oak hammocks and scrub areas. Included in the county are commercial and natural forest areas, rivers and associated wetlands. The large, forested areas in the county such as the Guana Tolomato Matanzas National Estuarine Research Reserve and Matanzas State Forest provide refuge for a wide variety of animal and plant species. The east and west coastlines provide habitats for plants and animals, protection from storms, recreational opportunities and economic income for the county. The sandy beach is generally backed by a dune system, which can reach heights of 40 feet, but typically ranges from 10 to 20 feet high. Other vulnerable areas are described within each hazard profile.

### Land Uses and Development Trends

St. Johns County exhibits a pattern of rural, suburban and urban land uses. In the northwest and northeast part of the County there are intensive single family, multi-family, and commercial urban land uses. Both urban and suburban land uses dominate the east central portion of the County in and around the City of St. Augustine. Residential and Commercial development exists and are expanding both north and south of St. Augustine along US-1 and I-95. Recreation land uses also exist along the barrier islands and along the St. Johns River in the County.

In the last three decades, intense development occurred in the northwest portion of the County including Fruit Cove, Julington Creek, Switzerland, and areas around 210 West. Development of several large subdivisions and commercial properties are also emerging along US-1, SR-16 and I-95 corridors. Nocatee, Silverleaf, Shearwater and Rivertown are all large residential neighborhoods in northern St. Johns County.

Over the past five years, St. Johns County, Florida, has experienced significant development across various sectors, including residential, commercial, healthcare, and infrastructure.

**Residential Development:**

The county has seen substantial residential growth, with numerous housing projects underway to accommodate the increasing population. For instance, the Seccession Subdivision, approved in April 2024, plans to develop up to 99 single-family units with related amenities. However, not all proposed developments have been approved. In September 2024, the St. Johns County Board of Commissioners unanimously denied a rezoning request for a 247.26-acre site intended for up to 376 homes, citing traffic concerns raised by residents.

**Commercial Development:**

The World Commerce Center, a mixed-use development south of the World Golf Village, has expanded significantly. Recent additions include a Costco Wholesale Warehouse, a Buc-ee's convenience store with 104 fueling stations, and a Bass Pro Shops. A Home Depot is slated to open soon and a Walmart is preparing to begin construction.

**Healthcare Expansion:**

In healthcare, Flagler Health+ has undergone significant changes. In September 2023, it merged with UF Health, resulting in the rebranding of Flagler Hospital to UF Health Flagler Hospital and the health system to UF Health St. Johns. Ascension St. Vincent's Hospital and several new stand-alone Emergency Rooms have opened over the last five years. A new clinic is also underway in the West Augustine Community.

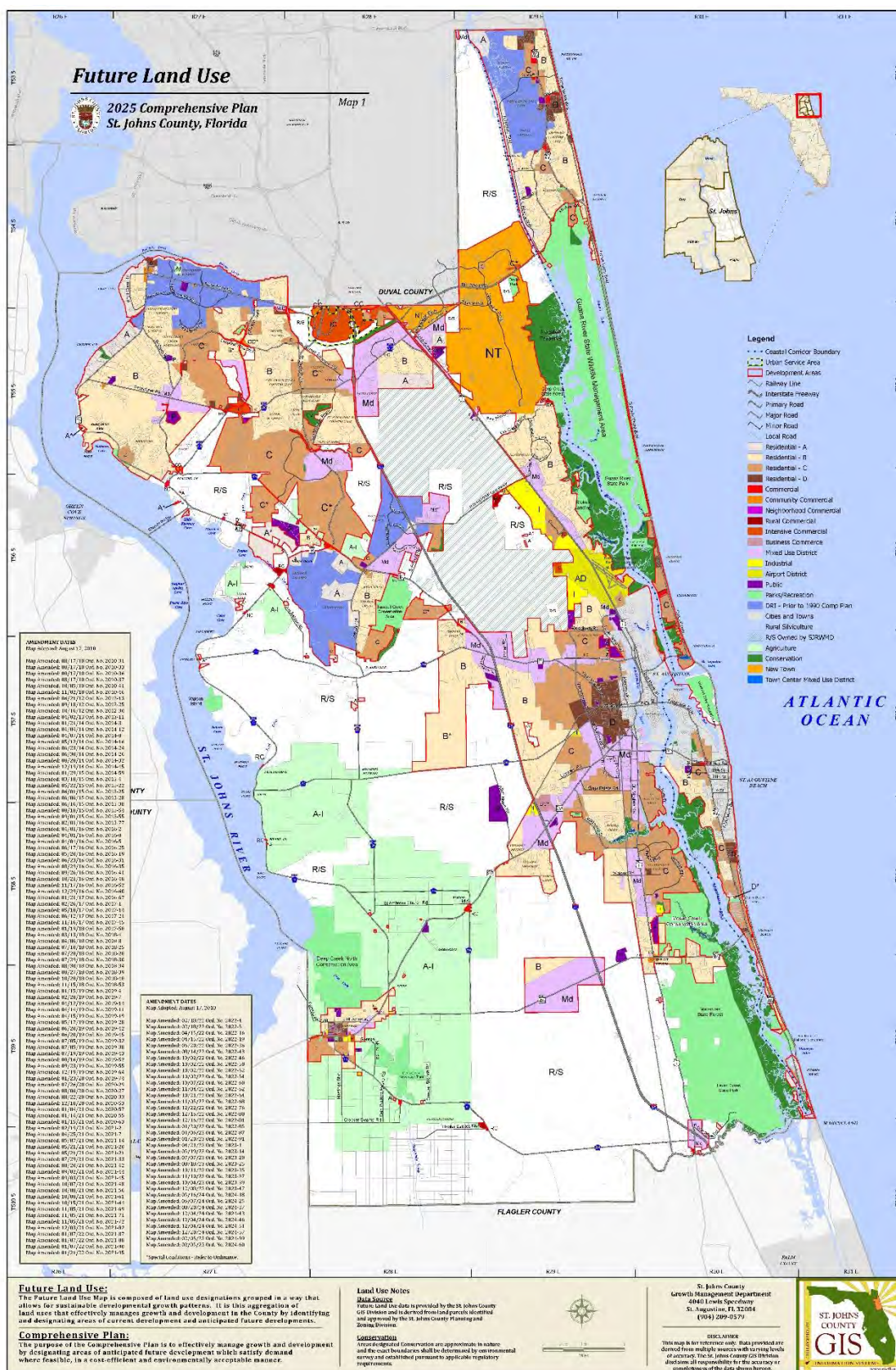
The county is preparing for a potential doubling of its population by 2050, prompting the development of a 25-year growth plan. To manage the rapid growth, the county has undertaken a Comprehensive Plan update. This plan aims to effectively manage growth and development by designating areas of anticipated future development which satisfy demand where feasible, in a cost-efficient and environmentally acceptable manner.

Figure 1: Future Land Use Map is composed of land use designations grouped in a way that allows for sustainable developmental growth patterns. It is this aggregation of land uses that effectively manages growth and development in the County by identifying and designating areas of current development and anticipated future developments.

Overall, St. Johns County has experienced dynamic development over the past five years, with ongoing projects and planning efforts aimed at accommodating growth and enhancing community infrastructure. These developments have led to both increased opportunities and vulnerabilities as explained throughout the natural hazards section. However, even with all the growth and changes throughout St. Johns County and its participating jurisdictions, because it was anticipated and takes into account strong building and floodplain management codes, it did not change the direction or priorities of the LMS.



Figure 1: Future Land Use Map



## IV. Risk Assessment

During the 2025 update process, it was determined that the LMS should serve as the single risk assessment for the County. As a result, hazards not historically included in the LMS have been integrated to meet the requirements of the St. Johns County CEMP.

Only hazards that have been determined to pose a significant risk to the county or stakeholders of either plan will be fully profiled. Natural and human-caused hazards not fully profiled include the following:

- Tsunamis – there is no history of previous tsunamis, no nearby faults, and if one were to occur, any impacts are expected to be minimal and localized to the shore
- Sinkholes – there is no karst topography in this area of Florida
- Earthquakes – St. Johns County is not near a fault line
- Dam/levee failure – there are no significant dams or levees in St. Johns County
- Commercial nuclear power plant incidents – there are no nuclear power plants nearby.

### A. Natural Hazards

Each natural hazard profile contains the following information:

- Overview- a definition and general information of the hazard being described.
- Location- where the hazard occurred or could occur.
- Historical occurrences- the number of times a hazard has occurred. If a recorded event occurred within the past five years, it was noted in this LMS update. However, if an event was not noted, that does not indicate a decreased probability of occurrence, simply that the county has had period of inactivity for that hazard.
- Impacts- what has or could happen to each participating jurisdiction and the identified assets.
- Probability of future events- the likelihood of a hazard occurring in the future. Historical information from trustworthy sources is used to help calculate the probability of the hazard occurring. Often the probability is calculated based on the number of times a hazard has historically occurred. Official sources include the NWS, United States Geological Survey, Florida Forest Service, FDEM, Florida Department of Environmental Protection, Florida Department of Law Enforcement and others. Probability may also be referred to by the following scale:
  - Highly likely- Hazard is expected to occur at least annually
  - Likely- Hazard may occur once every 1-5 years
  - Possible- Hazard is expected to occur every 5-10 years
  - Low- Hazard occurs less than one time every 10 years
- Extent- how bad could it potentially be?
- Vulnerability- what is susceptible to impacts from the hazard? How has or will vulnerability change based on development changes?

### 1. Tropical Cyclones

A tropical cyclone is a rotating, organized system of clouds and thunderstorms that originates over tropical or subtropical waters and has a closed low-level circulation. Tropical cyclones rotate counterclockwise in the Northern Hemisphere. They are classified as follows:

- Tropical Depression: A tropical cyclone with sustained winds of 38 mph (33 knots) or less.
- Tropical Storm: A tropical cyclone with sustained winds of 39 to 73 mph (34 to 63 knots).
- Hurricane: A tropical cyclone with sustained winds of 74 mph (64 knots) or higher. In the western North Pacific, hurricanes are called typhoons; similar storms in the Indian Ocean and South Pacific Ocean are called cyclones.
- Major Hurricane: A tropical cyclone with sustained winds of 111 mph (96 knots) or higher, corresponding to a Category 3, 4 or 5 on the Saffir-Simpson Hurricane Wind Scale.

Hurricanes are categorized on the Saffir-Simpson Hurricane Wind Scale from 1 through 5 as described in Table 8.

Table 8: Saffir Simpson Hurricane Wind Scale

Category	Sustained Winds	Types of Damage Due to Hurricane Winds
1	74-95 mph 64-82 kt 119-153 km/h	<b>Very dangerous winds will produce some damage:</b> Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.
2	96-110 mph 83-95 kt 154-177 km/h	<b>Extremely dangerous winds will cause extensive damage:</b> Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.
3 (major)	111-129 mph 96-112 kt 178-208 km/h	<b>Devastating damage will occur:</b> Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4 (major)	130-156 mph 113-136 kt 209-251 km/h	<b>Catastrophic damage will occur:</b> Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months.
5 (major)	157 mph or higher 137 kt or higher 252 km/h or higher	<b>Catastrophic damage will occur:</b> A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks to months.

Hurricane winds can cause significant property damage, but traditionally, the greatest threat to life is flooding and storm surge. Although hurricane winds can exert tremendous pressure against a structure, a large percentage of hurricane damage is caused not by wind itself, but from flying debris. Tree limbs, signs and signposts, roof tiles, metal siding, and other loose objects can become airborne missiles that penetrate the outer shells of structures, destroying their structural integrity. Driving rains associated with hurricanes can enter through even the smallest openings or through penetrated exteriors exacerbating interior damage.



The external and internal pressures generated against a structure by wind vary greatly with increases in elevation, shapes of buildings, openings in the structures, and the surrounding buildings and terrain. High-rise buildings, particularly those located along the beachfront, will receive the full strength of a hurricane's wind on their upper stories.

Hurricane winds generate massive quantities of debris, which can easily exceed a community's solid waste capacity. This debris can cause environmental concerns due to the nature of the debris, some of which will be considered hazardous materials. Debris can block roads, impacting recovery.

### **1.1 Tropical Cyclone Location**

All of St. Johns County and its jurisdictions is vulnerable to impacts from tropical depressions, tropical storms and hurricanes. The effects of an impacting tropical cyclone will depend upon strength, direction, size and location. A large storm can impact the entire county whereas a smaller storm may only impact inland or coastal areas.

### **1.2 Tropical Cyclone History**

The last hurricane to make landfall in St. Johns County was Hurricane Dora in 1964. Since Dora, numerous hurricanes and tropical storms have impacted the area. Notable recent impacts include hurricanes Matthew (2016), Irma (2017), Ian (2022), Nicole (2022), Helene (2024), and Milton (2024).

Hurricane Matthew passed 30 miles offshore of St. Johns County on October 7, 2016, as a Category 3 hurricane. Hurricane force winds along the coast and tropical storm force winds throughout the county caused significant power outages, tree damage and to a lesser extent, structural damage. Hurricane Matthew produced significant storm surge flooding along the Atlantic coast. According to the NWS Jacksonville the highest recorded wind speed was 65 mph with gusts to 86 mph. Storm surge flooding along the Atlantic coast ranged from 2 to 7 feet above ground level, and approximately 5 feet in some areas along the St. Johns River. Heavy rainfall of between 4-10 inches was recorded across St. Johns County and its municipalities.

Hurricane Irma passed to the west of St. Johns County on September 10, 2017, as a Category 1 hurricane. Hurricane force winds and tropical storm force winds throughout the county resulted in significant power outages and tree damage. Hurricane Irma produced significant storm surge flooding along both the Atlantic coast and St. Johns River. According to the NWS Jacksonville the highest recorded wind speed was 65 mph with gusts to 78 mph. Storm surge flooding along the Atlantic coast ranged from 1-4 feet above ground level, and 1-4 feet along the St. Johns River. Heavy rainfall of between 8-10 inches was recorded across St. Johns County and its municipalities. Irma also produced two tornadoes that will be further discussed in the tornado hazard portion of the plan.

Hurricane Ian was a large tropical cyclone that made landfall on September 28, 2022, in southwest Florida near Cayo Costa as a strong Category 4. Ian thrashed parts of Florida's western coast, bringing intense winds, heavy rainfall, and catastrophic storm surges. A storm surge with an inundation of an unprecedented 12 to 18 feet above ground level was reported

along the southwestern Florida coast. Ian was downgraded to a tropical storm on September 29<sup>th</sup> as it tracked inland, crossing over the Florida peninsula leaving a pathway of excessive rainfall. Storm surge and heavy rainfall flooding began in downtown St. Augustine on the morning of September 29<sup>th</sup>. Ian flooded several areas of the county including Davis Shores, Butler Beach, Treasure Beach, and North Beach. Surge inundation reached levels near that of Hurricane Matthew in 2016 and beaches were severely eroded. Rainfall amounts between September 28<sup>th</sup> and 30<sup>th</sup> totaled just over 16 inches in portions of the county. There was an estimated \$37.8 million in losses caused to residential property. Damage assessment teams found 380 affected structures, 223 with minor damage, and 33 structures with major damage.

On Tuesday, November 8<sup>th</sup>, just six weeks after Hurricane Ian impacted the area, Tropical Storm Nicole formed. Nicole continued to intensify into a Category 1 Hurricane after making landfall in the northern Bahamas. The storm then made landfall along the Florida east coast near Vero Beach during the early morning hours of November 10<sup>th</sup>. Substantial impacts were felt along the east coast of the state as hurricane-force winds, heavy rainfall, and high surf battered the region of the coastline still reeling from Hurricane Ian.

Locally, Nicole added to the erosion of the beach and dunes from Ian. A majority of the areas flooded from Hurricane Ian received a second round of flooding. State Road A1A in South Ponte Vedra Beach was washed out and residents became stranded when they attempted to evacuate as flood waters began to rise. Areas heavily impacted include Davis Shores, Summer Haven, Butler Beach, Treasure Beach, North Beach, Vilano Beach, Porpoise Point, and Roscoe Boulevard. In total, there was an estimated \$34.1 million in losses from structures classified as either affected (319), minor (177), or major (20).

In 2023 St. Johns County braced for impacts from Hurricane Idalia but received no notable impacts.

In 2024 the County also prepared for impacts from Hurricane Debby's forecasted heavy rainfall. While portions of the county did receive sustained tropical storm force winds, rainfall totals were less than anticipated and there was no major wind damage.

September 26-27<sup>th</sup> of 2024 Hurricane Helene moved north along the Florida Peninsula in the Gulf of Mexico and made landfall in Taylor County as a Category 4, causing a historic storm surge and extensive damages along the Gulf Coast all the way up into Western North Carolina. Helene's large size resulted in sustained tropical storm force winds with maximum recorded gusts of 68 mph in St. Johns County. Downed trees caused power outages and numerous roofs throughout the county had minor damage to their roofs (shingle damage).

Three weeks after Hurricane Helene made landfall, Hurricane Milton made landfall near Siesta Key as a Category 3 and exited near Cape Canaveral as a Category 1. Upon exiting, Milton interacted with a passing front and transformed into a system with extra-tropical characteristics causing stronger, onshore winds on the north side of the storm. St. Johns County recorded wind gusts as high as 70 mph at the Ponte Vedra Fire Station and sustained winds of 40-65 throughout the county. Rainfall totals ahead of Milton and through the storm's

departure totaled between 9-15 inches. Flooding occurred in Hastings and Flagler Estates. The USGS River Gauge on Deep Creek in Spuds reached a new record high.

The following storms affected Northeast Florida and St. Johns County in the past 40 years:

Storm Name	Date
Tropical Storm Isadore	September/October 1984
Hurricane Bob	July 24, 1985
Tropical Storm Chris	August 1988
Tropical Storm Josephine	October 1996
Tropical Depression Georges	September/October, 1998
Hurricane Floyd	September 15, 1999
Tropical Storm Gabrielle	September 2001
Hurricane Charley	August 2004
Hurricane Frances	September 2004
Hurricane Jeanne	September 2004
Tropical Storm Ophelia	September 2005
Tropical Storm Alberto	June 2006
Tropical Storm Ernesto	August 2006
Tropical Storm Fay	August 2008
Tropical Storm Beryl	May 2012
Tropical Storm Debby	June 2012
Hurricane Matthew (Category 3)	October 2016
Hurricane Irma (Category 1)	September 2017
Hurricane Dorian (Category 2)	September 2019
Hurricane Ian	October 2022
Hurricane Nicole	November 2022
Hurricane Idalia	August 2023
Hurricane Debby	August 2024
Hurricane Helene	September 2024
Hurricane Milton	October 2024

### 1.3 Tropical Cyclone Probability

According to the Center for Climate and Energy Solutions, climate change is worsening hurricane impacts in the United States by increasing the intensity and decreasing the speed at which they travel. Scientists are currently uncertain whether there will be a change in the number of hurricanes, but they are certain that the intensity and severity of hurricanes will continue to increase. These trends are resulting in hurricanes being far more costly in terms of both physical damage and deaths.

Hurricane Dora was a category 2 when it made landfall in St. Johns County. Since then, no other hurricane has made landfall in northeast Florida. Despite historically low direct hits, St. Johns County is not immune to landfalling hurricanes. Tropical cyclones are likely to impact the area at least once every 1 to 5 years. Dora was a category 3 just before landfall. Taking

into account considerations of a changing climate and stronger storms, a category 5 hurricane cannot be ruled out.

*Table 9: Probabilities of a Tropical Cyclone Impact in St. Johns County*

Tropical Cyclone Impact Probabilities*									
County	# Named Storms 1880-2020	# Hurricanes 1880-2020	# Major Hurricanes 1880-2020	2024 Forecast Probability of Named Storm impact	2024 Forecast Probability of Hurricane impact	2024 Forecast Probability of Major Hurricane impact	Average Probability of Named Storm impact	Average Probability of Hurricane impact	Average Probability of Major Hurricane impact
<b>St. Johns</b>	68	23	5	51%	21%	5%	38%	15%	3%
*Defined as one or more storms within 50 miles of location									
Source: <a href="https://tropical.colostate.edu/TC_impact.html">https://tropical.colostate.edu/TC_impact.html</a>									

## 1.4 Tropical Cyclone Vulnerability

St. Augustine is the Nation's Oldest City and its location on the Atlantic Coast leaves it vulnerable to the high winds of hurricanes. Its age alone makes the structures and infrastructure particularly vulnerable to hurricane damage. St. Augustine has old, historically significant structures whose loss would represent the loss of irreplaceable historical and cultural resources.

The proximity of dense population to the Atlantic Ocean, as well as the generally low coastal elevations, significantly increases the County's vulnerability. An important community lifeline, UF-Health St. Johns hospital is in a highly vulnerable location.

While all of St. Johns County is vulnerable in some degree to high winds, if a hurricane were to occur, there are certain areas and structures more vulnerable. The following areas/structures are the most susceptible to high winds from a hurricane:

- Areas along the Atlantic shoreline and Intracoastal Waterway
- Areas adjacent to the St. Johns River
- Multi-story buildings
- Mobile/manufactured homes, particularly older ones
- Unmitigated homes built before 2002

For major hurricanes (Category 3+), flying debris can make any structure without window protection or impact rated windows more susceptible to damage.

### Future Vulnerability

The potential for property damage and human casualties in St. Johns County has increased over the last several decades primarily because of the rapid growth this county has experienced, particularly along the vulnerable coastline areas.

One thing Florida learned after Hurricane Andrew was that strong building codes can reduce loss, shorten recovery, and they are necessary. The Florida Building Code sets the minimum

building regulations that each county and municipality must adhere to. Counties and municipalities may require stronger or stricter codes. Structures built in the wind-borne debris region must be built to withstand impacts from high wind impacts and structures inland must be built to withstand at least 110 mph wind loads. Future development in St. Johns County will be required to meet the stringent building code, making the community better able to withstand hurricane winds than structures built before 2002.

Florida Power and Light (FPL), JEA, and Beaches Energy have all witnessed the impact mitigating the power grid can have on recovery and operations. FPL has improved service reliability by more than 40% by strengthening powerlines, poles and converting to underground services. This will help vulnerable people stay home or return home more quickly after a tropical cyclone impacts the area.

## **2. Coastal Flooding/Storm Surge**

Coastal flooding is a term that refers to weather events that have the possibility of flooding the immediate coastline or even further inland. NOAA describes several factors that contribute to coastal flooding:

- Local severe weather events such as tropical cyclones or extra-tropical storms, create meteorological conditions that drive up the water level, creating a storm surge
- Large waves, driven by local winds or swells from distant severe weather, can raise average coastal water levels and cause large and damaging waves to reach land
- High tide levels caused by normal variations in the astronomical tide cycle
- The combination of storm surge and heavy rain events, whether locally or in the upland watershed
- Other larger scale regional and ocean scale variations, caused by seasonal heating and cooling and ocean dynamics, can contribute to high water levels
- Sea-level rise

Though coastal flooding in St. Johns County is often the result of storm surge, there are instances of abnormally high astronomical tides with onshore winds and weather systems such as nor'easters that have produced coastal floods.

Storm surge is the abnormal rise in ocean water levels caused by the wind and pressure forces of a hurricane or tropical storm. Storm surge easily overtakes dry land along the coast and Intracoastal Waterway and can cause rivers, streams and tributaries inland to flood. The amount of storm surge associated with a storm depends on the storm intensity, size, pressure, forward speed, angle of approach, width and slope of the ocean bottom, and local land features.

Storm surge can completely wash structures off their foundations or undermine foundations to the point of structural collapse. Battering waves may increase damage to buildings directly along the coast. Extended pounding by frequent waves can demolish any structure not specifically designed to withstand such forces. Storm surge may also cause extensive erosion of beaches and dunes. The results can be catastrophic failure of structures and infrastructure in surge areas.



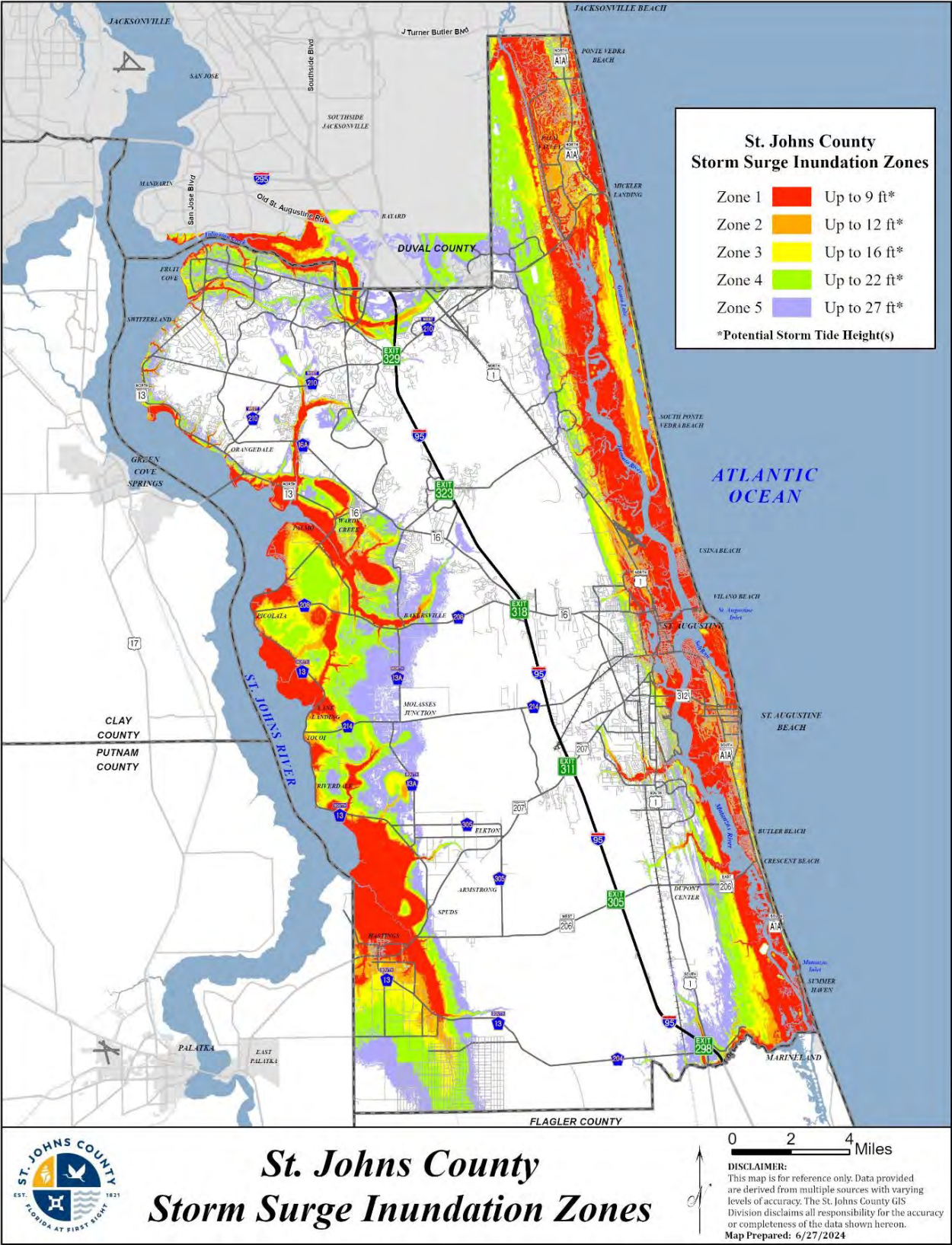
## **2.1 Coastal Flooding/Storm Surge Location**

The location of coastal flooding is similar to that of storm surge; however, due to the nature of the events that cause coastal flooding, it is not expected to extend as far inland as storm surge. All coastal areas in St. Johns County are susceptible to coastal flooding with notable areas including the City of St. Augustine, South Ponte Vedra and Vilano Beach.

St. Johns County may have storm surge and coastal flooding along the Atlantic Coast, Intracoastal Waterway, and along the St. Johns River which makes up the western boundary of the county. The St. Johns River is shallow and strongly influenced by tides from the Atlantic Ocean up to 50 miles downstream. Areas particularly vulnerable include the entire shoreline of the St. Johns River, the southern portions of Julington Creek, shorelines adjacent to Cunningham Creek, Six Mile Creek and Deep Creek, which leads into and may cause the Hastings area to flood.

Complete details regarding the storm surge threat are available from the SLOSH (Sea, Lake and Overland Surges from Hurricanes) model currently in use by the NWS and National Hurricane Center. The Northeast Florida Regional Council updated the Storm Surge Atlas for St. Johns County utilizing new SLOSH data in 2020. Storm surge will have the greatest impact on structures and infrastructure located in storm surge zones illustrated in Figure 2 below. Zone 5 on the following map depicts the expected maximum extent of storm surge. The lavender areas, or zone 5, signifies where flooding from a storm tide forecast of 27 feet (above ground) would reach. The inundation zones are not equivalent to evacuation zones.

Figure 2: Storm Surge Inundation Zones



## **2.2 Coastal Flooding/Storm Surge History**

Since the last LMS update St. Johns County has experienced three storm surge flooding events- Hurricane Ian in September 2022, Hurricane Nicole in November 2022 and Hurricane Milton in 2024. Other recent significant surge events include Hurricane Matthew (2016) and Hurricane Irma (2017).

Four of the last five surge events caused major flooding in the City of St. Augustine and major erosion along the beach. In some instances, 30-40 feet of the dune system were eroded, causing collapse of shoreline homes and endangering others. During Hurricane Nicole, surge washed over A1A eroding a part of the roadway.

Storm surge from these storms flooded homes along the Intracoastal Waterway in addition to some along the St. Johns River. Areas particularly hard hit include the City of St. Augustine, Davis Shores, Lincolnvile, Treasure Beach, Butler Beach, Crescent Beach, Vilano Beach, North Beach and South Ponte Vedra Beach.

Other notable coastal flooding events occurred from nor'easters with strong onshore winds in September 2020, November 2021, April 2023, June 2023 and December 2023. Coincidentally, a number of these notable coastal flooding events happened during periods of astronomically high tides which exacerbated impacts.

## **2.3 Coastal Flooding/Storm Surge Probability**

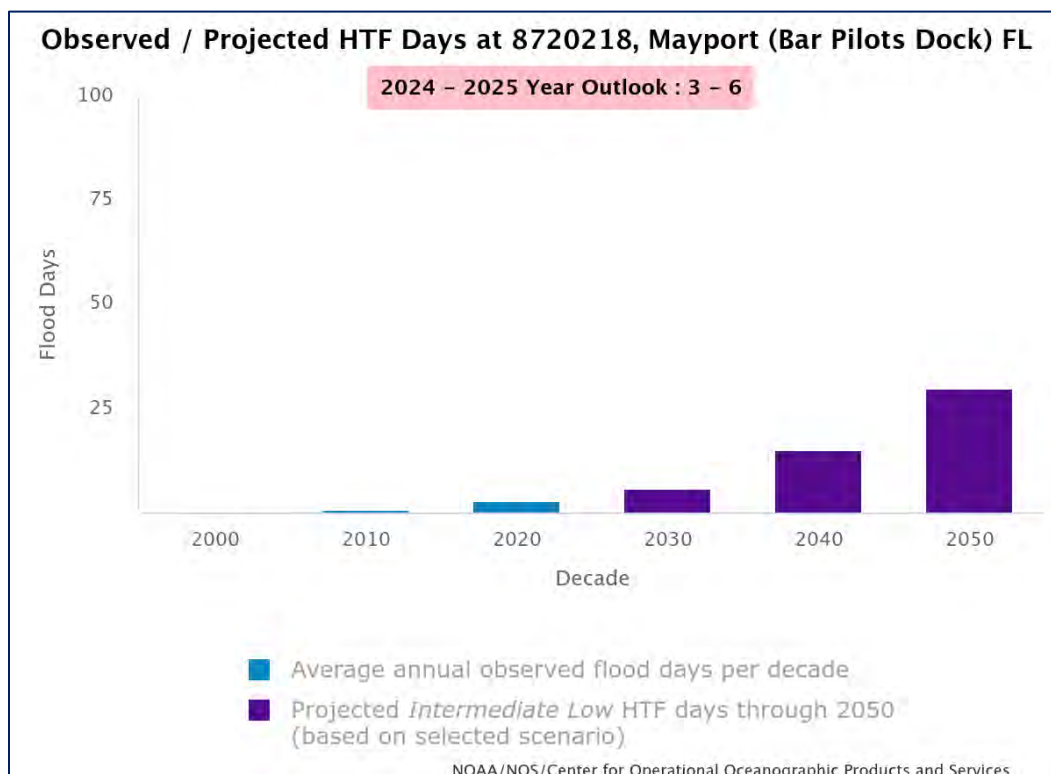
Since 2016, St. Johns County has experienced storm surge from 6 tropical cyclones, five of which caused enough damage to result in FEMA Individual Assistance declarations. Given the number of coastal flooding and surge events that have occurred over the last 8 years, St. Johns County residents in vulnerable areas (up to zone 1 on Figure 2) should expect to see at least one event a year. The probability of a smaller coastal flooding event is highly likely. Coastal flooding of more significant magnitude (Zones 2-5) may occur slightly less frequently.

According to the NOAA, the number of coastal flooding days are increasing. Even utilizing a conservative sea level rise projection of “intermediate low” at the Mayport (Jacksonville) tide gauge, the number of coastal high tide flooding days is expected to be ten times more by 2050<sup>1</sup>.

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<sup>1</sup> <https://tidesandcurrents.noaa.gov/high-tide-flooding/annual-outlook.html#decadal>

Figure 3: Figure 3: Observed and Projected High Tide Flooding (HTF) Days per Decade



## 2.4 Coastal Flooding/Storm Surge Vulnerability

Coastal flooding can be extremely dangerous, and any factor alone or in combination with another can cause severe damage. Coastal flooding has the potential to destroy structures and infrastructure, as well as having strong environmental effects and can have major impacts on the local economy.

The northern beaches of St. Johns County are those located north of the St. Augustine Inlet, including the areas of Vilano Beach, North Beach, Usina Beach, South Ponte Vedra Beach, and Ponte Vedra Beach. The majority of the northern beaches are coquina beaches with a steep slope down the water's edge, making them, and the structures located on them, extremely susceptible to the battering wave action along with the beach erosion produced by storm surge. The northern beaches are made up of primarily single-family homes, one large condominium complex located on South Ponte Vedra Beach and a small commercial district in Vilano Beach consisting of one grocery store, less than a dozen restaurants, and five hotels.

State Road A1A travels the entire length of the northern beaches and lies close to the water's edge just north of Vilano Beach; it is an evacuation route and main thoroughfare for this entire area and would be vulnerable to over wash and erosion. During the hurricanes of 2022, a portion of A1A was compromised, making it impassable. The Florida Department of Transportation is continually attempting to protect this critical segment of A1A.

The structures that are not located directly on the northern beaches, but still east of the Intracoastal Waterway, would be vulnerable to the battering wave action and the erosion, though slightly less than those located directly on the beach.

South of the St. Augustine Inlet are the southern beaches of St. Johns County, including the areas of Anastasia Island, St. Augustine Beach, Crescent Beach, Treasure Beach, and Butler Beach. The southern beaches are mostly wide, white sandy beaches, making them, and the structures located on them, vulnerable to storm surge. The most vulnerable structures are those located directly on the beach and those located east of A1A. They will suffer from both the battering wave action along with the beach erosion produced by storm surge. The erosion would undermine the structure's foundations, potentially causing complete failure.

Structures that are located west of A1A, but still east of the Intracoastal Waterway, would be vulnerable to the battering wave action and the erosion, though slightly less than those located directly on the beach. These areas are mixed use, including single family homes, condominiums, marinas, tourist attractions, restaurants, businesses and hotels. These areas are some of the most popular tourist destinations in St. Johns County and include the St. Augustine Alligator Farm, St. Augustine Amphitheater, St. Augustine Lighthouse, Anastasia State Park, St. Augustine Beach Pier, Fort Matanzas National Monument and miles upon miles beautiful white sandy beaches. Along with the previously identified structures there are three fire stations and the City of St. Augustine Beach Administration building and Police Station located in this area.

The City of St. Augustine is the nation's oldest continuous city and as a result has numerous buildings of historical significance. The City of St. Augustine lies at the mouth of the St. Augustine Inlet with the Intracoastal Waterway on its eastern border. The City is home to single family and multi-family housing along with tourist attractions, the Castillo de San Marcos National Monument (the oldest masonry fort in the United States), Florida National Guard Headquarters, Flagler College, Lightener Museum, businesses, restaurants, hotels, churches, cemeteries and inns. The age of the structures in the City, from homes to commercial, will add to their vulnerability as the majority of the structures located in the City are over 100 years old, with many of them much older.

The Bridge of Lions is a low, drawbridge and serves as the main artery for traffic to and from Anastasia Island into the City. This bridge, due to its low height on each side of the River, is vulnerable to storm surge. The King Street bridge over the San Sebastian River is also very low and floods easily with Nor'easters and storm surge events. The City of St. Augustine Administration, Police Department, and Fire Department are all located within the City as well and are vulnerable to storm surge.

In confined harbors, the combination of storm tides, waves, and currents can also severely damage marinas and boats. The St. Augustine Inlet is the only navigable inlet between Jacksonville to the north and Ponce Inlet in the South. The St. Augustine City Marina, the Conch House Marina, Camachee Cove Marina, and over 50 mooring buoys are located just inside this inlet. Hundreds of Boats are docked in these marinas, and anchored to the mooring buoys would suffer catastrophic damage from an incoming storm surge. The docks in these

marinas would also suffer severe damage or complete destruction. Storm surge associated with hurricanes Matthew, Irma, Ian and Nicole all produced significant damage to the City of St. Augustine Marina.

In estuaries and freshwater marshes, saltwater intrusion endangers the public health, kills vegetation, and can send animals, such as snakes and alligators, fleeing from flooded areas. In southern St. Johns County, large estuarine communities could be vulnerable to saltwater intrusion.

Infrastructure as throughout St. Johns County and its jurisdictions is vulnerable to coastal flooding. UF Health-St. Johns is vulnerable to storm surge due to the proximity of the Intracoastal Waterway. Beaches Energy has identified two properties that would benefit from being elevated above the 500-year floodplain to protect their energy infrastructure. St. Johns County has identified several lift stations on the barrier island that could be elevated and floodproofed to reduce future damages. The City of St. Augustine mitigated 13 lift stations that were damaged during Hurricane Matthew and those efforts paid off for hurricanes Ian and Nicole.

### **Future Vulnerability**

The Florida Building Code now includes a minimum of 1-foot freeboard. This means any structure built in the SFHA must be built at least one foot above the base flood elevation. St. Johns County and its municipalities are all required follow these requirements. Other measures required of the NFIP and building codes will help to reduce future vulnerability to new developments in areas along the coast.

While coastal wetlands, including saltmarshes, provide protection from flooding and storm surge events, northeast Florida (including Nassau, Duval, St. Johns, Flagler, and Volusia counties) has lost 9,000 acres of salt marsh since 1990 ([Dix et al., 2021](#)). Within the Guana-Tolomato Matanzas National Estuarine Research Reserve (GTMNERR), according to aerial estimates derived from data from FDEP, there has been a loss of 3,766 acres of salt marsh. Drivers of this coastal wetland loss can include erosion from wave energy, sea level rise, and increased development. Although northeast Florida is experiencing a vegetation shift in coastal wetlands from salt marsh to mangroves, there is still an overall coastal wetland loss which could impact the ability for coastal wetlands to provide ecosystem services such as storm protection.

The dune system protects the coastline from coastal flood events and storm surge. Every year, efforts are made to renourish the coast and ensure dunes are restored after events. As a part of restoration efforts dune grass and other plants that help hold the sand in place are planted. However, there are invasive plants, in particular, *Kalanchoe x Houghtonii* and *Beach Vitex*, that have the potential to destabilize the dunes. Efforts to control these species are underway.



### **3. Severe Thunderstorms**

A thunderstorm is a transient storm of lightning and thunder, usually with rain, gusty winds, and sometimes hail. A storm is classified as severe if it contains one or more of the following phenomena:

- Hail 1-inch or greater
- Winds gusting in excess of 58 mph
- A tornado

Long-lived thunderstorms are called supercell thunderstorms. Supercell thunderstorms are responsible for producing the majority of severe weather, such as large hail and tornadoes. Downbursts are also occasionally associated with severe thunderstorms. A downburst is a strong downdraft resulting in an outward burst of damaging winds on or near the ground. Downburst winds can produce damage similar to a strong tornado. Although usually associated with thunderstorms, downbursts can even occur with showers too weak to produce thunder. Strong squall lines can also produce widespread severe weather, primarily very strong winds and/or microbursts.

On average, Florida has 3,500 cloud-to-ground lightning flashes per day and 1.2 million flashes per year occur, during a recent 10-year study according to Vaisala. Florida ranks fourth in the nation for lightning flashes behind Texas, Oklahoma and Kansas. However, because of the dense population and the amount of people that spend a great deal of time outdoors year-round, more people are struck and killed by lightning in Florida than any other state, according to Vaisala and the National Weather Service.

#### **3.1 Severe Thunderstorm Locations**

Thunderstorms can occur throughout all of St. Johns County and its jurisdictions.

#### **3.2 Severe Thunderstorm History**

Thunderstorms are common in St. Johns County, and area residents are quite familiar with them and the severe weather they can bring. According to the National Climatic Data Center (NCDC) Storm Events Database, during the period of 2020 – January 2024, St. Johns County experienced the following:

- 42 days with thunderstorm events with winds gust over 40 mph.
  - The highest recorded wind gust of 60 mph occurred in the Hastings area February 2020
- 9 days with hail events
- Total property damage for all hail and wind events was estimated at \$1.05 million with no crop damage reported
- 4 recorded house fires caused by lightning
- 2 individuals struck by lightning.

#### **3.3 Severe Thunderstorm Probability**

According to NOAA, even though severe thunderstorms can occur any month of the year, the peak severe weather season in Florida is during the spring months of March, April, and May and the peak months for lightning strikes are June, July, and August. Thunderstorms occur almost daily during the summer months; some can become severe. Severe thunderstorms can

be expected to occur multiple times a year in St. Johns County. In terms of extent, St. Johns County can expect to see winds more than 70 mph, hail of 1-3 inches in diameter and continuous lightning when a severe storm occurs. A worst-case scenario would be a thunderstorm with a catastrophic tornado (refer to Section 4.3).

According to Climate Central, a recent study suggests that conditions favorable to severe thunderstorms could become about 5-20 percent more frequent per 1.8°F of warming. Whether these changing conditions will ultimately result in the formation of more severe storms remains an active area of research. A 2023 study projects a 6.6% increase in supercell frequency in the densely populated eastern U.S. by the end of this century because of climate warming.<sup>2</sup>

### **3.4 Severe Thunderstorm Vulnerability**

Despite the fact the probability of severe thunderstorms and lightning occurring is high in St. Johns County, the vulnerability of the buildings and infrastructure is relatively low. Severe thunderstorms generally affect a much smaller segment of the county and its population at any given time. The Florida Building Code requires homes to be built to withstand high winds, which limits the potential exposure to homes. Critical facilities such as schools are also built to a higher standard which helps reduce impacts from storms.

Lightning can be one of the most dangerous and frequently encountered weather hazards. Many lightning victims are individuals engaged in recreation or work. Although most survive, survivors generally suffer long-term effects, including memory problems, numbness, attention deficits, sleep disorders, confusion and general loss of strength. Many also are left with a storm phobia.

While a lot of tall infrastructure is equipped with surge protections for lightning strikes, the following infrastructure may be particularly vulnerable if struck and damaged:

- Communications systems (phone networks)
- Companies with expansive or complicated computer networks
- AM/FM radio station towers
- The 11 communication towers hosting St. Johns County's 800 MHz radio system
- Cell towers
- The Northeast Florida Regional Airport Air Traffic Control tower

Characteristics that make buildings vulnerable include

- Chimneys
- Flagpoles
- Steeples, ridges and parapets

Properties in St. Augustine that might be vulnerable due to their height or exposure include:

- St. Augustine Amphitheater
- St. Augustine Lighthouse
- The gun deck at the Castillo de San Marcos

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<sup>2</sup> <https://www.climatecentral.org/climate-matters/severe-storm-super-hazards>



- World Golf Hall of Fame Tower
- Roof top restaurants

### Future Vulnerability

The Florida Building Code requires structures to be built to a high standard, especially to wind. This will help new structures better withstand high wind events. There has been significant growth, particularly in the unincorporated areas where large tracts of land have been clear cut for development. This leaves new structures vulnerable to lightning strikes and at risk of catching fire. New homes burn up to eight times faster than older homes, increasing the potential for loss of life and property. Lightning mitigation efforts, such as installing lightning rods, could reduce future vulnerability in new and existing developments.

## 4. Tornadoes

A tornado is a violently rotating column of air touching the ground, usually attached to the base of a thunderstorm. Tornadoes are nature's most violent storms, spawned from powerful thunderstorms. Winds of a tornado may reach 300 miles per hour and can create a damage path more than one mile wide and 50 miles long. Strong downburst (straight-line) winds may also occur due to the same thunderstorm. Hail commonly occurs in close proximity to tornadoes. Some tornadoes are clearly visible, while rain or nearby low-hanging clouds obscure others. Tornadoes can develop rapidly and may dissipate just as quickly. Most tornadoes are on the ground for less than 15 minutes.

Although tornadoes in Florida are generally not as large and powerful as they are in the Midwest "Tornado Alley", they do occur in St. Johns County and have caused significant damage. Florida ranks third among the States in the number of tornados, behind Texas and Kansas. Tornadoes can also be spawned by tropical cyclones adding to the damage toll.

Tornadoes that occurred before 2007 were measured using the Fujita Scale. In February 2007 the scale was revised and renamed the Enhanced Fujita (EF) Scale to better align tornado damage with wind speeds. The new scale factors in how most structures are designed. The EF Scale is a set of wind estimates (not measurements) based on damage.

*Table 10: Fujita and Enhanced Fujita Scales*

Fujita Scale		EF Scale		
F Number	Wind Speed (mph)	EF Number	Wind Speeds (mph)	Potential Impacts
0	40 - 72	0	65 - 85	Roof shingles loosened or ripped off, damage to siding, shallow-rooted trees pushed over
1	73 – 112	1	86 – 110	Roofs ripped off, mobile homes overturned, large branches snapped from trees
2	113 – 157	2	111 – 135	Entire roofs of buildings ripped off, large trees uprooted, boxcars overturned

3	158 – 207	3	136 – 165	Strong-framed houses completely destroyed, buildings lifted off their foundations, heavy objects like cars thrown through the air
4	208 – 260	4	166 – 200	Well-constructed buildings leveled, cars and large objects thrown long distances, dirt/vegetation scored from earth
5	261 - 318	5	Over 200	Vehicles of all sizes shredded and thrown miles away, completely demolished neighborhoods and towns, entire landscapes scoured and flattened

#### 4.1 Tornado Location

All areas of St. Johns County and its participating jurisdictions are equally susceptible to tornados.

#### 4.2 Tornado History

A review of records from the NWS shows that between 1950 and 2024 St. Johns County has 65 recorded tornadoes, 6 of which occurred 2019 – May 2024.

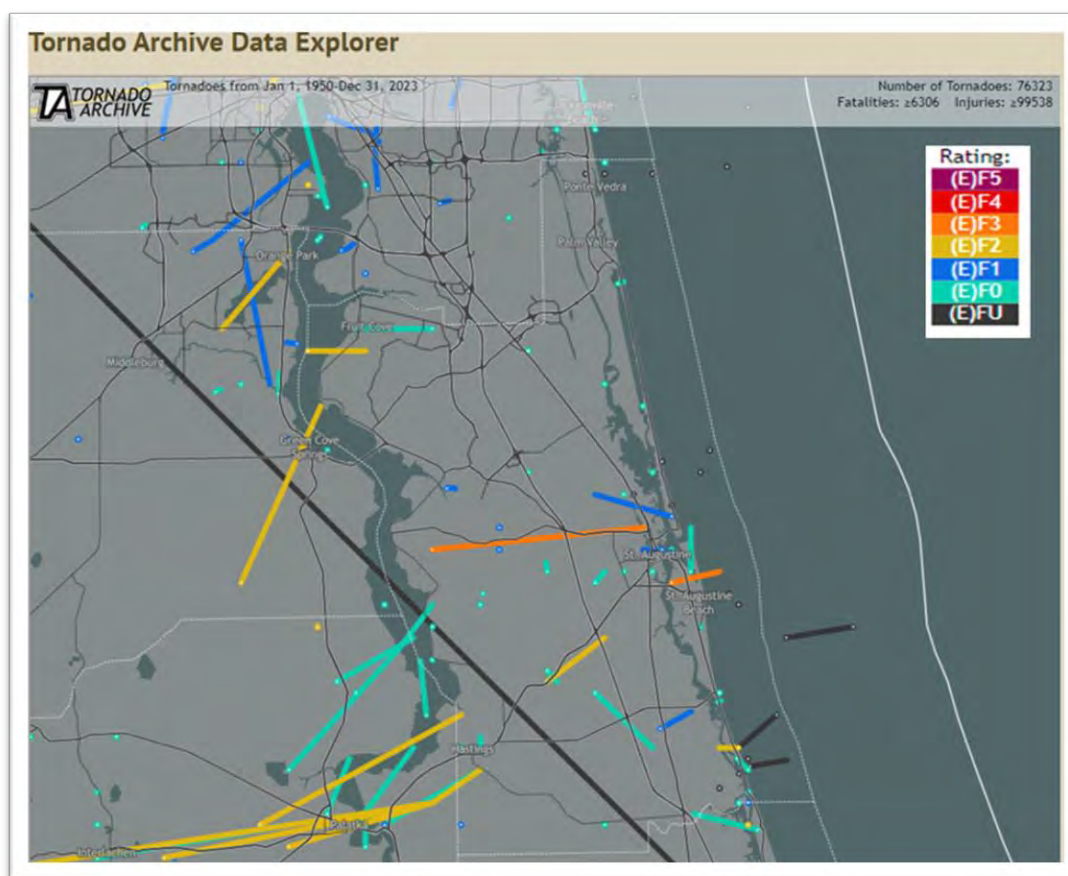
*Table 11:Recent Tornado History*

EF	Date	Winds/damage
<b>0</b>	12/13/2019	A tornado in Elkton just after 5am tracked ENE from the SW Corner of Saint Ambrose Church Road and CR 305 to just east of CR 207. Tree debris, shingles and part of a tin roof were reported in trees and across the ground. A kitchen and bath store in Elkton sustained major roof damage as well as damage to their supplies stored outdoors including solid surface countertops. The official NWS Storm Survey estimated peak winds around 85 mph (EF0) and reported road signs that were bent and/or twisted in Elkton. Metal roof panels were stripped off a building and thrown over a fence. A door was also extracted from a building.
<b>0</b>	3/31/2020	A weak EF0 tornado with peak winds near 80 mph briefly touched down in Ponte Vedra Beach near Guana River State Park. The tornado caused tree damage and some structural damage to nearby homes including a broken window. A tree was blown down near Sea Hammock Way.
<b>0</b>	2/14/2021	A tornado briefly touched down south of Bakersville near County Road 13A. There were tree limbs down near Molasses Junction.
<b>0</b>	9/11/2023	Images were shared showing roof damage to the sheet metal and wooden structure of a horse stable and an outdoor toilet blown over.
<b>0</b>	5/3/2024	A tornado touched down in the Beacon Lake neighborhood off CR-210. The tornado caused damage to roofs, fences, and patio furniture with winds up to 70 to 80 mph at its peak along a path measuring one-quarter of a mile and up to 125 yards wide.

1	5/11/2024	A tornado occurred just east of the St. Johns River, then traveled NE though the TrailMark and Samara Lakes neighborhoods. The tornado had estimated peak winds of 100 mph with a path 6.7 miles long and 310 yards wide as it swept through around 11:33 a.m. Shingles were ripped off, soffits and fences damaged, and some windows were broken.
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There have been two F3 tornadoes recorded in St. Johns County, these storms occurred in 1958 and 1971; property damage estimates for these two storms were estimated as \$250,000 per event.

Figure 4: Historic Tornado Tracks



### 4.3 Tornado Probability

Over the last 74 years there have been 65 recorded tornado events. On average, this equates to nearly one tornado every year. According to USATornadoes.com, the maximum tornado probability for St. Johns County for any given year since 2002 was 30% in 2017. Most months and years the probability ranges from 5-15%.<sup>3</sup> Tornadoes are likely to occur somewhere in St. Johns County at least once every 1-5 years.

<sup>3</sup> <https://www.ustornadoes.com/2022/03/18/maximum-tornado-probabilities-by-month-and-year/>

An analysis provided by Climate Central states that when excluding the weakest events, the overall number of U.S. tornadoes each year hasn't changed since 1970. Tornado activity has become concentrated in more frequent outbreaks (days with multiple tornadoes). The frequency of U.S. tornado outbreaks is increasing faster for the most extreme outbreaks. There is also evidence that tornadoes are getting more powerful in the U.S. and that fall tornado activity is increasing especially in the Southeast. Since 1979 "Tornado Alley" has shifted eastward, with increased tornadic activity observed in the South, Southeast, and Ohio Valley. However, there's no clear connection between these observed trends and climate change.<sup>4</sup>

In terms of extent, St. Johns County has never had a tornado stronger than an EF-3. Florida has only ever had two F-4 tornadoes. Based on this historical information, the probable worst-case scenario for St. Johns County would be a long track EF-3 tornado through the densely populated and commercialized area of downtown St. Augustine.

#### **4.4 Tornado Vulnerability**

All of St. Johns County is vulnerable to tornadoes including individuals living in mobile/manufactured and older homes due to the higher potential of damage to those structures. Mobile homes are located throughout the County, but the southwestern portion of the county has a higher percentage of mobile homes with the Flagler Estates community. Agriculture communities with large secondary structures such as barns and other substandard or older structures are also vulnerable to tornadoes. Crops can easily be damaged by tornadoes. The agriculture community is in the southwestern portion of the County, south of International Golf Parkway and west of Interstate 95. Infrastructure such as power lines is also susceptible to damage from tornadoes due to flying debris.

Cost estimates would vary greatly as they would be dependent on the location of the tornado, housing development vs. farmland, as thus a cost estimate cannot be easily calculated. Total damage estimates are not available from many of the historic tornadoes. Damage to homes is often covered by homeowner's insurance and the events do not rise to the level of a federal disaster declaration.

#### **Future Vulnerability**

The Florida Building Code will help reduce impacts from smaller tornadoes. As the county and its municipalities continue to grow, new structures will be at risk of damage from strong tornadoes. New homes built in the wind-borne debris area with impact windows will be less vulnerable than homes on the mainland portion of the county. Unfortunately, even the best built structures could be vulnerable to catastrophic structural damage from EF-3 tornadoes.

### **5. Flooding**

Flooding is generally associated with small natural streams or other drainage systems that are overwhelmed by large amounts of runoff generated by episodes of extremely heavy rainfall. The National Flood Insurance Program (NIFP) defines a flood as a general and temporary

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<sup>4</sup> <https://www.climatecentral.org/climate-matters/severe-storm-super-hazards>

condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties.

St. Johns County has several flood zones, as identified on the Flood Insurance Rate Maps (FIRMs). Maps of St. Johns County's flood zones can be found in Section 5.1.

*Table 12: NFIP Flood Zone Definitions*

<b>Flood Zone</b>	<b>Description</b>
<b>A</b>	Areas with a 1 percent annual chance of flooding and a 26 percent chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.
<b>AE</b>	The base floodplain where base flood elevations are provided. AE Zones are now used on new format FIRMs instead of A1-A30 Zones.
<b>AE-Floodway</b>	A floodway is the channel of a river and a portion of the adjacent floodplain that is reserved to discharge the 100-year (one percent annual chance) flood such that there will be a limited increase in the 100-year flood height.
<b>AH</b>	Areas with a 1 percent annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from one to three feet. These areas have a 26 percent chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
<b>AO</b>	River or stream flood hazard areas, and areas with a 1 percent or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from one to three feet. These areas have a 26 percent chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.
<b>VE</b>	Coastal areas with a 1 percent or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26 percent chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
<b>X-Shaded</b>	Area of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods. B Zones are also used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than one square mile.
<b>X</b>	Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level. Zone C may have ponding and local drainage problems that don't warrant a detailed study or designation as a base floodplain. Zone X is the area determined to be outside the 500-year flood and protected by levee from 100-year flood.

## 5.1 Flooding Location

Flooding occurs in several areas in St. Johns County. The two largest areas of note are the downtown area in the City of St. Augustine and Flagler Estates with roads frequently flooded after rains. Other areas of the County that have experienced significant flooding are the neighborhood surrounding the St. Augustine Amphitheater, the neighborhood to the west of Surfside Beach Park, North Beach, Hastings, and West Augustine.

The most well-known area with repetitive flooding is the waterfront area of downtown St. Augustine which is low in elevation and can flood from the combination of a full moon, a high tide and a northeasterly wind. Flooding also occurs throughout the County within low-lying areas and within the 100-year floodplain.

Notable roadways prone to flooding include:

- Solana Road
- Several sections of Roscoe Blvd. which runs along the Intracoastal Waterway
- Greenbriar Road east of Roberts Road
- International Golf Parkway west of the World Golf Village and a large section just west of US-1.
- San Marco/Avenida Menendez
- King Street
- A1A Coastal Highway
- Portions of US 1

Flooding as well as coastal flooding is modeled by FEMA as part of the NFIP. Vulnerability to flooding is documented in the Flood Insurance Rate Maps (FIRMs) delineating the 100-year flood (A, AE and VE zones) and the 500-year flood (shaded X zones). Figure 5 and Figure 6 below illustrate the updated FEMA Flood Zones for all of St. Johns County. St. Johns County GIS also maintains an interactive Flood Zone Viewer map where residents can get more specific, parcel-level flood information for their property. The Flood Zone Viewer can be located at <https://www.gis.sjcfcl.us/floodviewer/>. The map also contains information for the City of St. Augustine Beach and the City of St. Augustine.

In St. Johns County floodplains are generally associated with the St. Johns River and the Intracoastal Waterway and their tributaries. Flooding within these areas accounts for the principle flooding problems within the County. As shown on the following map the largest portion of the county vulnerable to freshwater flooding is the area east of US 1 and areas along the St. Johns River. These are also the areas with the highest population concentrations within the County.



Figure 5: NFIP Flood Zones - Northern St. Johns County

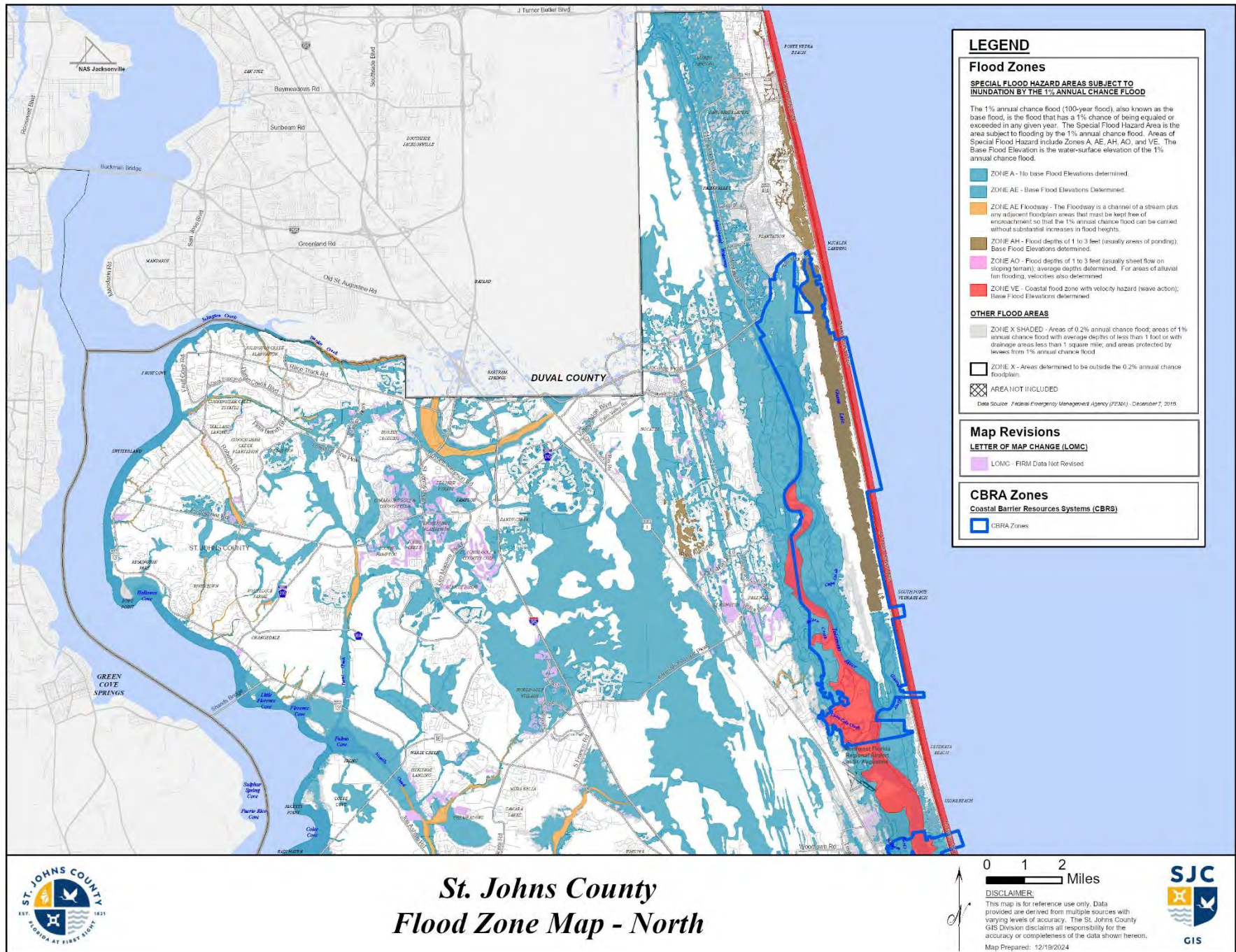
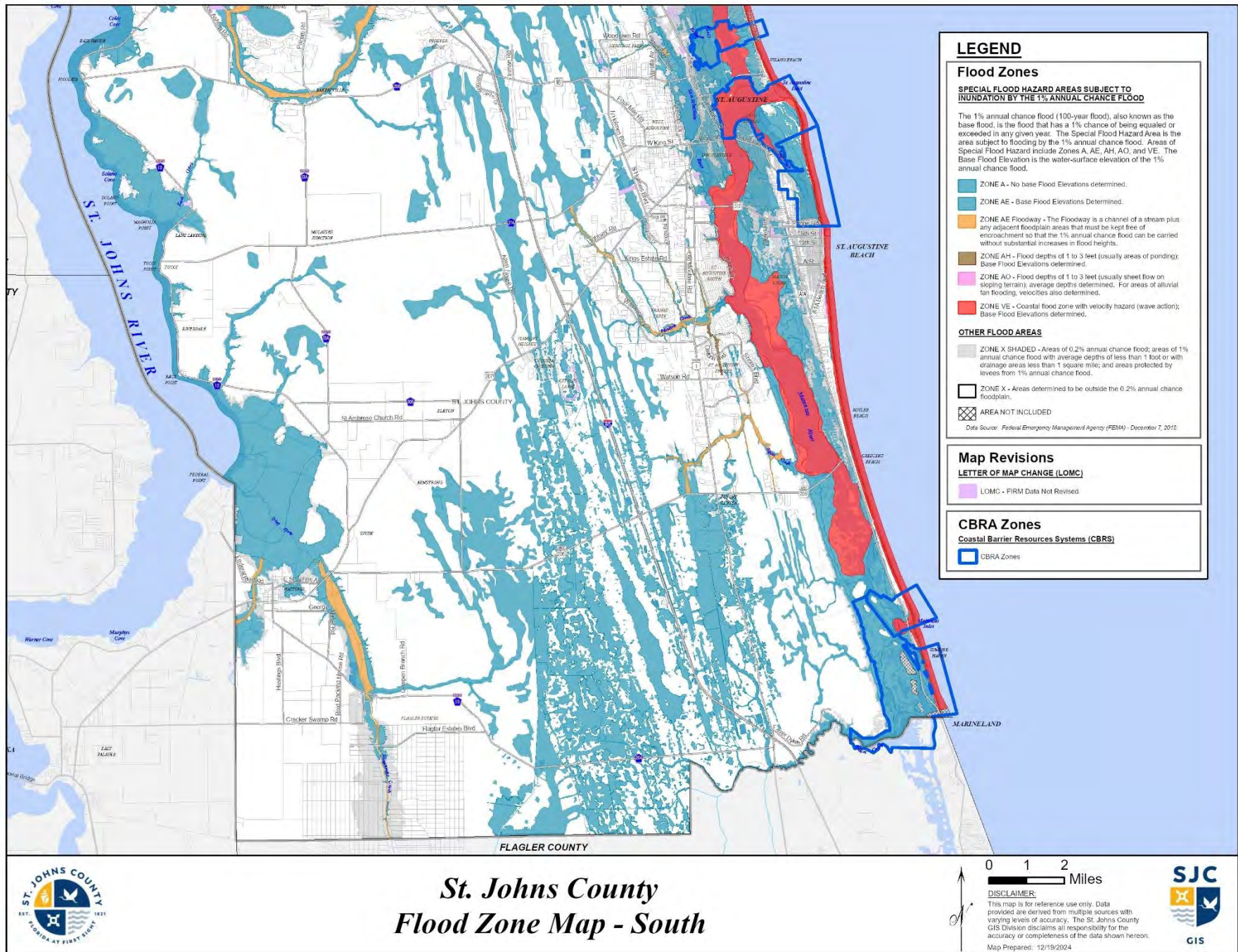




Figure 6: NFIP Flood Zones – Southern St. Johns County





## **5.2 Flooding History**

On September 27, 2020, more than 5 inches of rain fell in less than 4 hours flooding US-1 near SR-312. State Road 207 and US-1 had more than 3 feet in the intersection, topping the hoods of several SUVs for sale at the adjacent car dealer. 25 of the 30 vehicles for sale were destroyed. This same rain event caused citywide flooding and some minor flooding of classrooms at Crookshank Elementary.

In July 2021 heavy rain from slow moving storms caused flood waters on Cordova Street in St. Augustine to be nearly two feet deep.

Heavy rainfall occurred around US1 near Palencia and the St. Augustine Airport on September 26, 2023, from an afternoon thunderstorm at high tide, trapping the typical drainage methods. Radar estimates and ground truth measurements indicate 6-8 inches of water fell in a 2-hour period. US-1 was flooded, but passable, and several feet of water covered neighborhood roadways in the Venetian/Old Dixie area. Two homes were reportedly flooded. The area remained flooded for several hours until the tide was able to recede.

In October 2024, rainfall during the week of Hurricane Milton led to historic flooding on Deep Creek in the Hastings area. According to a WeatherSTEM in Hastings, 13.57 inches of rain fell during the week causing impassible roads and severe damage to nearby homes.

The information contained here does not include storm surge flooding as that is covered in the Storm Surge/Coastal Flooding hazard section.

## **5.3 Flooding Probability**

One could expect flood-prone areas such as the City of St. Augustine to flood multiple times a year due to heavy rainfall. Despite the inconvenience of these episodic floods, the impacts would be mostly to streets, and disruptions would be short in duration. The probability of flooding in the city is highly likely.

Areas in the FEMA-identified Special Flood Hazard Area (SFHA) have at least a .02% chance or a 1% annual chance of flooding each year. These areas are identified in Figure 5 and Figure 6. Flooding from rainfall in these areas is possible. The likelihood of rainfall flooding outside of the SFHA is low, but not impossible.

The highest flood waters on record for St. Johns County occurred in Flagler Estates on September 14<sup>th</sup> – 15<sup>th</sup>, 2001 because of Tropical Storm Gabrielle. The water reached a depth of 3 feet on Flagler Estates Boulevard and surrounding areas. If conditions were right, this extent of flooding, or possibly more, could be experienced in the future throughout all of St. Johns County and its jurisdictions.

According to Climate Central, intense rainfall is increasing. Warmer air holds more moisture- 4% more water vapor for every 1°F of warming. This relationship supercharges the water cycle, bringing heavier rainfall extremes. Intense rainfall will increase flood severity. Droughts are lengthening, and the soil is dryer which can have mixed effects on flood activity. Drier soils have

a greater capacity to soak up water from sustained rain, but during intense downpours dry and hardened soils can lead to more runoff and flash flooding.<sup>5</sup>

## 5.4 Flooding Vulnerability

A significant portion of the County's population is vulnerable to the effects of a 100-year flood event. This could mean either that the dwelling units are directly impacted by being flooded, or that the property or access to the property are flooded resulting in health and safety hazards. Flooding may also inundate potential evacuation routes and prevent people evacuating from vulnerable areas. Flooded roads and storms can also contribute to fatal accidents.

Homes built on grade are more susceptible to flooding than homes that are elevated. Building code revisions that occurred in the 2010s began requiring homes in the floodplain to be built at least one foot above the Base Flood Elevation in the SFHA.

The age of the structures in the City of St. Augustine, from homes to commercial, will add to their vulnerability as most of the structures located in the city are over 100-years old. The City of St. Augustine Administration, Police Department, and Fire Department are all located within flood-prone areas. Flooding in the city would force many of these businesses and tourist attractions to close, resulting in large economic losses. Due to the topography of the city, each of these structures and pieces of infrastructure, as well as the entire population, is vulnerable to freshwater flooding.

Approximately 60% of Flagler Estates is considered wetlands and Deep Creek traverses the central area of the community. There are roughly 2,000 people residing in Flagler Estates, most of whom are vulnerable to flooding.

Coastal Barrier Resource Systems (CBRS) are a system of protected coastal areas that include ocean-front land and other protected areas. These areas have restricted development to protect the barrier system and prevent future flood damage. There are 4 CRBS zones in St. Johns County, including:

1. Guana River Area (Unit FL03P) located in the Guana River Marsh Aquatic Preserve and Guana River Wildlife Management Area, extending out seaward to the 20-30-foot bathymetric contour.
2. Usina Beach area (Unit PO4A) located between Vilano and Usina Beaches, north of the St. Augustine Inlet. It extends from the Atlantic Ocean to the Tolomato River where it includes Saltwater Marsh.
3. Conch Island area (Unit P05 and P05P) which includes the Porpoise Point area on the southern tip of the northern barrier island to the north of the St. Augustine Inlet, the St. Augustine Inlet, Conch Island, an undeveloped island which is included in Anastasia State Park, and St. Augustine Beach.

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<sup>5</sup> <https://www.climatecentral.org/climate-matters/climate-change-and-inland-flooding>

4. Matanzas River/Inlet area (Unit P05A and P05AP) which includes barrier island beginning approximately 1 mile north of the Inlet and extending south to the St. Johns County/Flagler County line, including an area that goes west into Pellicer Creek. It includes extensive saltwater and brackish marsh areas.

The Coastal Barrier Resources Act of 1982 (CBRA) was specifically designed to restrict federally subsidized development of undeveloped coastal barriers along the Atlantic and Gulf coasts to:

- Minimize loss of human life by discouraging development in high-risk areas
- Reduce wasteful expenditure of federal resources
- Protect the natural resources associated with coastal barriers.

### **Repetitive Loss Properties**

The NFIP keeps track of the number of claims policy owners make. If the number and magnitude of claims meets a certain threshold, the structures may be classified as a Severe Repetitive Loss (SRL) or a Repetitive Loss (RL) property. SRL and RL properties often receive priority for mitigation funding.

- A RL is an insurable building for which two or more claims of more than \$1,000 were paid by the NFIP within any rolling ten-year period, since 1978. A RL property may or may not be currently insured by the NFIP.
- A SRL is any NFIP-insured residential property that has met at least 1 of the following paid flood loss criteria since 1978, regardless of ownership:
  - 4 or more separate claim payments of more than \$5,000 each (including building and contents payments); or
  - 2 or more separate claim payments (building payments only) where the total of the payments exceeds the current value of the property.
  - In either case, 2 claim payments must have occurred within 10 years of each other.

RL and SRL properties have proven to be vulnerable to floods. The cause of the flood could be from storm surge, coastal flooding, or areal flooding.

According to the most recent data from the NFIP, St. Johns County, including the incorporated municipalities have 1,135 RL properties, and of those, 99 are classified as SRL. Both St. Johns County and the City of St. Augustine are working to mitigate RL and SRL properties through various avenues including elevating structures with the use of grant funds.

Community specific information on the type and number of SRL and RL properties as well as the amount of NFIP claims can be found in the following tables. Exact addresses are considered confidential and are thus not included. This information is current as of October 21, 2024.

Table 13: NFIP Repetitive Loss Properties by Building Type

Type and Number of Repetitive Loss Properties*			
	St. Johns County	St. Augustine	St. Augustine Beach
Single Family	528	421	6
Multi-Family (2-4 units)	24	37	2
Other Residential Units	4	8	2
Business/Non-Residential	11	65	1
Other Non-Residential	10	16	0
<b>Total</b>	<b>577</b>	<b>547</b>	<b>11</b>

Table 14: NFIP Severe Repetitive Loss Properties by Building Type

Type and Number of Severe Repetitive Loss Properties*			
	St. Johns County	St. Augustine	St. Augustine Beach
Single Family	17	61	1
Multi-Family (2-4 units)	1	6	0
Other Residential Units	1	2	0
Business/Non-Residential	1	6	1
Other Non-Residential	0	2	0
<b>Total</b>	<b>20</b>	<b>77</b>	<b>2</b>

Table 15: Total NFIP Claims for Repetitive Loss Properties

NFIP Claims for Repetitive Loss Properties			
	St. Johns County	St. Augustine	St. Augustine Beach
Building Payments	\$56,172,529.22	\$60,404,182.93	\$554,351.72
Contents Payments	\$9,249,192.54	\$8,902,715.97	\$74,341.71
<b>Total Losses</b>	<b>1,418</b>	<b>1,385</b>	<b>29</b>

In 2022 St. Johns County conducted a comprehensive Historical Flood Analysis to address requirements of Activity 510 (Step 5(c)) of the CRS. The analysis was conducted with RL and SRL data from 2018, which was the best available data at the time. The analysis has been included as Appendix F and will be updated as resources permit.

### Future Vulnerability

The Florida Building Code now includes a minimum of 1-foot freeboard. This means any structure built in the SFHA must be built at least one foot above the base flood elevation. St. Johns County and its municipalities are all required follow these requirements. Additionally, the County's land development codes take into consideration the need to offset impervious surfaces to reduce future

flooding. This topic will be addressed by the City of St. Augustine in the coming months. Other measures required of the NFIP and building codes will help to reduce future vulnerability to new developments. The county and cities are also working to elevate vulnerable homes to reduce future flood damages.

With more intense rainfall predicted and increased impervious surfaces due to the growing population, flood prone areas are likely to increase. The City of St. Augustine is seeing more sunny day flooding, and any extra impervious surfaces will only exacerbate the issue. However, it remains to be seen how freeboard, onsite drainage, stormwater infrastructure, and development codes in newly developed areas of St. Johns County can combat future flood risk since many of these developments are so new.

## 6. Wildfire

Wildfire is defined by the Florida Forest Service (FFS) as any unplanned vegetative fire that threatens to destroy life, property, or natural resources. Wildfires occur in Florida every year and are part of the natural cycle of Florida's fire-adapted ecosystems. Many of these fires are quickly suppressed before they can damage or destroy property, homes and lives.

There are four types of wildfires:

- **Ground Fires:** Smolder or creep slowly underground. These fires usually occur during periods of prolonged drought and may burn for weeks or months until sufficient rainfall extinguishes the fire, or it runs out of fuel.
- **Surface Fires:** Burn along the forest floor consuming the litter layer and small branches on or near the ground.
- **Crown Fires:** Spread rapidly by the wind, moving through the tops of the trees.
- **Wildland/Urban Interface Fires:** Fires occurring within the Wildland Urban Interface (WUI) in areas where structures and other human developments meet or intermingle with wildlands or vegetative fuels. Homes and other flammable structures can become fuel for WUI fires.

Florida has a history of naturally occurring wildfires. The hot, wet summers following long periods of uninterrupted growth cause the buildup of the underbrush, which is prime fuel for wildfires. Large amounts of dry underbrush require only an ignition source; this can be from a home fireplace, trash burn, carelessly tossed away cigarette, or a natural source such as lightening. Once ignited, the underbrush can burn thousands of acres.

### 6.1 Wildfire Location

Wildfire becomes a major issue when they threaten structures. Fires can occur throughout the county but pose the biggest threat in the WUI areas. Other factors can contribute to wildfire risk including structure type, vegetation, fuel density, and access. Areas of risk throughout the county have been identified as either low, medium or high-risk areas.

- **Low Wildfire Hazard** – Homes are built with concrete and appropriate non-flammable roofing materials. Short grass, low shrubs and light duff are present. The forest and heavy vegetation are not continuous throughout the community. Wildfires that do occur in these

areas are less intense and easier to suppress because of the lower volume of fuel to feed and sustain the fire. (Hastings, Butler Beach, Elkton).

- **Medium Wildfire Hazard** – Wildland vegetation is continuous throughout the community. Tall grass, medium shrubs, thick duff and ladder fuels are prominent in the areas. Vegetation is less than 30 feet from the structures. Homes are built with vinyl, plastic or other types of less fire-resistant materials. Access is limited and the concentration of fuel to feed fires causes more intense fire behavior. Fire suppression becomes more difficult and costlier. (Ponte Vedra Beach, St. Augustine, St. Augustine Beach, Vilano Beach, Bakersville, Fruit Cove, World Golf Village).
- **High Wildfire Hazard** – Dense, highly flammable vegetation surrounds the neighborhood and is within a few feet of homes. A thick layer of vegetation is present on the forest floor. Access to the neighborhood is limited to one entrance and/or on poorly maintained roads. Homes are rarely built with fire-resistant materials. Continuous, overgrown vegetation limits access and creates intense wildfire conditions. Fire suppression is challenging and requires more resources (engines, dozers and aircraft) and firefighters than normal. (Flagler Estates-both Flagler and St. Johns County, Del Webb, Palencia, Nocatee, Las Colinas, Cypress Point, The Colony, Kingston).

## 6.2 Wildfire History

In 1998 St. Johns County experienced its most severe outbreak of wildfire. Approximately 12,842 acres burned. No homes were lost, and one injury was reported. The cost to St. Johns County was \$476,420; this does not include the cost for the timber that was lost during the fires. Other significant wildfire events (>100 acres) have been recorded in St. Johns County in 1985, 1990, 1993, 1998 - 1999, 2004, 2007, and 2011. Wildfires in 2011 burned several hundred acres of timber and came dangerously close to the St. Johns County Animal Control Facility and Pet Center, but no structures were burned. Another wildfire in 2011 burned over a thousand acres and caused closures of Interstate 95 and US Highway 1 for approximately 12 hours. Some timber was lost but no structures were burned. In May 2021 nearly 700 acres of rural St. Johns County near World Golf Village were burned when a controlled fire escaped the boundary.

According to Florida Forest Service from 2021 to July 26, 2024, there have been 108 brush or wildfires in St. Johns County. The breakdown per year is as follows:

- 2021 – 15 fires total
- 2022 – 29 fires total
- 2023 – 38 fires total
- 2024 – 26 fires so far.

## 6.3 Wildfire Probability

St. Johns County can expect to have multiple large fires every year, making this probability highly likely. Wildfire events typically correlate with dry periods and the typical Florida dry season which is November-May. Each year in Florida thousands of acres of wildland and many homes are destroyed by fires that can erupt at any time of the year from a variety of causes, including arson, lightning and debris burning. During prolonged periods of drought, the likelihood of fires will increase. It would be reasonable to assume St. Johns County could see future wildfires greater than 1,000 acres impacting WUI areas.

## 6.4 Wildfire Vulnerability

In recent history 1998 - 1999, 2004, 2007, and 2011 the fires have been larger and have threatened urbanized areas more frequently. St. Johns County is transforming from a rural county, to one which is much more urban in nature, but a large percentage of its land area is still covered in forest. As a result, many areas of the County are susceptible to wildfire. The most vulnerable areas are those generally located at the urban/wildland interface. These are areas where subdivisions occur adjacent to large undeveloped areas of forestland. Much of this land is in large ownerships including lands owned by large timber companies and actively managed for silviculture. When subdivisions are developed without clearing the wooded areas surrounding them the interface becomes extremely hazardous.

Many of these areas have an extensive canopy of longleaf pine, loblolly pine, pond pine, slash pine, sand pines that are being managed for silviculture and housing developments adjacent to these areas are vulnerable to fires. The following areas have been identified as some of the most vulnerable areas of St. Johns County to wildland fire.

- Some of the largest areas of silviculture in St. Johns County are around US 1 South of State Road 206, west of Interstate 95. Thousands of acres in this area are managed by large timber companies. Matanzas State Forest lies between US 1 South and the Intracoastal Waterway and is bordered by State Road 206 to the south. There are several subdivisions that encroach on the boundaries of the state forest and in 2005 these homes were threatened by a wildfire that started in Matanzas State Forest and evacuations were required. The St. Johns County Southeast Branch Library and Gamble Rogers Middle School are both located at the edge of the Matanzas State Forest.
- Whisper Ridge, a large subdivision with single family homes, and St. Johns County Fire Station 4 are located just off State Road 16, west of Interstate 95 and are surrounded by large tracts of timber.
- Palencia, a master planned community with commercial, single and multi-family homes, and St. Johns County Fire Station 15, have been constructed just north of the intersection of International Golf Parkway and US 1 North. Large areas of timber and upland forest surround these areas to the north and south, with saltwater marsh communities on the eastern boundaries. On the west side of US 1, across from the area is the St. Johns County Pet Center and the St. Johns County Stratton Road Transfer Station. They are surrounded by large tracts of managed timber, and in 2011 both were threatened by a wildland fire.
- Flagler Estates is a mostly mobile/manufactured home community that lies in the southeastern corner of the County. Approximately 60% of the land located in this subdivision is considered wetlands, and as such is heavily wooded. There are roughly 2,000 people residing in Flagler Estates, with most of the homes surrounded by forested lands.
- The St. Johns County Water Treatment Plant is located on County Road 214, near Interstate 95. This facility is a main supplier of drinking water to St. Johns County residents. It is surrounded by forested land on all sides.
- The area known as Vermont Heights is located just West of Interstate 95 on State Road 207. This area is mostly residential with both site-built, as well as mobile/modular, homes. The St. Johns County Tillman Ridge Transfer Station is also located in this area. This area is surrounded by both large tracts of managed timber and forested lands.

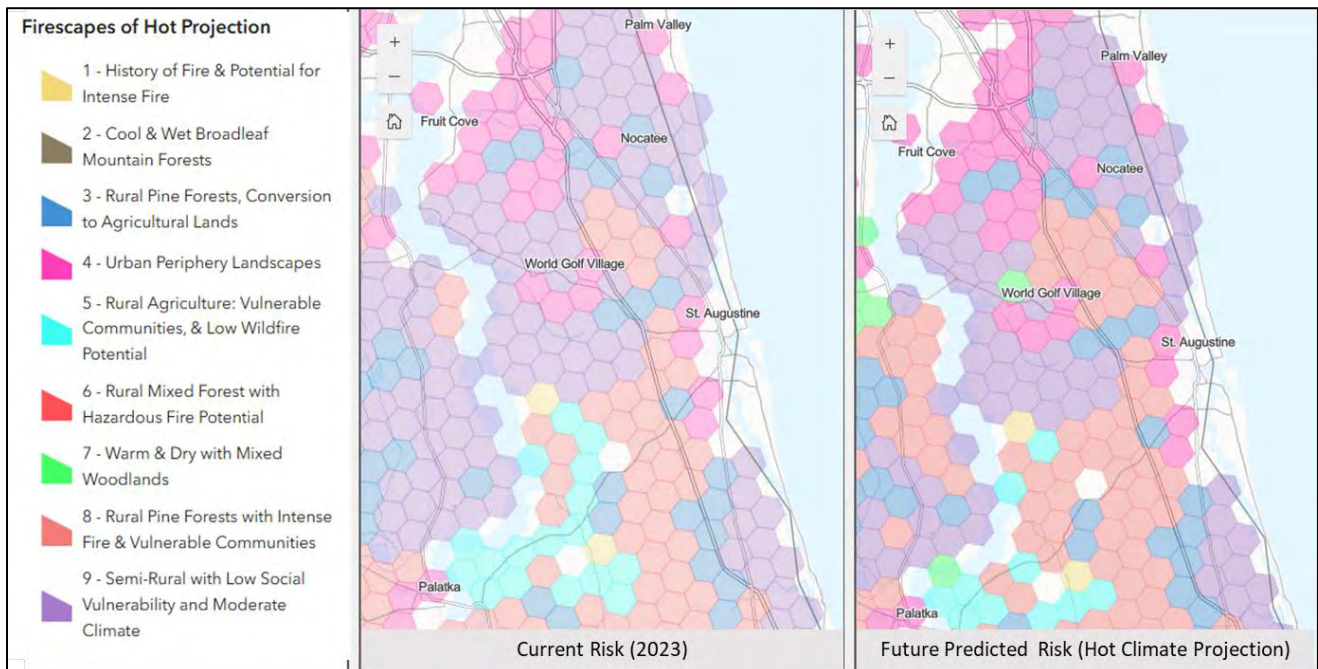
- The Nine Mile Construction & Demolition Landfill is located on International Golf Parkway. In 1995 a nearby wildfire caused the landfill to catch fire. The landfill burned for well over two weeks and was closed to any incoming garbage and debris. This area is still surrounded by large tracts of managed timber.

The upland pine communities in Florida are adapted for periodic episodes of fire, and they burn very easily. They also generate large quantities of flammable leaf litter and other combustible by-products, which catch fire easily and generate a very hot, if short-lived fire.

Adding to the fire hazard is the growing number of people living in new communities built in areas that were once wildland. According to Global Forest Watch St. Johns County has had a 42% decrease in tree cover since the year 2000. From 2013 to 2023, 57% of tree cover loss in St. Johns occurred within natural forest. Much of this tree cover loss is a result of new residential and commercial developments. While deforestation does reduce the number of acres available for wildfires, it does sometimes increase the number of homes built along and within vulnerable areas.

According to the analysis prepared by the USDA Forest Service's Eastern Forest Environmental Threat Assessment Center, the future predicted risk for St. Johns County under a hot climate, as depicted below in Figure 7, shows only minimal changes from the current risk. However, in the differences depicted, it should be noted that there is a growth in the amount of rural pine forest with intense fires and vulnerable communities in the World Golf Village area and in the southern portion of the county.

*Figure 7: Wildfire Risk Based on Landcover Type and Future Risk*



Source: <https://experience.arcgis.com/experience/1f38db46f6654a92a345e8977bb624e3/page/Hot-Climate-Projection/>



## Future Vulnerability

As St. Johns County and its jurisdictions continue to be built out, the wildland continues to dwindle. The density of houses and the lack of access to preservations or forested areas by firefighters behind homes will increase the risk. According to the future risk modeled in Figure 7 above, the greatest increase in landcover is rural pine forest with intense fire and vulnerable communities. As such, extra effort should be made to maintain uncontrolled ground cover in forested areas to reduce the risk of wildfire.

## 7. Drought

A drought is a deficiency in precipitation over an extended period. Although droughts are a normal and recurring feature of our climate, sometimes they can endanger vegetation, animals, and even people. The duration of droughts varies widely. They can develop quickly and last a few weeks or can persist for months or years if exacerbated by extreme heat, wind, and other climate factors. Dry conditions and droughts can often lead to cascading hazards, like brush fires or wildfires. There are different types of droughts including those from meteorological, agricultural, societal, and hydrologic perspectives.

There are several drought indices utilized to monitor drought conditions- the Palmer Drought Severity Index (PDSI), U.S Drought Monitor (USDM), and the Keetch-Byram Drought Index (KBDI).

The KBDI is a reference scale for estimating the dryness of soil. It is updated continuously and uses daily maximum temperature and precipitation as its inputs. The KBDI attempts to measure the amount of precipitation necessary to return the soil to full field capacity. Typically, KBDI increases on non-precipitation days and decreases when rainfall is reported. The scale ranges from zero (no moisture deficit) to 800 and the higher the value, the more favorable conditions are for the spread and occurrence of wildfires.

Figure 8: Keech-Byram Drought Index (KBDI)

KBDI Scale	Expected Conditions and Wildfire Threat
0-200	Soil moisture is high. Typical of spring dormant season following winter precipitation.
200-300	Typical of late spring, early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.
300-400	
400-500	Typical of late summer, early fall. Lower litter and duff layers actively contribute to fire intensity and will burn actively.
500-600	
600-700	Often associated with more severe drought with increased wildfire occurrence. Intense, deep burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.
700-800	

- KBDI = 0 - 200: Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. Typical of spring dormant season following winter precipitation
- KBDI = 400 - 600: Typical of late summer, early fall. Lower litter and duff layers actively contribute to fire intensity and will burn actively.
- KBDI = 600 - 800: Often associated with more severe drought with increased wildfire occurrence. Intense, deep burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.

Once the KBDI numbers begin entering the 600-800 range, officials start considering taking more extreme preventative actions like issuing burn bans.

The PDSI is an index of the relative dryness or wetness of an area. The PDSI indicates the prolonged and abnormal moisture deficiency or excess. The PDSI is an important climatological tool for evaluating the scope, severity, and frequency of prolonged periods of abnormally dry or wet weather.

- -4.0 or less is considered an extreme drought
- -3.0 to -3.9 is considered a severe drought
- -2.0 to -2.9 is considered a moderate drought
- -1.9 to +1.9 is considered near normal conditions
- 2.0 to 2.9 is considered an unusual moist period
- 3.0 to 3.9 is considered a very moist period
- 4.0 and above is considered an extremely moist period

The USDM is a map released every Thursday, showing where drought is and how bad it is across the U.S. and its territories. The map uses six classifications: normal conditions, abnormally dry (D0), showing areas that may be going into or are coming out of drought, and four levels of drought: moderate (D1), severe (D2), extreme (D3) and exceptional (D4).

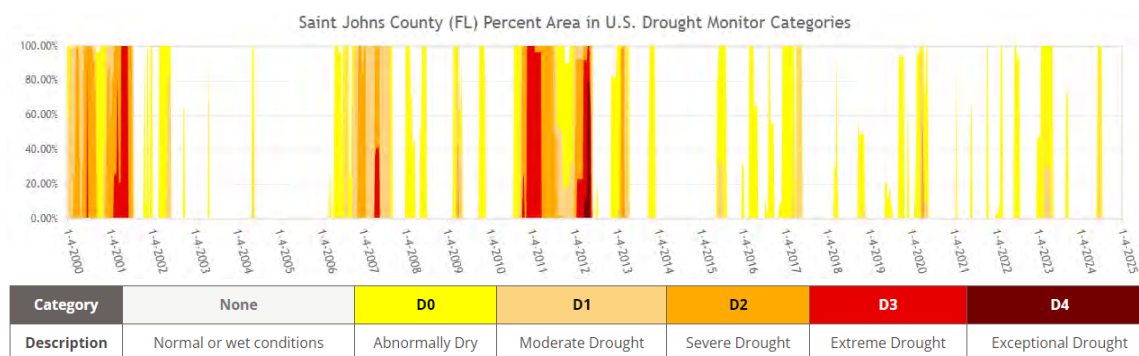
## **7.1 Drought Location**

Drought can occur anywhere in St. Johns County and its jurisdictions. Drought can affect just a portion of the area at a time or the entire area.

## **7.2 Drought History**

In May 2007 drought conditions persisted as the area experienced a 15 – 18-inch rainfall deficit. Below average potato and hay crops were reported due to the drought, but no loss estimates were compiled. According to the USDM, the majority of St. Johns County was in a drought from mid-August 2010 until the mid-June 2012. At the peak of the drought in May 2012, nearly 80% of the county was in an exceptional drought. Since then, through 2024, only short periods of abnormally dry and moderate drought have occurred.

Figure 9: Historic Drought Periods for St. Johns County



### 7.3 Drought Probability

Droughts occur slowly, over months to years and can continue for many months and years. Utilizing the USDM Time Series for the last 25 years, there has only been 2 years out of the last 25 where there was no record of some level of drought conditions. There have been 5 periods of extreme drought and one period of exceptional drought. Based on this history, the likelihood of an extreme-exceptional drought would be a likely, occurring on average once every 5 years and the occurrence of abnormally dry conditions could occur annually. In terms of extent, drought conditions could last a year or more, reaching -4.0 extreme drought on the PDSI or D4 on the USDM for two or more months.

According to Drought.gov, the Southeast region generally receives substantial precipitation and is often considered water rich. However, the region is increasingly experiencing record-breaking droughts, highlighting competing water demands. Drought conditions can develop rapidly in the Southeast, especially when the lack of rain and high temperatures combine to increase evapotranspiration of water in the soils.

### 7.4 Drought Vulnerability

The environment, particularly agriculture interests including farms and ranches in the unincorporated areas, would likely suffer the greatest impacts from extended periods of drought. The western area of the County is most vulnerable to the impacts of drought because this area is extensively involved in farming and ranching. A drought could cause significant economic hardships in the agricultural communities when crops are damaged or unable to grow. The urbanized communities along the coast are less vulnerable economically due to their location and non-agricultural economic base. Most infrastructure, schools, commercial developments, and residential homes are not vulnerable to drought unless wildfires occur. Residents of St. Johns County could see household wells dry up, which would cause major expenses for homeowners who rely on well water. Potential impacts to St. Johns County's potable water supply by saltwater intrusion during drought conditions are generally low.

### Future Vulnerability

Drought has its largest impact on the agriculture and environment. Much of the large-scale developments occurring and being proposed are in the unincorporated areas of St. Johns County. Developed areas will be less vulnerable to droughts. Droughts are less likely to impact the City of St. Augustine and St. Augustine Beach due to their lack of farming and ranching.

## 8. Extreme Heat

A heat wave is when temperatures are abnormally and uncomfortably hot for an extended period. This event could last from one day to several weeks. Heat waves are often accompanied by high humidity. The heat index is the "apparent temperature" that describes the combined effect of high air temperature and high humidity. The higher this combination, the more difficult it is for the body to cool itself and it can result in heat exhaustion, heat stroke, and even death.

Figure 10: Heat Index Classifications

Classification	Heat Index	Effect on the body
Caution	80°F - 90°F	Fatigue possible with prolonged exposure and/or physical activity
Extreme Caution	90°F - 103°F	Heat stroke, heat cramps, or heat exhaustion possible with prolonged exposure and/or physical activity
Danger	103°F - 124°F	Heat cramps or heat exhaustion likely, and heat stroke possible with prolonged exposure and/or physical activity
Extreme Danger	125°F or higher	Heat stroke highly likely

Due to the proximity to the Atlantic Ocean, extremely high temperatures are rare in St. Johns County and its jurisdictions. The highest ever recorded temperature was 103°F, but heat indices regularly reach 105-110°F in the summer.

### 8.1 Extreme Heat Location

Extreme heat can occur anywhere in St. Johns County and its jurisdictions.

### 8.2 Extreme Heat History

On July 20<sup>th</sup>, 1986, St. Augustine reached a record high temperature of 103°F. There have been no recorded extreme heat temperatures for St. Johns County in the NCDC Storm Events Database. The best available data for record heat indices comes from National NWS Jacksonville for the City of Jacksonville. The highest ever recorded heat indices occurred over a 3-day period in July 1980 ranging from 123-127°F.

NWS's records for the City of Jacksonville contain 26 of the highest heat indices for each month April – October dating back to the 1950s. Since 2020 there have been 25 heat index record-setting days.



Figure 11: Heat Index Records for Jacksonville, FL (1950- August 2024)

APR JAX Peak Heat Index	MAY JAX Peak Heat Index	JUN JAX Peak Heat Index	JUL JAX Peak Heat Index	AUG JAX Peak Heat Index	SEP JAX Peak Heat Index	OCT JAX Peak Heat Index
105F 04-30-1991 93/75	106F 05-27-2019 100/67	118F 06-29-1998 100/78	127F 07-13-1980 102/81	118F 08-11-2019 97/80	112F 09-05-2022 94/79	106F 10-09-2017 90/79
102F 04-28-1991 94/72	106F 05-29-2017 98/70	116F 06-04-1985 100/77	126F 07-12-1980 101/81	117F 08-13-2023 98/79	112F 09-03-2020 93/80	106F 10-07-2017 90/79
100F 04-28-2017 93/71	106F 05-31-2004 97/72	115F 06-23-1981 99/77	123F 07-14-1980 99/81	116F 08-14-2023 98/78	110F 09-04-2020 95/77	106F 10-09-2009 93/76
100F 04-29-1991 93/71	106F 05-29-1982 93/76	113F 06-23-2024 96/78	119F 07-17-1981 103/76	115F 08-01-1999 99/77	110F 09-02-2020 94/78	104F 10-04-1990 94/73
97F 04-09-2020 92/69	106F 05-25-1953 99/69	113F 06-30-2012 95/79	118F 07-20-2000 102/76	115F 08-20-1980 99/77	110F 09-16-2018 96/76	103F 10-08-2017 90/77
97F 04-27-1991 90/71	105F 05-28-2019 96/72	113F 06-25-1998 98/76	118F 07-18-1981 99/79	114F 08-12-2023 96/79	110F 09-09-1990 97/75	103F 10-10-2009 93/74
97F 04-29-1970 92/69	104F 05-25-1975 94/73	113F 06-02-1985 100/74	118F 07-11-1980 100/78	114F 08-08-2023 99/76	110F 09-05-1983 93/79	103F 10-07-2009 92/75
97F 04-23-1970 92/69	103F 05-26-2024 95/71	113F 06-18-1981 99/75	117F 07-22-2015 95/81	114F 08-07-2023 98/77	110F 09-03-1970 97/75	103F 10-02-1977 92/75
97F 04-24-1967 93/67	103F 05-31-2020 93/74	113F 06-09-1981 98/76	117F 07-14-1981 102/75	114F 08-09-2007 97/78	110F 09-02-1970 98/74	103F 10-01-1969 90/77
97F 04-18-1967 94/65	103F 05-30-2019 95/71	112F 06-26-2024 94/79	116F 07-31-2010 97/79	114F 08-08-2007 96/79	109F 09-01-2020 94/77	102F 10-12-2009 92/74
96F 04-20-2011 90/70	103F 05-30-2004 96/70	112F 06-21-2019 96/77	116F 07-31-1999 98/78	114F 08-01-1986 100/75	109F 09-24-2000 91/80	101F 10-22-2019 90/75
96F 04-24-1999 93/66	103F 05-25-2000 95/71	112F 06-29-2009 94/79	116F 07-22-1991 98/78	114F 08-26-1982 94/80	109F 09-18-1993 94/77	101F 10-17-2018 93/72
96F 04-23-1988 89/72	103F 05-14-1995 96/70	112F 06-21-2009 96/77	115F 07-30-2010 102/74	114F 08-22-1980 94/80	109F 09-04-1983 92/79	101F 10-11-2009 90/75
95F 04-05-2023 89/71	103F 05-29-1991 93/74	112F 06-20-2009 96/77	115F 07-16-1981 102/74	114F 08-01-1962 97/78	109F 09-12-1982 91/80	101F 10-08-2009 90/75
95F 04-06-2022 85/76	103F 05-30-1982 91/76	112F 06-17-2009 93/80	115F 07-03-1970 99/77	114F 08-18-1952 96/79	109F 09-06-1962 95/76	101F 10-01-2004 90/75
95F 04-29-2017 89/71	103F 05-28-1982 95/71	112F 06-14-1998 101/73	114F 07-30-2023 99/76	113F 08-15-2023 95/79	109F 09-15-1949 94/77	101F 10-05-2002 89/76
95F 04-05-2017 91/68	103F 05-22-1957 93/74	112F 06-27-1954 101/73	114F 07-19-2000 101/74	113F 08-14-2019 97/77	108F 09-04-1970 96/75	101F 10-02-1959 92/73
95F 04-28-2014 91/68	103F 05-12-1957 93/74	111F 06-17-2016 97/76	114F 07-04-1997 94/80	113F 08-10-2019 98/76	107F 09-19-2018 93/77	100F 10-07-2021 90/74
95F 04-27-2011 93/65	103F 05-26-1955 95/71	111F 06-16-2010 95/78	114F 07-21-1995 98/77	113F 08-13-2011 95/79	107F 09-18-2018 93/77	100F 10-31-2019 91/73
95F 04-26-2011 92/66	102F 05-09-2024 96/69	111F 06-13-2004 92/80	114F 07-25-1983 97/76	113F 08-05-2011 98/76	107F 09-17-2018 93/77	100F 10-16-2018 90/74
95F 04-09-2011 92/66	102F 05-23-2020 95/70	111F 06-24-1996 95/78	114F 07-15-1981 102/73	113F 08-01-2010 95/79	107F 09-12-2010 95/75	100F 10-16-2017 89/75
95F 04-29-2002 88/72	102F 05-31-2019 97/68	111F 06-16-1981 102/71	114F 07-06-1980 99/76	113F 08-02-1999 98/76	107F 09-08-1990 97/73	100F 10-06-2002 90/74
95F 04-21-2002 91/67	102F 05-26-2019 98/66	111F 06-14-1981 98/75	114F 07-08-1969 98/77	113F 08-10-1987 97/77	107F 09-02-1989 95/75	100F 10-06-2000 90/74
95F 04-20-2002 91/68	102F 05-30-2017 93/73	111F 06-11-1981 97/76	113F 07-21-2023 98/76	113F 08-22-1983 96/78	106F 09-06-2022 95/74	100F 10-04-1995 88/77
95F 04-13-2001 92/66	102F 05-03-2010 92/74	111F 06-29-1978 97/76	113F 07-05-2023 96/78	113F 08-09-1981 96/78	106F 09-11-2020 89/80	100F 10-03-1994 89/75

### 8.3 Extreme Heat Probability

Based on the number of events that have occurred over the last 4 years, St. Johns County may have at least one record setting extreme heat day per year, making the probability “highly likely”. Depending on the month, records could range from 95-127°F, classifying the area as either Danger or Extreme Danger.

According to Center for Climate and Energy Solutions, across the globe, hot days are getting hotter and more frequent, while we’re experiencing fewer cold days. In July 2023, Earth broke or tied its record for the hottest day on record, four days in a row. Over the past decade, daily record high temperatures have occurred twice as often as record lows across the continental United States, up from a near 1:1 ratio in the 1950s.<sup>6</sup> A recent study projects that the annual number of days with a heat index above 100°F will double, and days with a heat index above 105°F will triple, nationwide, when compared to the end of the 20<sup>th</sup> century.<sup>7</sup>

### 8.4 Extreme Heat Vulnerability

Heat waves are not uncommon in Florida. An extended heat wave could have an impact on the elderly, young and those with medical conditions. Those areas of St. Johns County that are inland, away from the moderating influence of the ocean and its breeze would be more vulnerable to extreme heat.

Extreme heat can also impact infrastructure- from transportation to utilities to clean water and agriculture. High heat can deteriorate and buckle pavement, warp or buckle railway tracks, and exceed certain types of aircraft operational limits. Electricity usage increases as air conditioning and refrigeration units in homes and offices work harder to keep indoors cooler. Transmission

<sup>6</sup> <https://www.c2es.org/content/heat-waves-and-climate-change/>

<sup>7</sup> <https://iopscience.iop.org/article/10.1088/2515-7620/ab27cf>

capacity across electric lines is reduced during high temperatures, further straining the electrical grid. Heat can have lasting impacts as crops may be damaged, reducing production which leads to short supply and or increased cost to the farmers and consumers.

### **Future Vulnerability**

As global temperatures and the population throughout St. Johns County and its jurisdictions rise, people will continue to be vulnerable to extreme heat. If necessary, St. Johns County and its jurisdictions can open cooling shelters if there is ever an extended period of power outage during extreme temperatures. Extreme heat is not expected to increase vulnerability to any new infrastructure or developments.

## **9. Winter Storm / Freeze**

A winter storm is defined as a storm that can range from a few hours of moderate snow to blizzard-like conditions with wind-driven snow that can last for days. Winter storms can impede visibility, affecting driving conditions, and can have an impact on communications, electricity or other services. Winter storms can range from several states to one county. St. Johns County is not generally susceptible to winter storms, because temperatures rarely reach snow-producing levels. The climactic conditions for winter storms are also not favorable. However, temperatures can reach levels low enough to cause damage to crops and water lines.

Freezing occurs when temperatures are below freezing, less than 32°F, over a widespread area for a significant period. Freezing temperatures can damage agricultural crops and burst water pipes in homes and buildings. In St. Johns County there is an average of 17 days a year at or below freezing. Frost, often associated with freezes, can increase damaging effects. Frost is a layer of ice crystals that is produced by the deposition of water from the air onto a surface that is at or below freezing.

Wind chill is the term used to describe the rate of heat loss on the human body resulting from the combined effect of low temperature and wind. As winds increase, heat is carried away from the body at a faster rate, driving down both the skin temperature and eventually the internal body temperature. Exposure to low wind chills can be life threatening to both humans and animals alike.

The NWS issues the following products during winter storms and freezes:

*Table 16: Winter Weather Watches and Warnings*

<b>Name</b>	<b>Description</b>
<b>Winter Storm Watch</b>	Issued when conditions are favorable for a winter storm event in the next 24 to 72 hours. A watch is generally issued when the risk of a hazardous winter weather event has increased and is intended to give lead time for people to make plans.
<b>Winter Storm Warning</b>	Issued when a winter storm event is expected to meet or exceed local winter storm warning criteria in the next 12 to 36 hours. A warning is generally issued when a hazardous winter weather event is occurring, is imminent, or has a very high probability of occurrence, and is used when conditions pose a threat to life or property.

<b>Winter Weather Advisory</b>	Issued when a winter storm event is expected to meet or exceed local winter weather advisory criteria in the next 12 to 36 hours but stay below warning criteria. An advisory is for less serious conditions that cause significant inconvenience and should lead to cautious behavior to avoid injury or property damage.
<b>Freeze Watch</b>	Issued when there is a potential for significant, widespread freezing temperatures within the next 24 to 36 hours.
<b>Freeze Warning</b>	Issued when significant, widespread freezing temperatures are expected.
<b>Frost Advisory</b>	Issued when the minimum temperature is forecast to be 33 to 36 degrees on clear and calm nights during the growing season.

### 9.1 Winter Storm / Freeze Location

Areas west of I-95, away from the moderating influence of the Atlantic Ocean are more likely to be impacted from freezing temperatures, but the entire county (all jurisdictions) can be affected by winter storms and freezes.

### 9.2 Winter Storm / Freeze History

Some of the coldest ever recorded temperatures in St. Johns County were in January 1985. On January 21<sup>st</sup>, 1985, St. Augustine recorded a temperature of 10°F and the Hastings area recorded a temperature of 12°F.

Records show that St. Augustine received approximately 2 inches of snow in February 1951. St. Johns County experienced an ice storm Christmas 1989. As a result, I-95 along with many local roads were closed for 2 days and power outages were widespread. In March 1993 St. Johns County experienced the Storm of the Century. This storm produced ice and winds gusting over 70 mph, closing roads and causing power outages in many parts of the county for 3 days. As demonstrated in the above examples, snow, ice, gusting winds, and extremely cold temperatures could be expected in St. Johns County and its municipalities for multiple consecutive days. St. Johns County has not experienced winter storm conditions or extreme freezing conditions since these events.

### 9.3 Winter Storm / Freeze Probability

In St. Johns County, inclusive of its jurisdictions, one could experience wind chills between 36°F and -11°F. Winter storms are less frequent than freezes. The probability of a winter storm is low and could occur, on average, less frequently than once every 10 years. If a winter storm was to occur, a worst-case scenario would be equivalent to the March 1993 storm, with temperatures reaching 10°F. A freeze is likely to occur at least once every year or two.

Most of the research surrounding climate change discusses a warming climate. Information obtained from a 2009 Global Climate Change Impacts Report states that since the mid-1970's, the number of days per year in which the temperature falls below freezing has declined by 4-7 days over much of the Southeast or 5 days for St. Johns County.<sup>8</sup>

<sup>8</sup> <https://nca2009.globalchange.gov/southeast/index.html>

## **9.4 Winter Storm / Freeze Vulnerability**

St. Johns County is vulnerable to the impacts from winter storms or freezes due to the County's large agricultural land use in the west. Many of the crops that are grown in this area are grown and harvested in the winter. A winter storm or extended freezing temperatures could cause significant economic losses in the agricultural communities. Winter Storms would affect roadway infrastructure throughout the County and municipalities, especially the bridges, if snow or ice began accumulating. St. Johns County's and its municipalities do not have removal equipment, nor do we have any spreading equipment for salt or sand. This would cause our transportation system to come to a standstill, affecting the economy of St. Johns County and its municipalities.

Those areas of St. Johns County that are inland, away from the moderating influence of the ocean and its breeze would be more vulnerable to winter storms and freezes. Extended cold could also damage utilities infrastructure such as pipes. This could cause issues with potable water and sewage systems being able to deliver and remove water and waste. It could also damage the pipes into privately owned homes as infrastructure is not built to withstand extreme cold. A winter storm or extended period of freezing temperatures could have an impact on the elderly, young and those with medical conditions. Extended periods of extreme cold could also affect the power grid due to high demand for heat.

### **Future Vulnerability**

As development increases, open land will become built out. Agriculture will remain the most vulnerable sector to winter storms and freezes. If necessary, St. Johns County and its jurisdictions could open warming shelters if there is an extended power outage during winter weather conditions.

## **B. Biological and Human-Caused Hazards**

In addition to natural hazards, St. Johns County has a variety of vulnerabilities to human-caused and biological hazards. A human-caused hazard is a hazard that arises from deliberate, intentional human actions to threaten or harm the well-being of others. Biological hazards refer to biological substances that pose a threat to the health of living organisms, primarily that of humans.

As required by Florida's CEMP regulations, biological and human-caused hazard profiles include the following:

- Overview
- Historic damages
- Probability of future events
- Severity of occurrence
- Vulnerability

### **1. Hazardous Materials**

Vulnerability: Low

Probability of Future Occurrence: Small scale – Highly likely; Large Scale – Low

Overall Risk: Low-Medium



Hazardous materials are used to maintain the modern lifestyles of both urban and rural communities. Agricultural uses for chemicals range from fertilizers, insecticides and disease control for crops to ammonia refrigeration units for dairy products. These chemicals increase crop yields and ensure the delivery of fresh products to markets. Communities often use extremely hazardous chemicals, such as chlorine or sulfuric acid for treating drinking and wastewater.

Many hazardous chemicals pass through St. Johns County via roadway or railway on any given day. A railway, interstate and US highway all traverse the entire length of St. Johns County. Some of the common materials transported through the area are gasoline, propane, chlorine, and ammonia. Any of those chemicals or others could be involved in a transportation incident causing a major hazardous materials scene, threatening health and safety for individuals in nearby areas.

The southwestern portion of the County, in and around the Hastings area, has a large agricultural community which uses potentially hazardous materials in the farming process. These hazardous materials, if released, could affect individuals living in proximity to the agricultural fields. Additionally, throughout St. Johns County, many properties have sheds, barns and storage buildings, which may contain mixed groups of chemicals including paints, insecticides, fertilizers, petroleum products, lubricants and other common household or agricultural products. While it can be assumed few people store and dispose of these items in full compliance with the law, many of these materials are in such small quantity the concern of a full “hazmat” incident is minimized.

St. Johns County’s vulnerability to hazardous materials accidents depends on three factors:

- The major transportation routes that pass through the community
- The hazardous material generators located in or near the community
- The resources in terms of people and property that are in an area of possible impact from a hazardous materials release.

Each year the number of registered facilities using hazardous materials in Northeast Florida increases. Supplying these facilities requires routinely transporting hazardous materials into the County by rail, truck, air and/or barge. The County is rapidly urbanizing, developing around the economic centers of St. Augustine, Ponte Vedra, and the World Golf Village. As the population and number of facilities that handle hazardous materials grow, greater numbers of people are vulnerable to an accidental release.

Each year facilities subject to the 1986 Emergency Planning and Community Right-To-Know Act must register and identify the type and quantity of hazardous materials on-site. Facilities are inspected, quantities are validated, and a risk assessment is completed. The assessments contain the following:

- A vulnerability zone (radius) around the facility that could be affected by a release.
- Population within this zone
- Potential environmental impacts within the zone
- Probability of occurrence
- Impacts to nearby critical facilities and property
- Impacts to the environment.

St. Johns County Fire Rescue maintains a Hazardous Materials Team which responds to hazardous materials incidents that occur regularly. The majority of these occurrences are small and easily managed. Small scale hazardous material incidents would include something similar to a propane tank leak, natural gas leak, or fuel spill.

As of this writing St. Johns County has never experienced a large-scale hazardous materials release that caused significant harm to the public or environment. One release of note did happen in August 2011. As fuel was being delivered to a gas station, vapors ignited as the fuel spilled and caused several explosions and a large fire. Foam was used to extinguish the fire, but a great deal of fuel leaked into the surrounding tidal saltwater marsh. There was one injury, and the gas station was a total loss. Dollar figures for damage estimates are not available for this incident.

The likelihood of a major hazardous material incident taking place is low.

## **2. Civil Disturbance**

Vulnerability: Low

Probability of Future Occurrence: Low

Overall Risk: Low

St. Johns County has a minor history of civil unrest, occurring during the 1960's and early in 2020. The death of George Floyd in May of 2020 sparked national protests against law enforcement agencies and racial tensions rose. To date, St. Johns County and its municipalities have seen a few peaceful protests with gatherings of approximately 200-250 people. Neighboring Duval County has had past rioting. Areas most at risk in Duval County are not located near St. Johns County.

## **3. Mass Migration**

Vulnerability: Low

Probability of Future Occurrence: Low

Overall Risk: Low

Mass immigration is a low probability due to St. Johns County's location being along the northeastern coast of Florida. On occasion an abandoned migrant vessel may wash ashore on the coast, but it is typically quickly removed. Potential impacts of such an event would be an increased need for social services, law enforcement and detention facilities.

## **4. Coastal Oil Spills**

Vulnerability: Medium

Probability of Future Occurrence: Low

Overall Risk: Medium

Coastal oil spills are moderate to major impact should one occur. There are no nearby offshore oil rigs. Shipping on the St. Johns River is relatively light. The greatest threat comes from the Port of Jacksonville and future drilling off the coast of Cuba. With the large volume of waterborne traffic

at the Port of Jacksonville, a spill is possible. Time, distance and currents are favorable to St. Johns County's planning effort. Warning residents and landowners of the spill's approach allows for some mitigating actions to take place to minimize damage. Most response capabilities are beyond the scope of St. Johns County and would come from federal authorities in accordance with the Area Contingency Plan which is directed by the U.S. Coast Guard. St. Johns County's efforts would center on warning, recovery and mitigation. Depending on the size of the spill, tourism and the environment could be severely impacted.

## **5. Terrorism**

Vulnerability: Low

Probability of Future Occurrence: Low

Overall Risk: Low

Terrorism incidents can come in many forms including cyber-terrorism, biological weapons, chemical weapons, nuclear weapons, explosive weapons, and incendiary weapons. Biological, nuclear, incendiary, chemical, and explosive materials (B-NICE) are considered hazardous by nature.

The following are descriptions of each type of potential hazardous threat by terrorist acts:

- Biological weapons - microorganisms and/or toxins from living organisms that have infectious or non-infectious properties that produce lethal or serious effects in plants and animals, including smallpox, anthrax, Ebola, and bubonic plague.
- Nuclear weapons - high-energy particles or gamma rays that are emitted by an atom that represent a hazard to humans both internally and externally.
- Incendiary weapons - intentional arson or explosions used to spread fire or chemical and biological weapons.
- Chemical weapons - gas, liquid, or aerosol agents used to affect the transmission of nerve impulses in the human nervous system, including blister/mustard agents, choking agents and blood agents.
- Explosive weapons- used to damage property and cause loss of human life by resulting secondary hazards such as unstable structures, debris and fire.
- Cyber weapon - computer viruses and software that can be used to penetrate and disrupt networks and steal information.

St. Johns County has never experienced an act of terrorism. The likelihood that one will occur is low, but never a 0% chance of one occurring.

All counties in Florida are vulnerable to a terrorist attack, whether physical destruction from bombs or contamination from chemical, biological weapons, or radiological materials. There is also the risk of cyber-terrorism attacks that could disrupt or destroy vital computer networks. There are several potential targets that are most vulnerable to a terrorist attack including:

- Northrup Grumman
- UF Health – St. Johns
- Florida National Guard Headquarters
- Florida National Guard Armory

- Schools
- Special Events (Francis Field, the St. Augustine Amphitheater, Fairgrounds)
- County and City Government Complex
- Facilities and sites of historical significance.

## **6. Exotic Pests and Diseases**

Vulnerability: Medium

Probability of Future Occurrence: Possible

Overall Risk: Medium

Commercial agriculture and related industries in St. Johns County have an economic impact of more than \$171 million with vegetable production contributing 28% of the total at \$48 million. Major crops in the area are, and have historically been, potato and cabbage; however current growers in the area are seeking alternative cropping systems to stay sustainable. Over 3,000 acres of Asian vegetables are currently being grown in the county and other crops such as sweet potatoes, cucurbits, artichokes and various cole crops are being grown and evaluated for their profitability.

St. Johns County has never experienced an exotic pest or disease outbreak of record. Biological hazards, such as exotic pests and diseases could pose an economic or health threat to humans or the agricultural community. The possibility also exists for the importation of pathogens that could have a widespread effect on the livestock industries. St. Johns County's large agricultural areas are vulnerable to exotic pests and diseases. The St. Johns County Agricultural Extension Office, with assistance from the Florida Department of Health, as necessary, would be the lead agency for addressing and managing this type of outbreak.

## **7. Pandemic**

Vulnerability: Medium

Probability of Future Occurrence: Possible

Risk: Medium

A pandemic is a disease outbreak that spans several countries and affects a large number of people. Pandemics are most often caused by viruses which can easily spread from person to person. A new virus can emerge from anywhere and quickly spread around the world. It is hard to predict when or where the next new pandemic will emerge.

In March 2020 the World Health Organization declared COVID-19 a pandemic. The pandemic had extensive economic impacts throughout the world. The coronavirus has continued to mutate and spread. Vaccines are now regularly available to help prevent severe infection and spread of the disease. Immune compromised individuals remain the most vulnerable to this virus and other highly contagious diseases.

The Florida Department of Health - St. Johns County, in conjunction with partner agencies will identify and manage any pandemic outbreak event. Potential impacts of a pandemic outbreak

include economic losses, hospital surge, mass care, mass casualties, population quarantine and infectious disease control.

## **8. Cyber-Attack**

Vulnerability: Medium

Probability of Future Occurrence: Possible

Risk: Medium

A cyber-attack is deliberate exploitation of computer systems, technology-dependent enterprises and networks. Cyber-attacks use malicious code to alter computer code or data, resulting in disruptive consequences that can compromise data and lead to cybercrimes, such as information and identity theft.

Cyberattacks may include the following consequences:

- Identity theft, fraud, extortion
- Malware, pharming, phishing, spamming, spoofing, spyware, Trojans and viruses
- Stolen hardware, such as laptops or mobile devices
- Denial-of-service and distributed denial-of-service attacks
- Breach of access
- Password sniffing
- System infiltration
- Website defacement
- Private and public Web browser exploits
- Intellectual property theft or unauthorized access.

Both private and public entities in St. Johns County are vulnerable to cyber-attack.

## **9. Natural gas**

Vulnerability: Low

Probability of Future Occurrence: Highly likely

Risk: Low

St. Johns County has over 2,000 miles of natural gas lines throughout the County. Natural gas lines run along most major roadways in the County. The lines are marked by either a yellow pipe along the side of the road or with a yellow stripe marked on the road. The lines are all privately owned by TECO Peoples Gas and are routinely maintained. TECO Peoples Gas also employs a strict safety program with a vehicle that routinely monitors the lines with detection equipment that will detect gas levels of 1 part per million. The biggest hazard to gas lines is breach by contractors working in the area.

## **10. Airplane Crashes**

Vulnerability: Low

Probability of Future Occurrence: Likely

Risk: Low

St. Johns County has one (1) public municipal airport: Northeast Florida Regional Airport located at 4900 US-1 North in St. Augustine. Currently, no commercial airlines operate flights in or out of the Northeast Florida Regional Airport. There are multiple businesses, including the Northrup Grumman Corporation, and private charters operating at the airport. There have been several small aircraft incidents at the airport that have resulted in loss of life. The majority of these incidents have taken place on the airport property on or near the runway. A crash in March 2024 in the woods near the airport killed two when the plane went down shortly after takeoff. Two other fatal accidents occurred with small planes since the last plan update.

Military aircraft also operate in and out of the airport, as such; the potential for a military aircraft incident exists and could require specialized resources as in the event of an incident. Only a small segment of the population would be affected.

## **11. Special Events**

Vulnerability: Low

Probability of Future Occurrence: Highly likely

Risk: Low

St. Johns County and the City of St. Augustine are tourist destinations and host many special events each year. Large local events include, but are not limited to, the Fourth of July Fireworks, the Easter Festival and Parade, Nights of Lights events, the Sing Out Loud Festival, and the TPC Golf Tournament. Each activity requires community planning and is a major impact on Law Enforcement and Emergency Services. Potential effects on St. Johns County include evacuation of large populations, mass care, mass casualty, sheltering, civil unrest and communications failures.

## **Section V – Mitigation Initiatives**

### **A. Project Selection and Submission Criteria**

In St. Johns County there are numerous areas and locations that suffer or are vulnerable to disasters such as hurricane, floods, wildfires and other natural and human caused disasters. The Working Group members submit the initiatives which reflect the needs of the community.

The Working Group has developed over the course of time and continues to enhance and improve upon a project list of potential mitigation projects. Projects are both structural and non-structural. Each project is submitted to the Working Group on the New Project Submission Form and then discussed in the context of cost, feasibility, responsible entity, implementation time, funding and areas affected. At that time, the Working Group Executive Committee will vote whether to add the project to the list or ask the project sponsor to revise or reconsider the project.

If the project receives approval by the Executive Committee, it will be added to the list with a ranking of High (H), Medium (M), or Low (L). These designations correspond to the following definitions:

- High- the project is in progress or actively seeking funding.
- Medium- the project sponsor's organization has identified the project as something that they would like to implement within the next few years and will consider funding opportunities as they arise.
- Low- the project sponsor's organization has identified the project as something that could feasibly reduce future impacts. However, for one reason or another, the project is not something the organization is ready to seek funding for.

The Hazard Mitigation Grant Program (HMGP) is one of the largest funding streams for mitigation projects. The way HMGP is administered in Florida requires counties to submit a letter from the LMS Chair with a prioritized list of mitigation projects. When applicants are ready to submit projects under the HMGP, the LMS Working Group will officially rank projects with a numerical score. HMGP projects are evaluated against 10 criteria and scored for a ranking as outlined in Section V.B.

Cost Benefit Analysis are completed only when a project has been identified for specific funding availability due to the extensive process involved in creating a cost benefit analysis.

The Working Group believes that project prioritization and reprioritization is an ongoing responsibility. The completion of a project alone may be a cause to reprioritize the remaining projects.

## B. Project Prioritization Methodology

### 1. Feasibility Assessment

All potential mitigation efforts, whether educational, legislative, or structural, must meet certain standards to be considered as viable projects or initiatives. The feasibility assessment, which consists of the four questions below shall be considered by the Sponsor before completing the Proposed Mitigation Initiative Form for any new mitigation initiatives.

- (1) Does the project provide a long-term solution to an existing or potential problem?
- (2) Does the project or initiative address a hazard to which the local community is clearly vulnerable?
- (3) Is the project or initiative technically and environmentally feasible?
- (4) Is the project expected to provide a return on the investment?

### 2. Prioritization Criteria

There are 10 categories in which individual mitigation projects or initiatives are evaluated. Up to ten points may be awarded in each of the categories for a total possible point score of 100 points. Bonus points are also available.

Prioritizing the proposed mitigation actions is based on the following 10 categories:

- |                                  |                                 |
|----------------------------------|---------------------------------|
| • Population Benefited           | • Infrastructure Criticality    |
| • Environmental Impact           | • Feasibility of Implementation |
| • Social Equity                  | • Implementation Impacts        |
| • Future Risk of Property Damage | • Funding Availability          |
| • Previous Damage                | • Sponsorship                   |

**Pre-requisite:** To be eligible for the project prioritization list, the proposed project must be consistent with at least one LMS Goal. The goals are as follows:

1. Protect the lives of the residents of St. Johns County and its municipalities.
2. Protect property to ensure that its intrinsic value is preserved.
3. Protect infrastructure so that it is available before, during, and after a disaster.
4. Protect business activities so that they continue to provide economic strength to the community.
5. Protect the natural environment to ensure that quality of life and economic wellbeing are preserved.

Which goal(s) does this project support? \_\_\_\_\_



## 1. Population Benefited

What percentage of the population will benefit from the mitigation initiative? The percentage is based on the total population of the jurisdiction (incorporated municipal area or the unincorporated area) where the project is located according to the most current United States Census figures.

- Project would benefit 75% or more of the population 10 points
- Project would benefit 50-74% of the population 8 points
- Project would benefit 25-49% of the population 6 points
- Project would benefit 24-1% of the population 4 points
- Project would benefit less than 1% of the population 2 points

## 2. Social Equity

Utilizing the most recent data, what is the level of Social Vulnerability for the census tract where the project is located? Social Vulnerability levels are determined by the Center for Disease Control (CDC) and can be located on the [interactive map](#)<sup>9</sup>.

- High vulnerability 10 points
- Medium-High vulnerability 8 points
- Low-Medium vulnerability 4 points
- Low vulnerability 0 points

## 3. Environmental Impact

What impact will the mitigation initiative have on the environment? The environment consists of the surrounding ecosystems, wildlife, and waterbodies.

- Project improves the environment 10 points
- Project has no effect on environment 6 points
- Project could cause negative impacts to the environment -10 points

## 4. Reduces Risk of Future Property Damage

Does the project mitigate a frequently recurring hazard? How frequently is the hazard expected to occur that the initiative is designed to mitigate?

- Hazard is expected to occur at least annually 10 points
- Hazard may occur once every 1-5 years 8 points
- Hazard is expected to occur every 5-10 years 6 points
- Hazard occurs less than one time every 10 years 4 points
- There is no known history of occurrence 2 points

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<sup>9</sup> [https://www.atsdr.cdc.gov/place-health/php/svi/svi-interactive-map.html?CDC\\_AAref\\_Val=https://www.atsdr.cdc.gov/placeandhealth/svi/interactive\\_map.html](https://www.atsdr.cdc.gov/place-health/php/svi/svi-interactive-map.html?CDC_AAref_Val=https://www.atsdr.cdc.gov/placeandhealth/svi/interactive_map.html)

## 5. Previous Damages (\$)

How much damage, in dollars, has previously occurred to this building, infrastructure, or area?

- >\$500,000 10 points
- \$250,000 – \$500,000 8 points
- \$100,000 – \$249,999 6 points
- \$50,000 – \$99,999 4 points
- < \$50,000 or unknown 2 points

## 6. Infrastructure Criticality

The critical question addressed here is, “does this proposed project help protect the community by hardening some critical element in the community’s infrastructure that will reduce the potential loss of life or property damage if a disaster strikes”? Points under this criterion are awarded based on the nature of the facility or infrastructure element being mitigated.

- Primary critical facilities are defined as “Facilities critical to the immediate support of life and public safety.” These are the facilities the community cannot afford to have any loss of function, even for a short period of time. Examples include a hospital, EOC, fire station, or emergency shelter. Mitigation initiatives or projects that will ensure continuity of operations for primary critical/essential services or infrastructure.

10 points

- Secondary critical facilities and infrastructure are defined as, “Facilities that will be critical for community recovery and restoration of services.” Examples of infrastructure include, but are not limited to power services, water, and wastewater.

- Mitigation initiatives or projects that will support secondary critical/essential infrastructure or services with loss/damage history

8 points

- Mitigation initiatives or projects will support secondary critical/essential infrastructure or services without loss/damage history

6 points

- Public convenience facilities are quality of life facilities such as parks, recreation areas, and non-essential public buildings. Project will support public convenience services or infrastructure

4 points

- Mitigation initiatives or projects that will have no impact on community infrastructure or services

0 points

## 7. Feasibility of Implementation

Is this project technically, financially, and legally feasible? Basically, this overarching requirement addresses the ease with which a project can be implemented. How easily can required permits be obtained? What is the timeframe for accomplishing this project's goals? Are there any technical problems that must be overcome to implement this project? How long before the proposed mitigation project will accomplish its stated goal?

Projects which can be accomplished quickly or have an inherent advantage over long term projects will receive higher scores.

- Project could be implemented in one year 10 points
- Project could be implemented in three years 8 points
- Project could be implemented in five years 6 points
- Project implementation would be greater than 5 years 2 points
- Project would be difficult to implement 0 points

## 8. Implementation Impacts

How might this project affect people living nearby? Will anyone be displaced by implementation of this project?

- Project has positive impacts to the people in the surrounding area 10 points
- Causes a temporary disturbance (temporary relocation or noise complaints, etc.) 0 points
- Causes future harm to people/negatively impacts people long-term (i.e. increases flood risk in another area when solving it at the project site) -10 points

## 9. Funding Availability

Is there an identified funding source or entity for this project or initiative; is funding currently available for this particular project? Points will be awarded as follows:

- Matching funds are identified and available 10 points
- Matching funds can be made available in a short timeframe 6 points
- Matching funds are not available 0 points

## 10. Sponsorship

Does the project have an active sponsor? (sponsor would be defined as a local government agency, or other entity, that will take responsibility for the mitigation initiatives management and implementation) Is a local government agency (City or County), or other entity willing to match funds?

- Project has an identified sponsor willing to match funds 10 points
- Project has identified sponsor 6 points
- Project has no identified sponsor 0 points

### **Bonus Points-** Number of Previous Damage Occurrences

How many times has the structure, infrastructure or area been damaged by previous hazard occurrences? The number of damaging events will equate to the number of points received. For example, if a house has flooded 4 times, 4 points would be awarded.

\_\_\_\_\_ points

## St. Johns County Local Mitigation Strategy

### Project Prioritization

Criteria	10 Points	8 Points	6 Points	4 Points	2 Points	0 Points	(-)10 Points
<b>Population Benefited</b>	Project would benefit 75% or more of the population.	Project would benefit 50-74% of the population.	Project would benefit 25-49% of the population.	Project would benefit 24-1% of the population.	Project would benefit less than 1% of the population.		
<b>Social Equity</b>	High	Medium-High		Low-Medium		Low	
<b>Environmental Impact</b>	Project would improve the environment		Project has no impact on the environment				Project could cause negative impact to the environment
<b>Reduces Risk of Future Property Damage</b>	Hazard is expected to occur at least annually	Hazard may occur once every 1-5 years	Hazard is expected to occur every 5-10 years	Hazard occurs less than once every 10 years	There is no known history of hazard		
<b>Previous Damages</b>	> \$500,000	\$250,000 - \$500,000	\$100,000 - \$249,999	\$50,000 - \$99,999	< \$50,000		
<b>Infrastructure Criticality</b>	Facilities critical to the immediate support of life and public safety	Facilities that support secondary critical/essential infrastructure or services with loss/damage history	Facilities that support secondary critical/essential infrastructure or services without loss/damage history	Project will support public convenience services or infrastructure		Projects have no impact on community infrastructure or services.	
<b>Feasibility of Implementation</b>	Project could be implemented in one year.	Project could be implemented in three years.	Project could be implemented in five years.		Project implementation would be greater than 5 years.	Project would be difficult to implement.	
<b>Implementation Impacts</b>	Does not displace or negatively affect any people					Causes a temporary disturbance	Negatively impacts people
<b>Funding Availability</b>	Matching funds are identified and available		Matching funds can be made available in a short timeframe			Matching funds are not available	
<b>Sponsorship</b>	Project has an identified sponsor willing to match funds.		Project has identified sponsor.			Project has no identified sponsor.	
<b>Project Occurrence</b>	Previously damaged by hazard 10 times	Previously damaged by hazard 8 times	Previously damaged by hazard 6 times	Previously damaged by hazard 4 times	Previously damaged by hazard 2 times	No history of damages	

updated 11/2024

## C. Funding

The following table provides current information on sources of available funding that is typically used for hazard mitigation projects. Funding sources often come and go; these programs are regularly available. As additional or updated information becomes available, the list will be amended accordingly.

Table 17: Common Mitigation Funding Avenues

Grant Program	Sponsoring Agency	Type of Assistance	Eligibility
<b>Hazard Mitigation Grant Program (HMGP)</b>	FEMA	Monetary	Only after a disaster
<b>Legislative Pre-Disaster Mitigation Program (L-PDM)</b>	FEMA	Monetary	Pre-Disaster
<b>Building Resilient Communities and Infrastructure (BRIC)</b>	FEMA	Monetary and Technical	States and Communities
<b>Community Development Block Grant – Mitigation (CDBG-Mit)</b>	HUD	Monetary and Technical	Tied to Disaster Funding
<b>Flood Mitigation Assistance (FMA)</b>	FEMA/National Flood Insurance Program	Monetary and Technical	Individual flood claims reaching a pre-set threshold
<b>Hurricane Loss Mitigation Program (HLMP)</b>	State of Florida	Monetary and Technical	Assistance for individual hardening of homes
<b>Resilient Florida</b>	State of Florida	Monetary	Mitigation and adaptation projects (may need to also be listed in a FDEP Adaptation Plan)
<b>Local General Revenue</b>	Local Government	Monetary	All projects

## D. Project Implementation

The mitigation project description will provide information on who initiated the mitigation project or initiative and who will be responsible for overseeing the implementation. Individual agencies and/or their representative will be responsible for implementing the mitigation initiatives they have approved for funding.

Project implementation is tracked on an ongoing basis. The mitigation project list contains the most up-to-date information for each initiative. Projects that have been completed are removed from the main project list and tracked on a list of completed projects to show progress and celebrate

successes. Projects that have been deleted from the list can be found on the deleted project list along with a reason for removing the project from the list. All valid and desired projects will remain on the main project tracking sheet until they can be moved to the completed or deleted list. A copy of these three project lists can be found in Appendix D.

Projects may remain on the project list for many years. Implementing mitigation measures can be time consuming and costly. In addition, despite efforts to speed up the flow of money, the federal grant process is lengthy. It can be years from the time a grant application is submitted to when the project is able to begin construction. This limitation, in addition to grant complexities, can deter individuals from pursuing mitigation funding.

# **APPENDIX A:**

## **LMS Contact List**



## St. Johns County LMS Working Group Contact List

First	Last	Title	Department	Municipality/Organization	phone	Cell	email
City of St. Augustine							
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David	Birchim	City Manager	City Administration	City of St. Augustine	904-209-4323	904-687-5390	<a href="mailto:dbirchim@citystaug.com">dbirchim@citystaug.com</a>
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Julie	Courtney	Historic Preservation Officer	Planning and Building	City of St. Augustine	904-209-4283		<a href="mailto:jcourtney@citystaug.com">jcourtney@citystaug.com</a>
Raymond	Deschler	Floodplain Coordinator	Public Works	City of St. Augustine	904-201-8840		<a href="mailto:rdeschler@citystaug.com">rdeschler@citystaug.com</a>
Roxanne	Horvath	Elected Official	City Commission	City of St. Augustine			<a href="mailto:rhovath@citystaug.com">rhovath@citystaug.com</a>
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St. Johns County							
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Westly	Woodward	Engineer	Building Services	St. Johns County	904-209-0615		<a href="mailto:wwoodward@sjcfl.us">wwoodward@sjcfl.us</a>
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Angela	Schedel	Engineer		Taylor Engineering			<a href="mailto:Aschedel@taylorengeering.com">Aschedel@taylorengeering.com</a>
Beth	Payne	Executive Director		NE FL Regional Council			<a href="mailto:epayne@nefrc.org">epayne@nefrc.org</a>
Bill	Tredik	Regional Manager/Chief Engineer		Applied Science	813-228-0900	904-325-3710	<a href="mailto:wtredik@appliedfl.com">wtredik@appliedfl.com</a>
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Courtney	Pittman	Interim Director		NEF Regional Airport	305-987-6076		<a href="mailto:ckp@sjc-airport.com">ckp@sjc-airport.com</a>
Linda	Gee			Flalger Estates & CRA			<a href="mailto:Lagee@windstream.net">Lagee@windstream.net</a>
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First	Last	Title	Department	Municipality/Organization	phone	Cell	email
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# **APPENDIX B:**

## LMS Meeting Documentation



## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: November 19, 2020 @ 9:00 am

A virtual meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, November 19, 2020 at 9:00 am, from the St. Johns County Emergency Operations Center via GoToMeeting. Kelly Wilson called the meeting to order with the following members:

John Burnham – St. Johns County Public Works  
Don Cuevas – Beaches Energy Services  
Kaitlyn Dietz – GTM Research Reserve  
Georgia Katz – St. Johns County Growth Management  
Wes Marsh – Brooks Rehab  
James Schock – St. Johns County Building Services  
Bill Tredik – St. Augustine Beach  
Angela Schedel – Taylor Engineering  
Kelly Wilson – LMS Chairperson, St. Johns County Emergency Management  
Laura Nelson – St. Johns County Emergency Management  
Westly Woodward – St. Johns County Floodplain Management  
Gina Lambert – Florida Division of Emergency Management  
Rhonda Dunn – St. Johns County Resident  
Jessica Beach – City of St. Augustine  
Joel Sneed – St. Johns County Fire Rescue  
Neal Shinkre – St. Johns County Public Works  
Duane Kent – St. Johns County Public Works  
Janis Fleet – Town of Marineland  
Tyler Nolen – Northeast Florida Regional Council  
William Tredik – City of St. Augustine Beach  
Jenny Wolfe – City of St. Augustine

#### I. Introductions

Kelly Wilson welcomed everyone to the virtual meeting. Rollcall was taken for any individuals who were on the phone and not logged in to the webinar.

#### II. New Information

##### a. LMS Update

- Kelly Wilson advised that the LMS Plan update was approved by the State and FEMA and she thanked everyone for their contributions throughout the update process.
- b. Hurricane Matthew HMGP Project Status**
  - Kelly Wilson advised the group that Hurricane Matthew HMGP projects are progressing at the local level. **A current Matthew HMGP Funding Table is included as part of these official minutes.**
  - Kelly Wilson- SJC Emergency Management, John Burnham- SJC Public Works, Jessica Beach- City of St. Augustine, Bill Tredik- St. Augustine Beach, each gave updates on the status of their HMGP Projects.
- c. Hurricane Irma HMGP Projects Status**
  - Kelly Wilson presented the Working Group a table of all Hurricane Irma HMGP Projects that had been submitted for St. Johns County. John Burnham and Jessica Beach provided status updates of their HMGP Projects. **A current Irma HMGP Funding Table is included as part of these official minutes.**
- d. Hurricane Michael HMGP Funding Opportunities**
  - Kelly Wilson and John Burnham discussed applications that were submitted for Hurricane Michael. Kelly advised that it could be years before anything is heard about projects.
- e. Hurricane Dorian Upcoming HMGP Allocation**
  - Kelly Wilson advised the Working Group that St. Johns County would be allocated HMGP funding as a result of the Major Disaster Declaration from Hurricane Dorian. Laura Nelson advised that the Notice of Funding Availability (NOFA) has been held up by the revision and final publication of Florida Administrative Code (FAC) 27P-22.
- f. Proposed Changes to FAC Rule 27P.22 – HMGP Funding**
  - Kelly Wilson advised the Working Group of the changes to Rule 27P-22. Due to push back from local governments, the proposed revisions were retracted and the Division published new changes that were merely administrative. The changes are expected to be published and become official soon.
- g. New Projects and Planning 2020\***
  - Kelly Wilson facilitated the 6 new projects that need to be added to the LMS Project List. **Project information sheets are included with the minutes.**

1. **Fire Station Generators (7)**- Kelly explained the project on behalf of Fire Rescue. The approval was motioned by John Burnham and seconded by Jim Shock. Motion was unanimously approved.
2. **Lightner/City Hall Flood Mitigation and Hardening**- Jenny Wolfe explained the project. Georga Katz motioned to approve the project and Jessica Beach seconded. Motion was unanimously approved.
3. **Flood Mitigation/Drainage Improvements for Plaza de la Constitución**- Jenny Wolfe explained the significance of the project. Kaitlyn Dietz made the motion to add the project and it was seconded by Jessica Beach. The motion was unanimously approved.
4. **Llambias House Flood Mitigation**- Jenny Wolfe explained the project. Georgia Katz made a motion and Kaitlyn Dietz Motion was unanimously approved.
5. **Repetitive Loss Elevation on Arricola Ave**- This project was explained by Jessica Beach with the City. The project has been submitted for funding under the Flood Mitigation Assistance program. A motion was made to add it to the list by Kaitlyn Dietz and seconded by Laura Nelson. Motion was unanimously approved.
6. **Repetitive Loss Demo Recon on Arricola Ave**- This demolition reconstruction project was submitted under the FMA program this year. The motion was made by Laura Nelson and seconded by Angela Schedel. Motion was unanimously approved.

### III. Action Items

#### a. Discussion and approval of minutes from February 27, 2020 LMS Working Group Meeting\*

A motion was made by Angela Schedel to approve the minutes for the February 27th meeting; seconded by Don Cuevas; motion carried unanimously.

#### b. Election of Chair and Vice Chair\*

Kelly Wilson proposed to move herself to the vice chair and make Laura Nelson the new Chairperson. The motion was made by Jessica Beach and seconded by Angela. Motion was unanimously approved.

### IV. Open Discussion

#### a. Discussion of 2021 LMS Working Group meeting date

- LMS Working Group Meetings for 2021, all meetings will be Thursdays, @ 9:00 am here at the St. Johns County EOC.
  - May 27, 2021
  - August 26, 2021
  - November 18, 2021



- b. Kelly mentioned that the County remains a Class 5 in the Community Rating System. Jessica Beach mentioned that the City of St. Augustine improved to a class 5.

V. Adjournment  
Meeting adjourned at 10:10 am

\* Denotes action item

### Hurricane Matthew Hazard Mitigation Grant Program Funded Projects

Project Rank	Project	Jurisdiction	Cost	Local Match 25%
1	Lake Maria Sanchez Flood Mitigation Project	City of St. Augustine	\$ 11,500,000.00	\$ 2,875,000.00
2	Master Stormwater Pump Station Improvements	City of St. Augustine Beach	\$ 500,000.00	\$ 125,000.00
3	Emergency Standby Generators at Primary Hurricane Shelters: Osceola Elem. School, Otis A. Mason Elem. School, Mill Creek Elem. School	St. Johns County School District	\$ 750,000.00	\$ 187,500.00
4	Upgrade Signalization at US1 @ County Road 210	St. Johns County	\$ 511,148.00	\$ 127,787.00
5	Upgrade Signalization at US 1 @ Lewis Point Rd.	St. Johns County	\$ 551,149.00	\$ 137,787.00
6	Upgrade Signalization at US 1 @ Shore Dr.	St. Johns County	\$ 551,149.00	\$ 137,787.00
7	Increase Primary Stormwater Outfall Capacity	City of St. Augustine Beach	\$ 350,000.00	\$ 87,500.00
8	Drainage Improvements at Kings Estate	St. Johns County	\$ 350,000.00	\$ 87,500.00
9	Install hurricane shutters and emergency standby generator at the St. Johns County Pet Center	St. Johns County	\$ 125,000.00	\$ 31,250.00
10	Flood Mitigation Improvements on South Whitney and West King St.	City of St. Augustine/St. Johns County	\$ 800,000.00	\$ 200,000.00
<del>11</del>	<del>Bartram Oaks Wastewater Treatment Plant Standby Generator</del>	<del>St. Johns County</del>	<del>\$ 163,000.00</del>	<del>\$ 40,750.00</del>
12	Drainage Improvements on Kings Road	St. Johns County	\$ 354,714.00	\$ 88,679.00
13	Drainage Improvements at North Beach	St. Johns County	\$ 2,000,000.00	\$ 500,000.00
14	South Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 253,260.00	\$ 63,315.00
15	Shores Unit 2 Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 212,160.00	\$ 53,040.00
			\$ 18,971,580.00	\$ 4,742,895.00

## St. Johns County Hurricane Irma HMGP Ranked Project List

Project Rank	Project	Applicant	Goal	Total Project Cost	Estimated Federal Share
1	Flood Mitigation at Avenida Menendez Seawall, Connectivity Project - CoSA Priority #1	City of St. Augustine	2,3,4	\$1,475,000.00	\$1,106,250.00
2	<del>Drainage Improvements at Winton Circle - SJC Priority #1</del>	<del>St. Johns County</del>	<del>2,3</del>	<del>\$1,500,000.00</del>	<del>\$1,125,000.00</del>
3	Wastewater Treatment Plant Shoreline Hardening and Flood Proofing - CoSA Priority #2	City of St. Augustine	2,3,4,5	\$7,160,000.00	\$1,790,000.00
4	<del>Deep Creek Conveyance Improvements - SJC Priority #2</del>	<del>St. Johns County</del>	<del>2,3,4,5</del>	<del>\$1,500,000.00</del>	<del>\$1,125,000.00</del>
5	Manhole Lid Inserts - Reduction of Infiltration & Inflow to the City's Sanitary Sewer System	City of St. Augustine	2,3,5	\$760,000.00	\$570,000.00
6	Flood Proofing and Wind Mitigation at Fire Station 6 – Crescent Beach	St. Johns County	2,3	\$31,000.00	\$23,250.00
7	Macaris Stormwater Outfall Resiliency Retrofit with Tide Check Valve	City of St. Augustine	2,3,4	\$300,000.00	\$225,000.00
8	Drainage Improvements by Retrofitting Stormwater Outfalls Citywide	City of St. Augustine	2,3,4, 5	\$1,600,000.00	\$1,200,000.00
9	Drainage Improvements at West Augustine Service Areas 2 & 4	St. Johns County	2,3,4	\$920,000.00	\$690,000.00
10	<del>Drainage Improvements at Rio del Mar Street &amp; Fountain of Youth - Boulevard</del>	<del>St. Johns County</del>	<del>2,3</del>	<del>\$1,000,000.00</del>	<del>\$750,000.00</del>
11	Drainage Improvements on CR 13 N	St. Johns County	2,3	\$1,500,000.00	\$1,125,000.00
12	Drainage Improvement and Flood Mitigation of Ct Theophelia Neighborhood	City of St. Augustine	2,3	\$1,000,000.00	\$750,000.00
13	<del>Drainage Improvement Fox Creek - Holmes Blvd</del>	<del>St. Johns County</del>	<del>2,3</del>	<del>\$873,000.00</del>	<del>\$654,750.00</del>
14	Drainage Improvements at Porpoise Point	St. Johns County	2,3,4	\$800,000.00	\$600,000.00
<b>Total</b>				<b>\$20,419,000.00</b>	<b>\$11,734,250.00</b>

Updated April 2019



## St. Johns County Emergency Management

SCORE

### St. Johns County Local Mitigation Strategy Proposed Mitigation Initiative

Date Submitted: 7/1/2020

<b>Jurisdiction Name:</b>	St. Johns County	
<b>Agency Submitting Initiative (Sponsor):</b>	St. Johns County Fire Rescue	
<b>Contact Person:</b>	Carl Shank	
<b>Email Address:</b>	cshank@sjcfl.us	
<b>Phone Number:</b>	904-209-1701	
<i>Is this initiative new or a revision of an earlier initiative?</i>	<input type="checkbox"/> New	<input checked="" type="checkbox"/> Revision
<i>Is the mitigation initiative consistent with the Guiding Principles, Goals, and Objectives of the St. Johns County Local Mitigation Strategy?</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Mitigation Initiative Title:</b>	Emergency Standby Generators for Fire Stations 2, 3, 4, 6, 9, 10 and 12	
<b>Description:</b>	<p>St. Johns County Fire Rescue (SJCFR) provides 24/7 all-hazards emergency response for St. Johns County and the municipalities included within. In order to provide this critical public safety response in times of natural or manmade disaster scenarios, SJCFR must have alternate power sources in place for critical public safety facilities.</p> <p>This project is to purchase and install emergency standby generators for the following St. Johns County Fire Stations:</p> <p>Station 2 – 1120 Sheffield Road, St. Johns FL 32259 Station 3 – 6010 State Road 13N, St. Augustine, FL 32092 Station 4 – 3400 County Road 208, St. Augustine, FL 32092 Station 6 – 5865 A1A South, St. Augustine, FL 32080 Station 9 – 2998 South Ponte Vedra BLVD, Ponte Vedra Beach, FL 32082 Station 10 – 155 Library Drive, Ponte Vedra Beach, FL 32082 Station 12 – 4505 Avenue B, St. Augustine, FL 32095</p>	
<b>Cost to Implement the Mitigation Initiative:</b>		

Hazard and Category Identification	
Identify the hazards intended to be addressed by this initiative, as well as the mitigation category by checking all applicable boxes below.	
Hazard	Category
<input type="checkbox"/> All Hazard <input type="checkbox"/> Hurricane – Storm Surge <input checked="" type="checkbox"/> Hurricane – High Winds <input checked="" type="checkbox"/> Tornado <input checked="" type="checkbox"/> Flooding <input type="checkbox"/> Wildfire <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Terrorism <input type="checkbox"/> Drought/Heat Wave <input checked="" type="checkbox"/> Freeze/Winter Storm <input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Beach Nourishment <input type="checkbox"/> Education and Training <input type="checkbox"/> Expand/Enhance/Improve Utilities <input type="checkbox"/> Flood/Repetitive Loss Mitigation <input type="checkbox"/> Hazardous Materials Mitigation <input checked="" type="checkbox"/> Infrastructure and Structure Improvements <input type="checkbox"/> Master Drainage Improvement <input type="checkbox"/> Planning <input type="checkbox"/> Wildfire Mitigation

Funding Category		
Select the most appropriate category of funding for the proposal from the list below.		
<input type="checkbox"/> Local Funding	<input type="checkbox"/> Flood Mitigation Assistance Grant	<input type="checkbox"/> Residential Construction Mitigation Program
<input type="checkbox"/> Pre-Disaster Mitigation Grant	<input checked="" type="checkbox"/> Hazard Mitigation Grant Program	<input type="checkbox"/> 406 PA Mitigation
<input type="checkbox"/> Shelter Retrofit Grant	<input checked="" type="checkbox"/> Community Development Block Grant	<input type="checkbox"/> Other type of funding

This section to be completed by Chairperson		
Has this mitigation initiative been approved by the executive committee?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, date accepted: <a href="#">Click here to enter a date.</a>		
Executive Committee Priority Ranking Score		
Notes:		



## St. Johns County Emergency Management

SCORE

### St. Johns County Local Mitigation Strategy Proposed Mitigation Initiative

Date Submitted: 11/18/2020

<b>Jurisdiction Name:</b>	City of St. Augustine	
<b>Agency Submitting Initiative (Sponsor):</b>	City of St. Augustine	
<b>Contact Person:</b>	Jenny Wolfe	
<b>Email Address:</b>	<a href="mailto:jwolfe@citystaug.com">jwolfe@citystaug.com</a>	
<b>Phone Number:</b>	(904) 209-4326	
<i>Is this initiative new or a revision of an earlier initiative?</i>	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Revision
<i>Is the mitigation initiative consistent with the Guiding Principles, Goals, and Objectives of the St. Johns County Local Mitigation Strategy?</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Mitigation Initiative Title:</b>	Flood Mitigation and Hardening for the Lightner Museum	
<b>Description:</b>	<p>The former Alcazar Hotel was built in 1888 by Henry Morrison Flagler and closed soon after during the Depression. In 1947, Otto C. Lightner purchased the building, opened the museum two years later. The building is on the National Register of Historic Places and currently home to the Lightner Museum and the City of Augustine government offices.</p> <p>The Alcazar Hotel – Historic Lightner Museum building is centrally located within the heart of the city between Granada and Cordova Streets and south of King Street. Like most of the Historic District, its proximity to the Matanzas River to the east and San Sebastian River to the west make it vulnerable to flooding during extreme weather events. The following mitigation actions are proposed to alleviate the effects of flood hazards:</p> <ul style="list-style-type: none"><li>• Site and Landscape Adaptations: Underground Cisterns</li><li>• Temporary Protective Measures: Temporary Flood Wrap, Temporary Flood Gates</li><li>• Wet Floodproofing: Wet Floodproofing Indoor Pool</li></ul>	
<b>Cost to Implement the Mitigation Initiative:</b>	\$2,040,000.00	

Hazard and Category Identification	
Identify the hazards intended to be addressed by this initiative, as well as the mitigation category by checking all applicable boxes below.	
Hazard	Category
<input type="checkbox"/> All Hazard <input checked="" type="checkbox"/> Hurricane – Storm Surge <input type="checkbox"/> Hurricane – High Winds <input type="checkbox"/> Tornado <input checked="" type="checkbox"/> Flooding <input type="checkbox"/> Wildfire <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Terrorism <input type="checkbox"/> Drought/Heat Wave <input type="checkbox"/> Freeze/Winter Storm <input checked="" type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Beach Nourishment <input type="checkbox"/> Education and Training <input type="checkbox"/> Expand/Enhance/Improve Utilities <input checked="" type="checkbox"/> Flood/Repetitive Loss Mitigation <input type="checkbox"/> Hazardous Materials Mitigation <input checked="" type="checkbox"/> Infrastructure and Structure Improvements <input type="checkbox"/> Master Drainage Improvement <input type="checkbox"/> Planning <input type="checkbox"/> Wildfire Mitigation

Funding Category		
Select the most appropriate category of funding for the proposal from the list below.		
<input checked="" type="checkbox"/> Local Funding	<input type="checkbox"/> Flood Mitigation Assistance Grant	<input type="checkbox"/> Residential Construction Mitigation Program
<input checked="" type="checkbox"/> Pre-Disaster Mitigation Grant	<input type="checkbox"/> Hazard Mitigation Grant Program	<input type="checkbox"/> 406 PA Mitigation
<input type="checkbox"/> Shelter Retrofit Grant	<input type="checkbox"/> Community Development Block Grant	<input checked="" type="checkbox"/> Other type of funding CDBG-MIT

This section to be completed by Chairperson		
Has this mitigation initiative been approved by the executive committee?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, date accepted: <a href="#">Click here to enter a date.</a>		
Executive Committee Priority Ranking Score		
Notes:		





## St. Johns County Emergency Management

SCORE

### St. Johns County Local Mitigation Strategy Proposed Mitigation Initiative

Date Submitted: 11/18/2020

<b>Jurisdiction Name:</b>	City of St. Augustine	
<b>Agency Submitting Initiative (Sponsor):</b>	City of St. Augustine	
<b>Contact Person:</b>	Jenny Wolfe	
<b>Email Address:</b>	<a href="mailto:jwolfe@citystaug.com">jwolfe@citystaug.com</a>	
<b>Phone Number:</b>	(904) 209-4326	
<i>Is this initiative new or a revision of an earlier initiative?</i>	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Revision
<i>Is the mitigation initiative consistent with the Guiding Principles, Goals, and Objectives of the St. Johns County Local Mitigation Strategy?</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Mitigation Initiative Title:</b>	Flood Mitigation and Drainage for the Plaza de la Constitución	
<b>Description:</b>	<p>The Plaza de la Constitución was planned along with the urban form of the harbor town as the center the St. Augustine in in accordance with the Spanish Royal Ordinances. The park is on a stretch of land bordered by the Cathedral Basilica of St. Augustine, Trinity Episcopal, and Government House. The Plaza earned its proper name for the obelisk that was erected to celebrate the Spanish Constitution of 1812. The Plaza is situated between Cathedral Place and King Street that serve as the main thoroughfares for the City. Its proximity to the Matanzas River to the east and San Sebastian River to the west make it vulnerable to flooding during extreme weather events. The following mitigation actions are proposed to alleviate the effects of flood hazards:</p> <ul style="list-style-type: none"><li>• Site and Landscape Adaptations: Elevated Park with underground stormwater detention system and Underground Cisterns under King Street and Cathedral Place</li><li>• Temporary Protective Measures: Temporary Flood Barrier</li></ul>	
<b>Cost to Implement the Mitigation Initiative:</b>	\$4,645,000.00	

Hazard and Category Identification	
Identify the hazards intended to be addressed by this initiative, as well as the mitigation category by checking all applicable boxes below.	
Hazard	Category
<input type="checkbox"/> All Hazard <input checked="" type="checkbox"/> Hurricane – Storm Surge <input type="checkbox"/> Hurricane – High Winds <input type="checkbox"/> Tornado <input checked="" type="checkbox"/> Flooding <input type="checkbox"/> Wildfire <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Terrorism <input type="checkbox"/> Drought/Heat Wave <input type="checkbox"/> Freeze/Winter Storm <input checked="" type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Beach Nourishment <input type="checkbox"/> Education and Training <input type="checkbox"/> Expand/Enhance/Improve Utilities <input type="checkbox"/> Flood/Repetitive Loss Mitigation <input type="checkbox"/> Hazardous Materials Mitigation <input checked="" type="checkbox"/> Infrastructure and Structure Improvements <input type="checkbox"/> Master Drainage Improvement <input type="checkbox"/> Planning <input type="checkbox"/> Wildfire Mitigation

Funding Category		
Select the most appropriate category of funding for the proposal from the list below.		
<input checked="" type="checkbox"/> Local Funding	<input type="checkbox"/> Flood Mitigation Assistance Grant	<input type="checkbox"/> Residential Construction Mitigation Program
<input checked="" type="checkbox"/> Pre-Disaster Mitigation Grant	<input type="checkbox"/> Hazard Mitigation Grant Program	<input type="checkbox"/> 406 PA Mitigation
<input type="checkbox"/> Shelter Retrofit Grant	<input type="checkbox"/> Community Development Block Grant	<input checked="" type="checkbox"/> Other type of funding CDBG-MIT

This section to be completed by Chairperson		
Has this mitigation initiative been approved by the executive committee?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, date accepted: <a href="#">Click here to enter a date.</a>		
Executive Committee Priority Ranking Score		
Notes:		



## St. Johns County Emergency Management

SCORE

### St. Johns County Local Mitigation Strategy Proposed Mitigation Initiative

Date Submitted: 11/18/2020

<b>Jurisdiction Name:</b>	City of St. Augustine	
<b>Agency Submitting Initiative (Sponsor):</b>	City of St. Augustine	
<b>Contact Person:</b>	Jenny Wolfe	
<b>Email Address:</b>	<a href="mailto:jwolfe@citystaug.com">jwolfe@citystaug.com</a>	
<b>Phone Number:</b>	(904) 209-4326	
<i>Is this initiative new or a revision of an earlier initiative?</i>	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Revision
<i>Is the mitigation initiative consistent with the Guiding Principles, Goals, and Objectives of the St. Johns County Local Mitigation Strategy?</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Mitigation Initiative Title:</b>	Flood Mitigation and Resiliency for the Llambias House	
<b>Description:</b>	<p>Located within the St. Augustine Town Plan Historic District, the Llambias House is designated a National Historic Landmark and is one of the few buildings in the area that dates back to the first Spanish Colonial Period (1565-1763) (National Park Service U.S. Department of the Interior 2020). Situated between the Matanzas River and Lake Maria Sanchez, the Llambias House experiences high exposure to flood water encroaching from both the east and west along St. Francis Street during extreme weather events. Due to the significant historic value of this asset and the available green space, the following mitigation actions are proposed to alleviate the effects of flood hazards:</p> <ul style="list-style-type: none"><li>• Site and Landscape Adaptations: Landscape Berm and Additional Trees</li><li>• Temporary Protective Measures: Temporary Flood Wrap and Removable Flood Gates</li></ul> <p>The Llambias House allows for a unique opportunity in a cityscape to use green or nature-based site infrastructure since the built infrastructure occupies less than 10% of the total parcel. This open space allows the addition of trees that naturally offer resilience as they age by intercepting water through their root systems. The green space also allows the implementation of landscape berms that can work in conjunction with the existing perimeter walls to offer protection against floodwaters.</p>	

<b>Cost to Implement the Mitigation</b>	\$135,000
<b>Hazard and Category Identification</b> <i>Identify the hazards intended to be addressed by this initiative, as well as the mitigation category by checking all applicable boxes below.</i>	
<b>Hazard</b>	<b>Category</b>
<input type="checkbox"/> All Hazard <input checked="" type="checkbox"/> Hurricane – Storm Surge <input type="checkbox"/> Hurricane – High Winds <input type="checkbox"/> Tornado <input checked="" type="checkbox"/> Flooding <input type="checkbox"/> Wildfire <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Terrorism <input type="checkbox"/> Drought/Heat Wave <input type="checkbox"/> Freeze/Winter Storm <input checked="" type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Beach Nourishment <input type="checkbox"/> Education and Training <input type="checkbox"/> Expand/Enhance/Improve Utilities <input checked="" type="checkbox"/> Flood/Repetitive Loss Mitigation <input type="checkbox"/> Hazardous Materials Mitigation <input type="checkbox"/> Infrastructure and Structure Improvements <input type="checkbox"/> Master Drainage Improvement <input type="checkbox"/> Planning <input type="checkbox"/> Wildfire Mitigation

<b>Funding Category</b> <i>Select the most appropriate category of funding for the proposal from the list below.</i>		
<input checked="" type="checkbox"/> Local Funding  <input checked="" type="checkbox"/> Pre-Disaster Mitigation Grant  <input type="checkbox"/> Shelter Retrofit Grant	<input type="checkbox"/> Flood Mitigation Assistance Grant  <input type="checkbox"/> Hazard Mitigation Grant Program  <input type="checkbox"/> Community Development Block Grant	<input type="checkbox"/> Residential Construction Mitigation Program  <input type="checkbox"/> 406 PA Mitigation  <input checked="" type="checkbox"/> Other type of funding CDBG-MIT
<b><i>This section to be completed by Chairperson</i></b>		
Has this mitigation initiative been approved by the executive committee?		<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, date accepted: <a href="#">Click here to enter a date.</a>		
Executive Committee Priority Ranking Score		
Notes:		



## St. Johns County Emergency Management

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SCORE

### St. Johns County Local Mitigation Strategy Proposed Mitigation Initiative

Date Submitted: 11/17/2020

<b>Jurisdiction Name:</b>	City of St. Augustine	
<b>Agency Submitting Initiative (Sponsor):</b>	City of St. Augustine	
<b>Contact Person:</b>	Jessica Beach	
<b>Email Address:</b>	<a href="mailto:jbeach@citystaug.com">jbeach@citystaug.com</a>	
<b>Phone Number:</b>	(904) 209-4227	
<i>Is this initiative new or a revision of an earlier initiative?</i>	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Revision
<i>Is the mitigation initiative consistent with the Guiding Principles, Goals, and Objectives of the St. Johns County Local Mitigation Strategy?</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Mitigation Initiative Title:</b>	Elevation of a Repetitive Flood Loss Property at 467 Arricola Avenue	
<b>Description:</b>	The property at 467 Arricola Avenue has been subject to repeated flooding. The property owner has opted to pursue the Flood Mitigation Assistance Grant through FEMA with the City as the applicant. The application is for elevation of the existing structure to meet current building codes and flood plain elevation requirements.	
<b>Cost to Implement the Mitigation Initiative:</b>	\$428,813	

Hazard and Category Identification	
Identify the hazards intended to be addressed by this initiative, as well as the mitigation category by checking all applicable boxes below.	
Hazard	Category
<input type="checkbox"/> All Hazard <input checked="" type="checkbox"/> Hurricane – Storm Surge <input type="checkbox"/> Hurricane – High Winds <input type="checkbox"/> Tornado <input checked="" type="checkbox"/> Flooding <input type="checkbox"/> Wildfire <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Terrorism <input type="checkbox"/> Drought/Heat Wave <input type="checkbox"/> Freeze/Winter Storm <input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Beach Nourishment <input type="checkbox"/> Education and Training <input type="checkbox"/> Expand/Enhance/Improve Utilities <input checked="" type="checkbox"/> Flood/Repetitive Loss Mitigation <input type="checkbox"/> Hazardous Materials Mitigation <input type="checkbox"/> Infrastructure and Structure Improvements <input type="checkbox"/> Master Drainage Improvement <input type="checkbox"/> Planning <input type="checkbox"/> Wildfire Mitigation

Funding Category		
Select the most appropriate category of funding for the proposal from the list below.		
<input type="checkbox"/> Local Funding	<input checked="" type="checkbox"/> Flood Mitigation Assistance Grant	<input type="checkbox"/> Residential Construction Mitigation Program
<input type="checkbox"/> Pre-Disaster Mitigation Grant	<input type="checkbox"/> Hazard Mitigation Grant Program	<input type="checkbox"/> 406 PA Mitigation
<input type="checkbox"/> Shelter Retrofit Grant	<input type="checkbox"/> Community Development Block Grant	<input type="checkbox"/> Other type of funding

This section to be completed by Chairperson		
Has this mitigation initiative been approved by the executive committee?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, date accepted: <a href="#">Click here to enter a date.</a>		
Executive Committee Priority Ranking Score		
Notes:		



## St. Johns County Emergency Management

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SCORE

### St. Johns County Local Mitigation Strategy Proposed Mitigation Initiative

Date Submitted: 11/17/2020

<b>Jurisdiction Name:</b>	City of St. Augustine	
<b>Agency Submitting Initiative (Sponsor):</b>	City of St. Augustine	
<b>Contact Person:</b>	Jessica Beach	
<b>Email Address:</b>	<a href="mailto:jbeach@citystaug.com">jbeach@citystaug.com</a>	
<b>Phone Number:</b>	(904) 209-4227	
<i>Is this initiative new or a revision of an earlier initiative?</i>	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Revision
<i>Is the mitigation initiative consistent with the Guiding Principles, Goals, and Objectives of the St. Johns County Local Mitigation Strategy?</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Mitigation Initiative Title:</b>	Demolition and Reconstruction of a Repetitive Flood Loss Property at 515 Arricola Avenue	
<b>Description:</b>	The property at 515 Arricola Avenue has been subject to repeated flooding. The property owner has opted to pursue the Flood Mitigation Assistance Grant through FEMA with the City as the applicant. The application is for demolition of the existing structure and to reconstruct a new structure to meet current building codes and flood plain elevation requirements.	
<b>Cost to Implement the Mitigation Initiative:</b>	\$397,000	



Hazard and Category Identification	
Identify the hazards intended to be addressed by this initiative, as well as the mitigation category by checking all applicable boxes below.	
Hazard	Category
<input type="checkbox"/> All Hazard <input checked="" type="checkbox"/> Hurricane – Storm Surge <input type="checkbox"/> Hurricane – High Winds <input type="checkbox"/> Tornado <input checked="" type="checkbox"/> Flooding <input type="checkbox"/> Wildfire <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Terrorism <input type="checkbox"/> Drought/Heat Wave <input type="checkbox"/> Freeze/Winter Storm <input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Beach Nourishment <input type="checkbox"/> Education and Training <input type="checkbox"/> Expand/Enhance/Improve Utilities <input checked="" type="checkbox"/> Flood/Repetitive Loss Mitigation <input type="checkbox"/> Hazardous Materials Mitigation <input type="checkbox"/> Infrastructure and Structure Improvements <input type="checkbox"/> Master Drainage Improvement <input type="checkbox"/> Planning <input type="checkbox"/> Wildfire Mitigation

Funding Category		
Select the most appropriate category of funding for the proposal from the list below.		
<input type="checkbox"/> Local Funding	<input checked="" type="checkbox"/> Flood Mitigation Assistance Grant	<input type="checkbox"/> Residential Construction Mitigation Program
<input type="checkbox"/> Pre-Disaster Mitigation Grant	<input type="checkbox"/> Hazard Mitigation Grant Program	<input type="checkbox"/> 406 PA Mitigation
<input type="checkbox"/> Shelter Retrofit Grant	<input type="checkbox"/> Community Development Block Grant	<input type="checkbox"/> Other type of funding

This section to be completed by Chairperson		
Has this mitigation initiative been approved by the executive committee?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, date accepted: <a href="#">Click here to enter a date.</a>		
Executive Committee Priority Ranking Score		
Notes:		

THE ST. AUGUSTINE RECORD  
Affidavit of Publication

SJC EMERGENCY MANAGEMENT  
100 EOC DRIVE

SAINT AUGUSTINE, FL 32095

ACCT: 15662  
AD# 0003319373-01

PO#

PUBLISHED EVERY MORNING SUNDAY THROUGH SATURDAY  
ST. AUGUSTINE AND ST. JOHNS COUNTY, FLORIDA

STATE OF FLORIDA  
COUNTY OF ST. JOHNS

Before the undersigned authority personally appeared MELISSA RHINEHART who on oath says he/she is an Employee of the St. Augustine Record, a daily newspaper published at St. Augustine in St. Johns County, Florida; that the attached copy of advertisement being a **NOTICE OF MEETING** in the matter of **LOCAL MITIGATION WORK GROUP** was published in said newspaper on **11/10/2020**.

Affiant further says that the St. Augustine Record is a newspaper published at St. Augustine, in St. Johns County, Florida, and that the said newspaper heretofore has been continuously published in said St. Johns County, Florida each day and has been entered as second class mail matter at the post office in the City of St. Augustine, in said St. Johns County, Florida for a period of one year preceding the first publication of the attached copy of advertisement; and affiant further says the he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission, or refund for the purpose of securing this advertisement for publication in said newspaper.

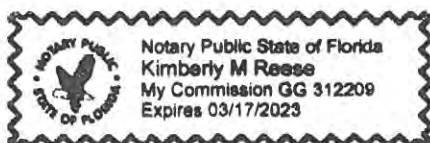
Sworn to (or affirmed) and subscribed before me by means of

☒ physical presence or  
☐ online notarization

this \_\_\_\_ day of NOV 10 2020

by *M. Rhinehart* who is personally known to  
me or who has produced as identification

*Kimberly M Reese*  
(Signature of Notary Public)



PUBLIC NOTICE

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thursday, November 19, 2020 virtually via GoToMeeting. All interested persons are invited to participate.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.

0003319373 November 10, 2020

Tue, Nov 10, 2020  
8:56:03AM

## Legal Ad Invoice

# The St. Augustine Record

Send Payments to:  
The St. Augustine Record  
One News Place  
St. Augustine, FL 32086

**Acct:** 15662  
**Phone:** 9048245550

**E-Mail:**

**Client:** SJC EMERGENCY MANAGEMENT

**Name:** SJC EMERGENCY MANAGEMENT  
**Address:** 100 EOC DRIVE

**City:** SAINT AUGUSTINE

**State:** FL

**Zip:** 32095

**Ad Number:** 0003319373-01

**Start:** 11/10/2020

**Placement:** SA Legals

**Copy Line:** PUBLIC NOTICE The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thu

**Caller:** Kelly Wilson

**Issues:** 1

**Rep:** Melissa Rhinehart

**Paytype:** BILL

**Stop:** 11/10/2020

### PUBLIC NOTICE

Lines 15  
Depth 1.25  
Columns 1  
  
Price \$22.44

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0003319373 November 10, 2020



## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: March 30, 2021 @ 9:00 am

A virtual meeting of the St. Johns County Local Mitigation Strategy Working Group was held Tuesday, March 30, 2021 at 9:00 am, from the St. Johns County Emergency Operations Center via GoToMeeting. Laura Nelson called the meeting to order with the following members:

Don Cuevas – Beaches Energy Services  
Kaitlyn Dietz – GTM Research Reserve  
James Schock – St. Johns County Building Services  
Angela Schedel – Taylor Engineering  
Kelly Wilson – St. Johns County Emergency Management  
Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Westly Woodward – St. Johns County Floodplain Management  
Jessica Beach – City of St. Augustine  
William Tredik – City of St. Augustine Beach  
Jenny Wolfe – City of St. Augustine  
Brian Law – City of St. Augustine Beach  
Michael Jordan – ARES  
Paul Studivant – St. Johns County Animal Control  
Todd Grant – City of St. Augustine Public Works  
Reuben Franklin – City of St. Augustine Public Works  
Joseph Cone – St. Johns County Health and Human Services  
Donna DeGennaro – Flagler Hospital

- I. Introductions  
Laura Nelson welcomed everyone to the virtual meeting. Rollcall was taken for any individuals who were on the phone and not logged in to the webinar.
- II. Approval of November 19, 2020 meeting minutes  
Motion to approve the minutes was made by Jim Shock and seconded by Kelly Wilson.
- III. Projects to be added to the list:
  - a. **Phase 1 Flood Barrier for South Davis Shores**
    - Jessica Beach briefly discussed the project. A motion for approval to add this project to the list was issued by Kelly Wilson and seconded by Jim Shock.

- b. **Smart Valve System for South Davis Shores**
  - Jessica Beach briefly discussed the project. A motion for approval to add this project to the list was issued by Jim Shock and seconded by Brian Law.
- c. **Drainage Improvements for South Davis Shores**
  - Jessica Beach briefly discussed the project. A motion for approval to add this project to the list was issued by Brian Law and seconded by Kaitlyn Dietz.
- d. **Stormwater Pump Station for Coquina Ditch in South Davis Shores**
  - Jessica Beach briefly discussed the project. A motion for approval to add this project to the list was issued by Kelly Wilson and seconded by Jim Shock.
- e. **Stormwater Resiliency Improvements to Ocean Walk Subdivision**
  - Bill Tredik explained the project. A motion to approve the project was issued by Todd Grant and seconded by Jessica Beach.
- f. **CR A1A Storm Surge Protection**
  - Bill Tredik explained the project. A motion to approve the project was issued by Todd Grant and seconded by Brian Law.

Project information sheets have been included with the minutes.

#### IV. Project Ranking

- a. **Projects Ranked for Hurricane Dorian HMGP Submission**  
The following projects were scored utilizing the project ranking criteria.  
The full ranking spreadsheet has been attached.

Rank	Project	Total Score
<b>City of St. Augustine</b>		
3	Smart Valve System for S. Davis Shores	70
5	Drainage Improvements to S. Davis shores	66
4	Phase 1 Flood Barrier for South Davis Shores	68
<b>City of St. Augustine Beach</b>		
1	CR A1A Storm Surge Protection	84
2	Stormwater Resiliency Improvements to Ocean Walk Subdivision	76

V. Open Discussion

**a. Reminder of 2021 LMS Working Group meeting date**

- LMS Working Group Meetings for 2021, all meetings will be Thursdays, @ 9:00 am here at the St. Johns County EOC.
  - May 27, 2021
  - August 26, 2021
  - November 18, 2021

V. Adjournment

Meeting adjourned at 10:10 am

\* Denotes action item



## St. Johns County Emergency Management

**SCORE** [Click here to enter text.](#)

### St. Johns County Local Mitigation Strategy Proposed Mitigation Initiative

Date Submitted: 3/29/2021

<b>Jurisdiction Name:</b>	City of St. Augustine	
<b>Agency Submitting Initiative (Sponsor):</b>	City of St. Augustine	
<b>Contact Person:</b>	Jessica Beach	
<b>Email Address:</b>	<a href="mailto:jbeach@citystaug.com">jbeach@citystaug.com</a>	
<b>Phone Number:</b>	(904) 209-4227	
<i>Is this initiative new or a revision of an earlier initiative?</i>	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Revision
<i>Is the mitigation initiative consistent with the Guiding Principles, Goals, and Objectives of the St. Johns County Local Mitigation Strategy?</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Mitigation Initiative Title:</b>	Phase 1 Flood Barrier for South Davis Shores	
<b>Description:</b>	<p>In order to address tidal flooding and storm surge that has historically flooded this low-lying neighborhood, a flood barrier is proposed along the western side of the neighborhood that affronts the Matanzas River and Quarry Creek. This would be established at elevation 7.0 NAVD88 to be consistent with other City projects and master planning with the option to elevate the flood barrier in the future. Phase 1 would address some of the lowest elevations within the area. This includes approximately 3,400 linear feet (LF) of shoreline to protect along the South Davis Shores neighborhood. This is estimated to protect approximately 88 acres of residential area.</p>	
<b>Cost to Implement the Mitigation Initiative:</b>	Planning level cost estimate \$ 6,936,000	

Hazard and Category Identification	
<i>Identify the hazards intended to be addressed by this initiative, as well as the mitigation category by checking all applicable boxes below.</i>	
Hazard	Category
<input type="checkbox"/> All Hazard <input checked="" type="checkbox"/> Hurricane – Storm Surge <input type="checkbox"/> Hurricane – High Winds <input type="checkbox"/> Tornado <input checked="" type="checkbox"/> Flooding <input type="checkbox"/> Wildfire <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Terrorism <input type="checkbox"/> Drought/Heat Wave <input type="checkbox"/> Freeze/Winter Storm <input checked="" type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Beach Nourishment <input type="checkbox"/> Education and Training <input type="checkbox"/> Expand/Enhance/Improve Utilities <input checked="" type="checkbox"/> Flood/Repetitive Loss Mitigation <input type="checkbox"/> Hazardous Materials Mitigation <input checked="" type="checkbox"/> Infrastructure and Structure Improvements <input type="checkbox"/> Master Drainage Improvement <input type="checkbox"/> Planning <input type="checkbox"/> Wildfire Mitigation

Funding Category		
<i>Select the most appropriate category of funding for the proposal from the list below.</i>		
<input checked="" type="checkbox"/> Local Funding	<input type="checkbox"/> Flood Mitigation Assistance Grant	<input type="checkbox"/> Residential Construction Mitigation Program
<input checked="" type="checkbox"/> Pre-Disaster Mitigation Grant	<input checked="" type="checkbox"/> Hazard Mitigation Grant Program	<input type="checkbox"/> 406 PA Mitigation
<input type="checkbox"/> Shelter Retrofit Grant	<input type="checkbox"/> Community Development Block Grant	<input type="checkbox"/> Other type of funding <small>Click here to enter text.</small>

This section to be completed by Chairperson		
Has this mitigation initiative been approved by the executive committee?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, date accepted: <small>Click here to enter a date.</small>		
Executive Committee Priority Ranking Score		
Notes:		





## St. Johns County Emergency Management

SCORE

### St. Johns County Local Mitigation Strategy Proposed Mitigation Initiative

Date Submitted: 3/16/2021

<b>Jurisdiction Name:</b>	City of St. Augustine	
<b>Agency Submitting Initiative (Sponsor):</b>	City of St. Augustine	
<b>Contact Person:</b>	Jessica Beach	
<b>Email Address:</b>	<a href="mailto:jbeach@citystaug.com">jbeach@citystaug.com</a>	
<b>Phone Number:</b>	(904) 209-4227	
<i>Is this initiative new or a revision of an earlier initiative?</i>	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Revision
<i>Is the mitigation initiative consistent with the Guiding Principles, Goals, and Objectives of the St. Johns County Local Mitigation Strategy?</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Mitigation Initiative Title:</b>	Smart Valve System for South Davis Shores	
<b>Description:</b>	<p>There are several locations within South Davis Shores where existing drainage culverts under roads allow for the movement of tidal water that connect to other wetland systems. Under higher-than-normal tide conditions and/or Nor'easters, this can cause flooding of streets and structures as a result of the culverts being overtopped with tides. A traditional inline check valve is not an appropriate solution for these locations as they would severely limit the natural daily tidal flow and could have adverse ecological impacts to the wetlands that are tidally dependent. An alternative is to install a smart valve system that would utilize a pinch valve or any compatible valve that can be operated pneumatically to open and close the valve. The valve would be connected to a telemetry system which would measure water levels at both ends of the culverts in real time. The telemetry system would offer remote access and control of the valve via a cloud-based system. Under normal conditions the valve will remain open during both high and low tide scenarios. If storm surge conditions and/or major rainfall events are forecasted, the valve would be closed temporarily to prevent tidal flow from entering the drainage system. The valve could then be re-opened at an appropriate point when the flooding conditions no longer warrant the closure of the valve system.</p>	

<b>Cost to Implement the Mitigation</b>	Planning level cost estimate \$ 600,000
<b>Hazard and Category Identification</b> <i>Identify the hazards intended to be addressed by this initiative, as well as the mitigation category by checking all applicable boxes below.</i>	
<b>Hazard</b>	<b>Category</b>
<input type="checkbox"/> All Hazard <input type="checkbox"/> Hurricane – Storm Surge <input type="checkbox"/> Hurricane – High Winds <input type="checkbox"/> Tornado <input checked="" type="checkbox"/> Flooding <input type="checkbox"/> Wildfire <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Terrorism <input type="checkbox"/> Drought/Heat Wave <input type="checkbox"/> Freeze/Winter Storm <input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Beach Nourishment <input type="checkbox"/> Education and Training <input type="checkbox"/> Expand/Enhance/Improve Utilities <input type="checkbox"/> Flood/Repetitive Loss Mitigation <input type="checkbox"/> Hazardous Materials Mitigation <input type="checkbox"/> Infrastructure and Structure Improvements <input checked="" type="checkbox"/> Master Drainage Improvement <input type="checkbox"/> Planning <input type="checkbox"/> Wildfire Mitigation

<b>Funding Category</b> <i>Select the most appropriate category of funding for the proposal from the list below.</i>		
<input checked="" type="checkbox"/> Local Funding  <input checked="" type="checkbox"/> Pre-Disaster Mitigation Grant  <input type="checkbox"/> Shelter Retrofit Grant	<input type="checkbox"/> Flood Mitigation Assistance Grant  <input checked="" type="checkbox"/> Hazard Mitigation Grant Program  <input type="checkbox"/> Community Development Block Grant	<input type="checkbox"/> Residential Construction Mitigation Program  <input type="checkbox"/> 406 PA Mitigation  <input type="checkbox"/> Other type of funding
<b><i>This section to be completed by Chairperson</i></b>		
Has this mitigation initiative been approved by the executive committee?		<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, date accepted: <a href="#">Click here to enter a date.</a>		
Executive Committee Priority Ranking Score		
Notes:		



## St. Johns County Emergency Management

SCORE

### St. Johns County Local Mitigation Strategy Proposed Mitigation Initiative

Date Submitted: 3/16/2021

<b>Jurisdiction Name:</b>	City of St. Augustine	
<b>Agency Submitting Initiative (Sponsor):</b>	City of St. Augustine	
<b>Contact Person:</b>	Jessica Beach	
<b>Email Address:</b>	<a href="mailto:jbeach@citystaug.com">jbeach@citystaug.com</a>	
<b>Phone Number:</b>	(904) 209-4227	
<i>Is this initiative new or a revision of an earlier initiative?</i>	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Revision
<i>Is the mitigation initiative consistent with the Guiding Principles, Goals, and Objectives of the St. Johns County Local Mitigation Strategy?</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Mitigation Initiative Title:</b>	Drainage Improvements for South Davis Shores	
<b>Description:</b>	<p>In order to meet the 100-year level of service (structures shall not flood up to the 100-year/24hour design storm), substantial flood mitigation and drainage improvements are needed for the South Davis Shores neighborhood to address current flooding. This includes improvements such as:</p> <ul style="list-style-type: none"><li>• increase in size of the Coquina Avenue cross-culverts with installation of tide check valves</li><li>• increasing the capacity of the existing Coquina Ditch</li><li>• upgrading existing storm pipes</li><li>• adding and upgrading additional storm inlets</li><li>• re-grade intersections in the neighborhood to raise crown elevation</li></ul>	
<b>Cost to Implement the Mitigation Initiative:</b>	Planning level cost estimate \$ 1,608,800	

Hazard and Category Identification	
Identify the hazards intended to be addressed by this initiative, as well as the mitigation category by checking all applicable boxes below.	
Hazard	Category
<input type="checkbox"/> All Hazard <input type="checkbox"/> Hurricane – Storm Surge <input type="checkbox"/> Hurricane – High Winds <input type="checkbox"/> Tornado <input checked="" type="checkbox"/> Flooding <input type="checkbox"/> Wildfire <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Terrorism <input type="checkbox"/> Drought/Heat Wave <input type="checkbox"/> Freeze/Winter Storm <input type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Beach Nourishment <input type="checkbox"/> Education and Training <input type="checkbox"/> Expand/Enhance/Improve Utilities <input type="checkbox"/> Flood/Repetitive Loss Mitigation <input type="checkbox"/> Hazardous Materials Mitigation <input type="checkbox"/> Infrastructure and Structure Improvements <input checked="" type="checkbox"/> Master Drainage Improvement <input type="checkbox"/> Planning <input type="checkbox"/> Wildfire Mitigation

Funding Category		
Select the most appropriate category of funding for the proposal from the list below.		
<input checked="" type="checkbox"/> Local Funding	<input type="checkbox"/> Flood Mitigation Assistance Grant	<input type="checkbox"/> Residential Construction Mitigation Program
<input checked="" type="checkbox"/> Pre-Disaster Mitigation Grant	<input checked="" type="checkbox"/> Hazard Mitigation Grant Program	<input type="checkbox"/> 406 PA Mitigation
<input type="checkbox"/> Shelter Retrofit Grant	<input type="checkbox"/> Community Development Block Grant	<input type="checkbox"/> Other type of funding

This section to be completed by Chairperson		
Has this mitigation initiative been approved by the executive committee?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, date accepted: <a href="#">Click here to enter a date.</a>		
Executive Committee Priority Ranking Score		
Notes:		



## St. Johns County Emergency Management

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SCORE

### St. Johns County Local Mitigation Strategy Proposed Mitigation Initiative

Date Submitted: 3/16/2021

<b>Jurisdiction Name:</b>	City of St. Augustine	
<b>Agency Submitting Initiative (Sponsor):</b>	City of St. Augustine	
<b>Contact Person:</b>	Jessica Beach	
<b>Email Address:</b>	<a href="mailto:jbeach@citystaug.com">jbeach@citystaug.com</a>	
<b>Phone Number:</b>	(904) 209-4227	
<i>Is this initiative new or a revision of an earlier initiative?</i>	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Revision
<i>Is the mitigation initiative consistent with the Guiding Principles, Goals, and Objectives of the St. Johns County Local Mitigation Strategy?</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Mitigation Initiative Title:</b>	Stormwater Pump Station for Coquina Ditch in South Davis Shores	
<b>Description:</b>	In order to address future sea level rise and higher tailwater conditions exceeding 3.7 feet NAVD88, a pump station will be necessary in order to maintain drainage within Coquina Ditch. This will enable the coquina ditch to continue to keep the peak flood stages the same under higher tailwater conditions to meet the 100-year storm level of service.	
<b>Cost to Implement the Mitigation Initiative:</b>	Planning level cost estimate \$ 2,000,000.	

Hazard and Category Identification	
Identify the hazards intended to be addressed by this initiative, as well as the mitigation category by checking all applicable boxes below.	
Hazard	Category
<input type="checkbox"/> All Hazard <input checked="" type="checkbox"/> Hurricane – Storm Surge <input type="checkbox"/> Hurricane – High Winds <input type="checkbox"/> Tornado <input checked="" type="checkbox"/> Flooding <input type="checkbox"/> Wildfire <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Terrorism <input type="checkbox"/> Drought/Heat Wave <input type="checkbox"/> Freeze/Winter Storm <input checked="" type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Beach Nourishment <input type="checkbox"/> Education and Training <input type="checkbox"/> Expand/Enhance/Improve Utilities <input type="checkbox"/> Flood/Repetitive Loss Mitigation <input type="checkbox"/> Hazardous Materials Mitigation <input type="checkbox"/> Infrastructure and Structure Improvements <input checked="" type="checkbox"/> Master Drainage Improvement <input type="checkbox"/> Planning <input type="checkbox"/> Wildfire Mitigation

Funding Category		
Select the most appropriate category of funding for the proposal from the list below.		
<input checked="" type="checkbox"/> Local Funding	<input type="checkbox"/> Flood Mitigation Assistance Grant	<input type="checkbox"/> Residential Construction Mitigation Program
<input checked="" type="checkbox"/> Pre-Disaster Mitigation Grant	<input checked="" type="checkbox"/> Hazard Mitigation Grant Program	<input type="checkbox"/> 406 PA Mitigation
<input type="checkbox"/> Shelter Retrofit Grant	<input type="checkbox"/> Community Development Block Grant	<input type="checkbox"/> Other type of funding

This section to be completed by Chairperson		
Has this mitigation initiative been approved by the executive committee?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, date accepted: <a href="#">Click here to enter a date.</a>		
Executive Committee Priority Ranking Score		
Notes:		



## St. Johns County Emergency Management

SCORE

### St. Johns County Local Mitigation Strategy Proposed Mitigation Initiative

Date Submitted:

<b>Jurisdiction Name:</b>	City of St. Augustine Beach	
<b>Agency Submitting Initiative (Sponsor):</b>	City of St. Augustine Beach Public Works Department	
<b>Contact Person:</b>	William Tredik	
<b>Email Address:</b>	btredik@cityofsab.org	
<b>Phone Number:</b>	(904) 471-1119	
<i>Is this initiative new or a revision of an earlier initiative?</i>	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Revision
<i>Is the mitigation initiative consistent with the Guiding Principles, Goals, and Objectives of the St. Johns County Local Mitigation Strategy?</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Mitigation Initiative Title:</b>	Stormwater Resiliency Improvements Ocean Walk Subdivision	
<b>Description:</b>	<p>Ocean Walk Subdivision, located south of Pope Road, is one of the lowest lying areas within the City of St. Augustine Beach, with roadway grades as low as elevation 4 NAVD, per existing Lidar data. The subdivision, constructed in the early 1980s prior to SJRWMD permitting requirements, suffers from recurring roadway flooding due to inadequate drainage facilities. Its low-lying topography makes public infrastructure and private properties extremely vulnerable to flooding exacerbated by storm surge and sea level rise.</p> <p>The Project would protect properties within the 56-lot subdivision by improving drainage conveyance, installing a stormwater pump station and installing backflow protection to the drainage system. The improvements would allow the drainage system to continue to function during high tailwater conditions and reduce the frequency, severity and duration of localized flooding.</p>	
<b>Cost to Implement the Mitigation Initiative:</b>	\$694,000	

Hazard and Category Identification	
Identify the hazards intended to be addressed by this initiative, as well as the mitigation category by checking all applicable boxes below.	
Hazard	Category
<input type="checkbox"/> All Hazard <input checked="" type="checkbox"/> Hurricane – Storm Surge <input type="checkbox"/> Hurricane – High Winds <input type="checkbox"/> Tornado <input checked="" type="checkbox"/> Flooding <input type="checkbox"/> Wildfire <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Terrorism <input type="checkbox"/> Drought/Heat Wave <input type="checkbox"/> Freeze/Winter Storm <input checked="" type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Beach Nourishment <input type="checkbox"/> Education and Training <input type="checkbox"/> Expand/Enhance/Improve Utilities <input checked="" type="checkbox"/> Flood/Repetitive Loss Mitigation <input type="checkbox"/> Hazardous Materials Mitigation <input checked="" type="checkbox"/> Infrastructure and Structure Improvements <input checked="" type="checkbox"/> Master Drainage Improvement <input type="checkbox"/> Planning <input type="checkbox"/> Wildfire Mitigation

Funding Category		
Select the most appropriate category of funding for the proposal from the list below.		
<input type="checkbox"/> Local Funding	<input type="checkbox"/> Flood Mitigation Assistance Grant	<input type="checkbox"/> Residential Construction Mitigation Program
<input type="checkbox"/> Pre-Disaster Mitigation Grant	<input checked="" type="checkbox"/> Hazard Mitigation Grant Program	<input type="checkbox"/> 406 PA Mitigation
<input type="checkbox"/> Shelter Retrofit Grant	<input type="checkbox"/> Community Development Block Grant	<input type="checkbox"/> Other type of funding

This section to be completed by Chairperson		
Has this mitigation initiative been approved by the executive committee?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, date accepted: <a href="#">Click here to enter a date.</a>		
Executive Committee Priority Ranking Score		
Notes:		





## St. Johns County Emergency Management

SCORE

### St. Johns County Local Mitigation Strategy Proposed Mitigation Initiative

Date Submitted:

<b>Jurisdiction Name:</b>	City of St. Augustine Beach	
<b>Agency Submitting Initiative (Sponsor):</b>	City of St. Augustine Beach Public Works Department	
<b>Contact Person:</b>	William Tredik	
<b>Email Address:</b>	btredik@cityofsab.org	
<b>Phone Number:</b>	(904) 471-1119	
<i>Is this initiative new or a revision of an earlier initiative?</i>	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Revision
<i>Is the mitigation initiative consistent with the Guiding Principles, Goals, and Objectives of the St. Johns County Local Mitigation Strategy?</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Mitigation Initiative Title:</b>	CR A1A Storm Surge Protection	
<b>Description:</b>	<p>The City of St. Augustine Beach is vulnerable along its northern boundary to storm surge inundation from Salt Run. Two (2) 48" and three (3) 36" existing culverts allow storm surge to travel under CR A1A into the Anastasia State Park Property north of Pope Road. Storm surge waters then travel through culverts under Pope Road – or potentially overtop Pope Road in extreme cases – and enter the City of St. Augustine Beach.</p> <p>The Project would install in-line backflow prevention devices on the five (5) culverts under CR A1A, blocking storm surge from Salt Run. The backflow prevention devices would provide significant storm surge protection to one of the lowest lying areas in the City of St. Augustine Beach.</p>	
<b>Cost to Implement the Mitigation Initiative:</b>	\$270,000	

Hazard and Category Identification	
Identify the hazards intended to be addressed by this initiative, as well as the mitigation category by checking all applicable boxes below.	
Hazard	Category
<input type="checkbox"/> All Hazard <input checked="" type="checkbox"/> Hurricane – Storm Surge <input type="checkbox"/> Hurricane – High Winds <input type="checkbox"/> Tornado <input checked="" type="checkbox"/> Flooding <input type="checkbox"/> Wildfire <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Terrorism <input type="checkbox"/> Drought/Heat Wave <input type="checkbox"/> Freeze/Winter Storm <input checked="" type="checkbox"/> Sea Level Rise	<input type="checkbox"/> Beach Nourishment <input type="checkbox"/> Education and Training <input type="checkbox"/> Expand/Enhance/Improve Utilities <input checked="" type="checkbox"/> Flood/Repetitive Loss Mitigation <input type="checkbox"/> Hazardous Materials Mitigation <input checked="" type="checkbox"/> Infrastructure and Structure Improvements <input checked="" type="checkbox"/> Master Drainage Improvement <input type="checkbox"/> Planning <input type="checkbox"/> Wildfire Mitigation

Funding Category		
Select the most appropriate category of funding for the proposal from the list below.		
<input type="checkbox"/> Local Funding	<input type="checkbox"/> Flood Mitigation Assistance Grant	<input type="checkbox"/> Residential Construction Mitigation Program
<input type="checkbox"/> Pre-Disaster Mitigation Grant	<input checked="" type="checkbox"/> Hazard Mitigation Grant Program	<input type="checkbox"/> 406 PA Mitigation
<input type="checkbox"/> Shelter Retrofit Grant	<input type="checkbox"/> Community Development Block Grant	<input type="checkbox"/> Other type of funding

This section to be completed by Chairperson		
Has this mitigation initiative been approved by the executive committee?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, date accepted: <a href="#">Click here to enter a date.</a>		
Executive Committee Priority Ranking Score		
Notes:		

### Ranking Sheet for Hurricane Irma HMGP Funding - March 2021

Project	Population Benefited	Environmental Impact	Consistency with LMS Goals	Reduces Risk of Future Property Damage	Supports Essential or Critical Services / Infrastructure	Funding Availability	Feasibility of Implementation	Community Rating System	Sponsorship	Social Equity	Total Score
<b>City of St. Augustine</b>											
Smart Valve System for S. Davis Shores	4	6	10	10	4	6	8	6	6	10	70
Drainage Improvements to S. Davis shores	4	10	10	8	4	0	8	6	6	10	66
Phase 1 Flood Barrier for South Davis Shores	4	0	10	10	4	6	8	6	10	10	68
<b>City of St. Augustine Beach</b>											
CR A1A Storm Surge Protection	8	10	10	10	6	6	8	6	10	10	84
Stormwater Resiliency Improvements to Ocean Walk Subdivision	4	10	10	8	4	6	8	6	10	10	76

## Order Confirmation

<b><u>Ad Order Number</u></b>	<b><u>Customer</u></b>	<b><u>Payor Customer</u></b>	<b><u>PO Number</u></b>
0003344355	SJC EMERGENCY MANAGEMENT	SJC EMERGENCY MANAGEMENT	
<b><u>Sales Rep.</u></b>	<b><u>Customer Account</u></b>	<b><u>Payor Account</u></b>	<b><u>Ordered By</u></b>
ISC.chris.landry	15662	15662	Laura Nelson
<b><u>Order Taker</u></b>	<b><u>Customer Address</u></b>	<b><u>Payor Address</u></b>	<b><u>Customer Fax</u></b>
ISC.chris.landry	100 EOC DRIVE SAINT AUGUSTINE FL 32092 USA	100 EOC DRIVE SAINT AUGUSTINE FL 32092 USA	
<b><u>Order Source</u></b>	<b><u>Customer Phone</u></b>	<b><u>Payor Phone</u></b>	<b><u>Customer EMail</u></b>
E-mail	9048245550	9048245550	
			<b><u>Special Pricing</u></b>

<b><u>Tear Sheets</u></b>	<b><u>Proofs</u></b>	<b><u>Affidavits</u></b>	<b><u>Blind Box</u></b>	<b><u>Promo Type</u></b>	<b><u>Materials</u></b>
0	0	0			

<b><u>Invoice Text</u></b>	<b><u>Ad Order Notes</u></b>
Meeting 3-30-2021	

<b><u>Net Amount</u></b>	<b><u>Tax Amount</u></b>	<b><u>Total Amount</u></b>	<b><u>Payment Method</u></b>	<b><u>Payment Amount</u></b>	<b><u>Amount Due</u></b>
\$26.93	\$0.00	\$26.93	Invoice	\$0.00	\$26.93

<b><u>Ad Number</u></b>	<b><u>Ad Type</u></b>	<b><u>Production Method</u></b>	<b><u>Production Notes</u></b>
0003344355-01	SA Legal Liner	AdBooker	

<b><u>External Ad Number</u></b>	<b><u>Ad Attributes</u></b>	<b><u>Ad Released</u></b>	<b><u>Pick Up</u></b>
		No	0003319373

<b><u>Ad Size</u></b>	<b><u>Color</u></b>
1 X 1.50"	

### **WYSIWYG Content**

#### **PUBLIC NOTICE**

The St. Johns County Local Mitigation Strategy Working Group meeting will take place virtually via GoToMeeting at 9:00 am on Tuesday, March 30, 2021. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.

0003344355 March 20, 2021

<b><u>Run Date</u></b>	<b><u>Product</u></b>	<b><u>Placement</u></b>	<b><u>Rate</u></b>	<b><u>Sched Cst</u></b>	<b><u>Disc/Prem</u></b>	<b><u>Color</u></b>	<b><u>Pickup</u></b>	<b><u>Tax</u></b>	<b><u>Subtotal</u></b>
03/20/2021	SA St Augustine Record	SA Legals	\$8.98 per Inch	\$13.47	\$0.00	\$0.00	\$0.00	\$0.00	\$13.47
03/20/2021	SA St Aug Record Online	SA Legals	\$8.97 per Inch	\$13.46	\$0.00	\$0.00	\$0.00	\$0.00	\$13.46



## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: May 27, 2021 @ 9:00 am

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, May 27, 2021 at 9:00 am from the St. Johns County Emergency Operations Center and via GoToMeeting. Laura Nelson called the meeting to order with the following members:

Don Cuevas – Beaches Energy Services  
Kaitlyn Dietz – GTM Research Reserve  
Abigail Kuhn – GTM Research Reserve  
Angela Schedel – Taylor Engineering  
Kelly Wilson – St. Johns County Emergency Management  
Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Westly Woodward – St. Johns County Floodplain Management  
Ashlie Jordan – St. Johns County Growth Management  
Jessica Beach – City of St. Augustine  
William Tredik – City of St. Augustine Beach  
Brian Law – City of St. Augustine Beach  
Lacey Pierotti – City of St. Augustine Beach  
Michael Jordan – ARES  
Benjamin Bennett – SJC Growth Management  
Gavin Butler – St. Johns County Emergency Management  
Tyler Nolen – Northeast FL Regional Council  
Geoffrey Sample – St. Johns River Water Management District  
Duane Kent – St. Johns County Public Works  
Paul Rose – St. Johns County School District  
James Griffith – St. Johns River State College  
Wes Marsh – Brooks Rehab

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting. Roll call was taken for any individuals who were on the phone and not logged in to the webinar.

#### II. **Approval of March 30th meeting minutes**

Motion to approve the minutes after a correction to the attendance list was made by Brian Law and seconded by Kelly Wilson.

#### III. **Funding Updates**

- a. Hurricane Sally Hazard Mitigation Grant Program Notice of Funding was distributed to the group via email. St. Johns County is a Tier III county, meaning we are eligible to apply for any funds left over from the declared counties. The application timeline is August 13, 2021.
- b. Flood Mitigation Assistance (FMA), Building Resilient Infrastructures and Communities (BRIC) and Hurricane Loss Mitigation Program (HLMP) funding programs were briefly discussed and it was noted that they may likely open before the next LMS meeting in August.

**IV. Project Updates**

- a. Jessica Beach noted that Phase II of the South Whitney and West King Street project was approved and they are in the process of contracting with the State of Florida.

**V. CRS/Flood Updates**

- a. Westley Woodard discussed the Certified Floodplain Manager (CFM) exam that will be offered on July 13<sup>th</sup> at 9:00am at the St. Johns County Public Works Conference Room.
- b. A discussion was had about CRS annual updates- each community submitted their annual reports and receipt was confirmed.
- c. Westley Woodard briefed on the county's floodplain ordinance change and Jessica Beach briefed on the proposed changes to the City of St. Augustine's ordinance changes in regards to property fill.

**VI. Upcoming Trainings**

- a. Mitigation for Emergency Managers (G-393) will be offered at the EOC on July 14<sup>th</sup>-16<sup>th</sup>. Laura Nelson indicated she would check on continuing education credits for CFMs.

**VII. Open Discussion**

- a. Reminder of 2021 LMS Working Group meeting date
  - LMS Working Group Meetings for 2021, all meetings will be Thursdays, @ 9:00 am here at the St. Johns County EOC.
    - August 26, 2021
    - November 18, 2021

**VIII. Adjournment**

Meeting adjourned at 9:50 am

\* Denotes action item



St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
May 27, 2021

[illegible]

THE ST. AUGUSTINE RECORD  
Affidavit of Publication

**SJC EMERGENCY MANAGEMENT  
100 EOC DRIVE**

**SAINT AUGUSTINE, FL 32092**

ACCT: 15662  
AD# 0003355648-01

PO#

PUBLISHED EVERY MORNING SUNDAY THROUGH SATURDAY  
ST. AUGUSTINE AND ST. JOHNS COUNTY, FLORIDA

STATE OF FLORIDA  
COUNTY OF ST. JOHNS


Before the undersigned authority personally appeared MELISSA RHINEHART who on oath says he/she is an Employee of the St. Augustine Record, a daily newspaper published at St. Augustine in St. Johns County, Florida; that the attached copy of advertisement being a **NOTICE OF MEETING** in the matter of **MTG- MITIGATION STRATEGY WRK GRP** was published in said newspaper on **05/17/2021**.

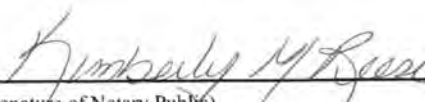
Affiant further says that the St. Augustine Record is a newspaper published at St. Augustine, in St. Johns County, Florida, and that the said newspaper heretofore has been continuously published in said St. Johns County, Florida each day and has been entered as second class mail matter at the post office in the City of St. Augustine, in said St. Johns County, Florida for a period of one year preceding the first publication of the attached copy of advertisement; and affiant further says the he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission, or refund for the purpose of securing this advertisement for publication in said newspaper.

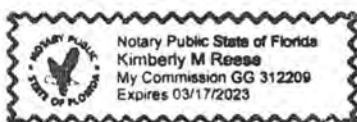
Sworn to (or affirmed) and subscribed before me by means of

☒ physical presence or  
☐ online notarization

this \_\_\_\_\_ day of MAY 17 2021

by  who is personally known to  
me or who has produced as identification

  
(Signature of Notary Public)



**PUBLIC NOTICE**

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at the St. Johns County Emergency Operations Center located at 100 EOC Drive in St. Augustine and virtually via GoToMeeting at 9:00 am on Thursday, May 27, 2021. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.

3355648 May 17, 2021



Mon, May 17, 2021  
9:15:36AM

## Legal Ad Invoice

# The St. Augustine Record

Send Payments to:  
The St. Augustine Record Dept 1261  
PO BOX 121261  
Dallas, TX 75312-1261

**Acct:** 15662  
**Phone:** 9048245550

**Name:** SJC EMERGENCY MANAGEMENT  
**Address:** 100 EOC DRIVE

**E-Mail:**  
**Client:** SJC EMERGENCY MANAGEMENT      **City:** SAINT AUGUSTINE      **State:** FL      **Zip:** 32092

**Ad Number:** 0003355648-01

**Caller:** Laura Nelson

**Paytype:** BILL

**Start:** 05/17/2021

**Issues:** 1

**Stop:** 05/17/2021

**Placement:** SA Legals

**Rep:** Dylan ISC-Abeyta

**Copy Line:** PUBLIC NOTICE The St. Johns County Local Mitigation Strategy Working Group meeting will take place at the St. Johns Co

### PUBLIC NOTICE

Lines 18  
Depth 1.50  
Columns 1  
  
Price \$26.93

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at the St. Johns County Emergency Operations Center located at 100 EOC Drive in St. Augustine and virtually via GoToMeeting at 9:00 am on Thursday, May 27, 2021. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.  
3355648 May 17, 2021



## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: August 26, 2021 @ 9:00 am

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, August 26, 2021 at 9:02 am via GoToMeeting. Laura Nelson called the meeting to order with the following members:

Amber Brock – Florida Department of Transportation  
Kaitlyn Dietz – GTM Research Reserve  
Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Westly Woodward – St. Johns County Floodplain Management  
William Tredik – City of St. Augustine Beach  
Brian Law – City of St. Augustine Beach  
Benjamin Bennett – SJC Growth Management  
Gavin Butler – St. Johns County Emergency Management  
Tyler Nolen – Northeast FL Regional Council  
Geoffrey Sample – St. Johns River Water Management District  
Stephanie Massey – Taylor Engineering  
Joseph McAnarney – St. Johns Soil and Water Management District  
Jim Shock – SJC Building Services  
Don Cuevas – Beaches Energy

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting. Rollcall was taken for any individuals who were on the phone and not logged in to the webinar.

#### II. **Approval of May 27th meeting minutes**

Motion to approve the minutes was made by Kaitlyn Dietz and seconded by Jim Shock.

#### III. **Funding Updates**

- a. Laura discussed the available and upcoming funding programs. Details on the programs can be found in the attached PowerPoint presentation.

#### IV. **Project Updates**

- a. William Tredik briefed that projects #2 and #7 on the HMGP Matthew List (Master Stormwater Projects) for the city are underway. They are 1.5 months into the 1-year project.

- b. Laura mentioned on behalf of the City of St. Augustine that they are submitting for CDBG-MIT Infrastructure money to help match the Lake Maria Sanchez mitigation project that is currently underway.
- c. For Hurricane Dorian projects, William Tredik mentioned the City of St. Augustine Beach is working through the application review process on the CR A1A storm surge protection project with the Florida Division of Emergency Management. He also mentioned that they withdrew their #2 project (Stormwater Resiliency Improvements Ocean Walk Subdivision) due to the fact they received a legislative appropriation to fund the project at 100%.

V. **CRS/Flood Updates**

- a. Laura briefed the group on the “CRS Next” public input process and webinars.
- b. Laura shared about the Flood Mitigation Workshops occurring in an effort to get homeowners to participate in a Flood Mitigation Assistance project.
- c. Westly Woodard mentioned that the county is in the process of updating the riverine areas of the flood maps with FEMA. There is no estimated date for when the maps will be released.
- d. Westly also mentioned that the County will be going through the CRS cycle verification visit next year.

VI. **Open Discussion**

- a. Reminder of 2021 LMS Working Group meeting date
  - LMS Working Group Meetings for 2021, all meetings will be Thursdays, @ 9:00 am here at the St. Johns County EOC.
    - November 18, 2021

VII. **Adjournment**

Meeting adjourned at 9:31 am

\* Denotes action item

# MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

AUGUST 26, 2021  
9:00 A.M.

## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

- Introductions
- Old Information
  - Approval of Minutes from May 27 LMS Working Group Meeting\*
- New Information
  - Funding Updates
    - FMA
    - BRIC
    - Resilient FL
  - Project Updates
  - Flood/CRS Updates
- Open Discussion
- Adjournment

## APPROVAL OF MEETING MINUTES

- Approval of May 27, 2020 LMS Meeting Minutes

## FUNDING UPDATES

- BRIC and FMA 2021 NOFAs released
  - Application period opens September 30, 2021 and FDEM has set a deadline of **November 12, 2021 at 5:00pm**
  - Applications will be submitted in FEMA Go
  - NOFA webinars available for more information
    - Next webinar: August 26 @ 2:00
    - Webinars will be recorded and posted to website
    - <https://www.fema.gov/grants/mitigation/2021-building-resilient-infrastructure-and-communities-and-flood-mitigation-assistance-programs>

## BRIC & FMA 2021 NOTICE OF FUNDING

- Total FMA Available - \$160,000,000
- Projected number of awards- 30 awards; 145 subawards
- FMA Priorities
  1. \$10 million for project scoping
  2. \$70 million Community Flood Mitigation Projects
  3. Technical assistance
  4. Flood Hazard Mitigation Planning
  5. Individual Flood Mitigation Projects
- Period of Performance – 36 months
- 100% federal funding for Severe Rep Loss structures; 90% for Rep Loss designated or 75% federal share for all other

## BRIC & FMA 2021 NOTICE OF FUNDING

- Total BRIC Available - \$1,000,000,000
- Funding Breakdown:
  - State/Territory Allocation Subtotal – \$56,000,000
  - Tribal Set-Aside Subtotal – \$25,000,000
  - National Competition Subtotal -- \$919,000,000
- 75% federal cost share/ 25% local
- Period of performance – 36 months

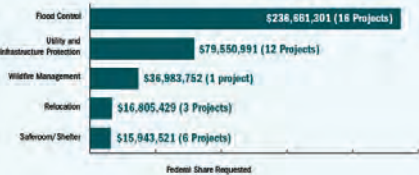
## BRIC 2020 STATISTICS

### BRIC Subapplications Summary (FY 2020)

**991** Subapplications  
**\$500M** Available  
**\$5.49B** Proposed Project Costs  
**\$3.6B** Received Requests for Funding in Applications

### Top 5 BRIC Project Selections (FY 2020)

40% subapplications have been selected for BRIC, with total project costs exceeding \$1.13 billion.



## FMA 2020 STATISTICS

### FMA Subapplications Summary (FY 2020)

**236** Subapplications  
**\$200M** Available  
**\$477M** Proposed Project Costs  
**\$398M** Received Requests for Funding in Applications

### Top 5 FMA Project Selections (FY 2020)

117 subapplications have been selected for FMA, with total project costs exceeding \$477 million.



## COVID-19 HMGP

- The Hazard Mitigation Grant Program (HMGP) will soon be available as a result of the COVID-19 disaster declaration
- SJC will be a Tier 1 county meaning we will receive an allocation proportional to the amount of eligible expenses claimed under FEMA's Public Assistance Program
- Timeline/NOFA is TBD

## FUNDING UPDATES

- Resilient Florida Grant Program-
  - Available to counties, municipalities, water management districts, flood control districts and regional resilience entities
  - To effectively address the impacts of flooding and sea level rise that the state faces, eligible applicants may receive funding assistance to analyze and plan for vulnerabilities, as well as implement projects for adaptation and mitigation
  - Funded from FL Dept. of Environmental Protection
  - Deadline for project proposals is September 1, 2021
  - [FRCP Resilience Grants](#) | Florida Department of Environmental Protection

## HMGP MATTHEW

### Hurricane Matthew Hazard Mitigation Grant Program Funded Projects

Project Rank	Project	Jurisdiction	Cost	Local Match 25%	Project Status (April 2021)	Notes
1	Lake Maria Sanchez Flood Mitigation Project	City of St. Augustine	\$ 11,500,000.00	\$ 2,875,000.00	In design still	
2	Master Stormwater Pump Station Improvements	City of St. Augustine Beach	\$ 500,000.00	\$ 125,000.00	In progress	merged with project #7
3	Emergency Standby Generators at Primary Hurricane Shelters: Osceola Elem. School, Ota A. Mason Elem. School, Mill Creek Elem. School	St. Johns County School District	\$ 750,000.00	\$ 187,500.00	completed	completed
4	Upgrade Signalization at US1 @ County Road 210	St. Johns County	\$ 511,148.00	\$ 127,787.00	completed	completed Feb 2021
5	Upgrade Signalization at US 1 @ Lewis Point Rd.	St. Johns County	\$ 551,149.00	\$ 137,787.00	In progress	In bid phase. Extended to march 2022
6	Upgrade Signalization at US 1 @ Shore Dr.	St. Johns County	\$ 551,149.00	\$ 137,787.00	In progress	In bid phase. Extended to march 2022
7	Increase Primary Stormwater Outfall Capacity	City of St. Augustine Beach	\$ 350,000.00	\$ 87,500.00	In progress	awaiting executed phase 2 contract
8	Drainage Improvements at Kings Estate	St. Johns County	\$ 350,000.00	\$ 87,500.00	completed	Completed March 2021
9	Install hurricane shutters and emergency standby generator at the St. Johns County Pet Center	St. Johns County	\$ 122,000.00	\$ 30,500.00	completed	completed
10	Flood Mitigation Improvements on South Whitnev and West King St.	Augustine/St. Johns County	\$ 800,000.00	\$ 200,000.00	In progress	awaiting FEMA approval for phase 2
44	Bartram Oaks Wastewater Treatment Plant Standby Generator	St. Johns County	\$ 163,000.00	\$ 40,750.00	withdrawn	No room on the property for a permanent generator
12	Drainage Improvements on Kings Road	St. Johns County	\$ 354,714.00	\$ 88,679.00	In progress	not for bid. Contract extended to Oct 2022
13	Drainage Improvements at North Beach	St. Johns County	\$ 2,000,000.00	\$ 500,000.00	In progress	phase 1 awarded - highly unlikely to meet BCA. Might need to be withdrawn
14	South Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 253,260.00	\$ 63,315.00		
15	Shore Unit 2 Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 212,160.00	\$ 53,040.00		

## HMGP IRMA

### St. Johns County Hurricane Irma HMGP Ranked Project List

Project Rank	Project	Applicant	Goal	Total Project Cost	Estimated Federal Share	Status Update (April 2021)
1	Flood Mitigation at Avenida Menendez Seawall, Connectivity Project - CoSA Priority #1	City of St. Augustine	2,3,4	\$1,475,000.00	\$1,106,250.00	In design. Permitted by FDEM moving forward with Local Funds
2	Drainage Improvements at Winton Circle - SJC Priority #1	St. Johns County	2,3	\$1,400,000.00	\$1,106,000.00	withdrawn after award due to workload. Changed scope and completed floodproofing to a Cat 2 instead of Cat 5
3	Wastewater Treatment Plant Shoreline Hardening and Flood Proofing - CoSA Priority #2	City of St. Augustine	2,3,4,5	\$7,160,000.00	\$1,790,000.00	withdrawn
4	Deep Creek Conveyance Improvements - SJC Priority #2	St. Johns County	2,3,4,5	\$1,800,000.00	\$1,106,000.00	being funded in-house not under HMGP with CIP
5	Manhole Lid Inlets - Reduction of infiltration & allow for the City's Sanitary Sewer System	City of St. Augustine	2,3,4	\$780,000.00	\$670,000.00	Not submitted
6	Flood Proofing and Wind Mitigation at Fire Station 6 - Grosvont - Beach	St. Johns County	2,3	\$31,000.00	\$23,250.00	Not submitted
7	Macaris Stormwater Outfall Resiliency Retrofit with Tide Check Valve	City of St. Augustine	2,3,4	\$300,000.00	\$225,000.00	funded by state cost-share grant not HMGP. Complete in progress 43 of 103 done. Not submitted for HMGP
8	Drainage Improvements by Retrofitting Stormwater Outfalls Citywide	City of St. Augustine	2,3,4,5	\$1,400,000.00	\$1,106,000.00	withdrawn because of funding considerations
9	Drainage Improvements at West Augustine Service Area 2 & 4	St. Johns County	2,3,4	\$920,000.00	\$660,000.00	withdrawn because of funding considerations
10	Drainage Improvements at Rio del Mar Street & Fountain of Youth Reservoir	St. Johns County	2,3	\$1,000,000.00	\$750,000.00	planned in CIP not submitted for HMGP
11	Drainage Improvements on CR 13 N	St. Johns County	2,3	\$1,400,000.00	\$1,106,000.00	formally withdrawn 2/7/2020 awarded phase 1 funding in March 2021
12	Drainage Improvement and Flood Mitigation of CI Theophilos	City of St. Augustine	2,3	\$1,000,000.00	\$750,000.00	
13	Drainage Improvement Fox Creek - Malibu Blvd	St. Johns County	2,3	\$823,000.00	\$664,250.00	
14	Drainage Improvements at Porpoise Point	St. Johns County	2,3,4	\$800,000.00	\$600,000.00	

## HMGP- DORIAN

### St. Johns County HMGP Ranked Project List- Dorian

Project Rank	Project Score	Project	Applicant	Goal(s)	Total Project Cost	Estimated Federal Share
1	84	CR A1A Storm Surge Protection	COSAB Public Works	2 & 3	\$ 550,000	\$ 412,500
2	76	Stormwater Resiliency Improvements Ocean Walk	COSAB Public Works	2 & 3	\$ 694,000	\$ 520,500
3	70	Subdivision	COSA Public Works	2 & 3	\$ 600,000	\$ 450,000
4	68	Smart Valve System for S. Davis Shores	COSA Public Works	2 & 3	\$ 6,936,000	\$ 5,202,000
5	66	Phase 1 Flood Barrier for S. Davis Shores	COSA Public Works	2 & 3	\$ 1,608,800	\$ 1,206,600

## COMPLETED PROJECTS

Project	Project Status	Jurisdiction*	Responsible for Project Implementation**
Rehabilitation of existing sewer system in the Abbott Tract	Completed	City of St. Augustine	COSA Public Works
Relocation of Fire Station 5 and 11 out of Evacuation Zone	Complete	St. Johns County	SJC Fire Rescue
Flood Mitigation at S. Avenida Menendez Seawall Project	Complete	City of St. Augustine	COSA Public Works
Upgrade Signalization at A1A and Coastal Highway	Complete	St. Johns County	St. Johns County Public Works
Upgrade Signalization at A1A and Solano	Complete	St. Johns County	St. Johns County Public Works
Upgrade Signalization at U.S. 1 and Health Park Boulevard	Complete	St. Johns County	St. Johns County Public Works
Install Shutters and a generator for the St. Johns County Pet Center	Completed	St. Johns County	SJC EM and SJC Animal Control
Emergency Standby Generator for Special Needs Shelter at Freedom Crossing Academy (state of FL generator now on site)	Completed	St. Johns County	SJC Emergency Management
Emergency Standby Generators at Primary Hurricane Shelters: Osceola Elem. School, Olin A. Mason Elem. School, Mill Creek Elem. School	Completed	St. Johns County	SJC School District
May Street @ Douglas (flooding) and at San Marco (construction) - improve evacuation	Completed	City of St. Augustine	COSA Public Works
Wastewater Treatment Plant Shoreline Hardening and Flood Proofing	Completed	City of St. Augustine	COSA Public Works
Macaris Stormwater Outfall Resiliency Retrofit with Tide Check Valve	Completed	City of St. Augustine	COSA Public Works
North and South Davis Shores Outfall Improvements	Completed	City of St. Augustine	COSA Public Works
Enhance construction of a new Emergency Communications Center outside storm surge zones	Completed	St. Johns County	SJC Public Safety
Upgrade Signalization at US1 @ County Road 210	Completed	St. Johns County	SJC Public Works
Drainage Improvements at Kings Estate Road	Completed	St. Johns County	SJC Public Works
Drainage Improvements at Remington Forest	Completed	St. Johns County	SJC Public Works
Drainage Improvements at Rio del Mar Street & Fountain of Youth Boulevard	Completed	St. Johns County	SJC Public Works
Emergency Standby Generator for Fuel Pumps at SJC Public Works Facility	Completed	St. Johns County	St. Johns County Public Works

## CRS/FLOOD UPDATES

- “CRS Next”
  - FEMA is seeking public comments on transforming the CRS to better align with the current understanding of flood risk and flood risk approaches to incentivize communities to manage and lower their flood risk through floodplain management initiatives
  - Written comments are due September 22 (Docket ID: [FEMA-2021-0021](https://www.regulations.gov/), through the Federal eRulemaking Portal: [http://www.regulations.gov/](https://www.regulations.gov/))
  - Webinars are being offered to collect verbal public feedback on the CRS program
    - The first webinar will begin at 11:00 a.m. ET on Tuesday, September 7, 2021.
    - The second webinar will begin at 1:00 p.m. ET on Wednesday, September 8, 2021.
    - The third webinar will begin at 2:00 p.m. ET on Thursday, September 9, 2021

### Flood Mitigation Workshops

**TUESDAY (8/24)**  
10am - 12pm\*  
6pm - 8pm

**WEDNESDAY (8/25)**  
1pm - 3pm

**THURSDAY (8/26)**  
**FRIDAY (8/27)**  
Appointments and Site Visits

\*For those unable to attend a workshop in person, there will be a live stream of the workshop on Tuesday, August 24, at 10:00am, with on-demand viewing available the following day at [www.CityStAugTV.com](http://www.CityStAugTV.com).

Contractors will be available to answer questions

The Alcazar Room, City Hall, 78 King Street  
Contact Kim Ryals, Quality Engineering  
phone: 321-688-1600  
email: [kryals@qengine.com](mailto:kryals@qengine.com)

**What is FMA?**  
Purpose  
Eligibility  
Evaluation Criteria  
Community Priorities

**What is the process?**  
Documentation  
Process of Grant  
Expected Timelines

**Mitigation/Elevation**  
What is allowed?  
What's ineligible?  
Cost Shares  
Payment Requirements  
Documentation

**QUALITY**

## NEXT LMS MEETING



- ~~February 25, 2021~~
- ~~May 27, 2021~~
- ~~August 26, 2021~~
- November 18, 2021

All meetings are Thursdays @ 9:00 am

## OPEN DISCUSSION



THE ST. AUGUSTINE RECORD  
Affidavit of Publication

**SJC EMERGENCY MANAGEMENT  
100 EOC DRIVE**

**SAINT AUGUSTINE, FL 32092**

ACCT: 15662  
AD# 0003371041-01  
PO#

PUBLISHED EVERY MORNING SUNDAY THROUGH SATURDAY  
ST. AUGUSTINE AND ST. JOHNS COUNTY, FLORIDA

STATE OF FLORIDA  
COUNTY OF ST. JOHNS

Before the undersigned authority personally appeared MELISSA RHINEHART who on oath says he/she is an Employee of the St. Augustine Record, a daily newspaper published at St. Augustine in St. Johns County, Florida; that the attached copy of advertisement being a **NOTICE OF MEETING** in the matter of **Mitigation Strategy Working Group meeting** was published in said newspaper on **08/16/2021**.

Affiant further says that the St. Augustine Record is a newspaper published at St. Augustine, in St. Johns County, Florida, and that the said newspaper heretofore has been continuously published in said St. Johns County, Florida each day and has been entered as second class mail matter at the post office in the City of St. Augustine, in said St. Johns County, Florida for a period of one year preceding the first publication of the attached copy of advertisement; and affiant further says the he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission, or refund for the purpose of securing this advertisement for publication in said newspaper.

**PUBLIC NOTICE**

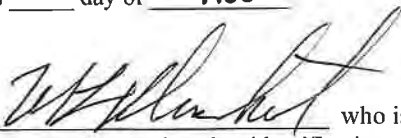
The St. Johns County Local Mitigation Strategy Working Group meeting will take place virtually via GoToMeeting at 9:00 am on Thursday, August 26, 2021. All interested persons are invited to attend.

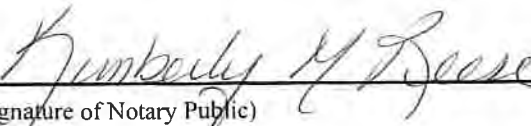
In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.  
0003371041, August 16, 2021

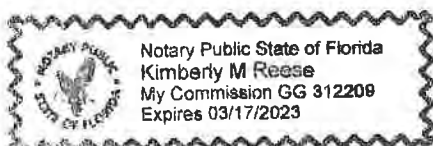
Sworn to (or affirmed) and subscribed before me by means of

☒ physical presence or  
☐ online notarization

this \_\_\_\_ day of **AUG 16 2021**

by  who is personally known to me or who has produced as identification

  
(Signature of Notary Public)



Mon, Aug 16, 2021  
10:09:59AM

## Legal Ad Invoice

# The St. Augustine Record

Send Payments to:  
The St. Augustine Record Dept 1261  
PO BOX 121261  
Dallas, TX 75312-1261

**Acct:** 15662  
**Phone:** 9048245550  
**E-Mail:**  
**Client:** SJC EMERGENCY MANAGEMENT

**Name:** SJC EMERGENCY MANAGEMENT  
**Address:** 100 EOC DRIVE

**City:** SAINT AUGUSTINE **State:** FL **Zip:** 32092

**Ad Number:** 0003371041-01  
**Start:** 08/16/2021

**Caller:** Laura Nelson  
**Issues:** 1

**Paytype:** BILL  
**Stop:** 08/16/2021

**Placement:** SA Legals

**Rep:** Candace ISC-Wendricks

**Copy Line:** PUBLIC NOTICE The St. Johns County Local Mitigation Strategy Working Group meeting will take place virtually via GoToM

### PUBLIC NOTICE

Lines 16  
Depth 1.50  
Columns 1  
  
Price \$26.93

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0003371041, August 16, 2021





## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: October 21, 2021 @ 9:00 am

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, October 21, 2021 at 9:02 am via GoToMeeting. Laura Nelson called the meeting to order with the following members:

Amber Brock – Florida Department of Transportation  
Kaitlyn Dietz – GTM Research Reserve  
Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Kelly Wilson – LMS Vice Chair, St. Johns County Emergency Management  
Brian Law – City of St. Augustine Beach  
Gavin Butler – St. Johns County Emergency Management  
Stephanie Massey – Taylor Engineering  
Don Cuevas – Beaches Energy  
Paul Rose – St. Johns County School District  
Frank Cervasio – St. Johns County School District  
Tiffany Islam – Flagler County Emergency Management  
Michael Jordan – St. Johns County Volunteer/Resident

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting. Rollcall was taken for any individuals who were on the phone and not logged in to the webinar. She explained that this meeting was scheduled to discuss potential projects for the funding opportunity that became available. As a result, the meeting scheduled for November would be cancelled.

#### II. **Approval of August 26<sup>th</sup> meeting minutes**

Motion to approve the minutes was made by Brian Law and seconded by Kaitlyn Dietz.

#### III. **Funding Updates**

- a. Laura discussed the COVID-19 HMGP notice of funding. Details on the programs can be found in the attached PowerPoint presentation.
- b. Laura spoke to the group trying to urge potential applicants to submit projects for COVID-19 funding. Only one project, a permanent generator at Freedom Crossing Academy, was put forth to be ranked for funding.
- c. City of St. Augustine Beach will consider submitting a project or two.

- d. Laura provided a reminder that the BRIC and FMA funding cycles are open. Details on the funding can be found in the attached PowerPoint presentation.

**IV. Project Updates**

- a. Laura mentioned she will be contacting project managers for project updates in December for the annual 27P-22 update required by Florida Administrative Code.

**V. CRS/Flood Updates**

- a. Laura briefed the group on the “CRS Next” public input process was extended until October 22, 2021.

**VI. Open Discussion**

- a. Dates were provided for the LMS Working Group Meetings for 2022. The following dates were established:
  - February 24, 2022
  - May 26, 2022
  - August 25, 2022
  - November 17, 2022

All meetings will be held on Thursdays at 9:00 am here at the St. Johns County EOC.

- b. Laura went over the updated Working Group contact list
- c. Kaitlin shared with the group that she worked with Jessica at the City of St. Augustine to apply for a tide gauge under a resiliency grant.
- d. The GTM Reserve is partnering with the Regional Council and Adapt Florida for some upcoming webinars. Information about the webinars can be found on their website.

**VII. Adjournment**

Meeting adjourned at 9:36 am

\* Denotes action item

## MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

OCTOBER 21, 2021  
9:00 A.M.

## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

- Introductions
- Old Information
  - Approval of Minutes from August 26 LMS Working Group Meeting\*
- New Information
  - Funding Updates
    - HMGP
    - FMA
    - BRIC
  - Project Updates
  - Flood/CRS Updates
- Open Discussion
- Adjournment

## APPROVAL OF MEETING MINUTES

- Approval of August 26, 2021 LMS Meeting Minutes

## COVID-19 HMGP

- All counties in Florida are eligible to apply
- Because this declaration is unlike typical disaster declarations, COVID-19 HMGP allocations were determined differently
  - Each county was first allocated \$100,000 and the remaining funds were divided up using the population and a proportion of the total state population
  - There will be no updated lock-in numbers like previous HMGP allocations
- The allocation for St. Johns County is \$1,403,978.95
  - A 25% cost-share match is required (\$467,993)
- The total statewide federal allocation is \$135,707,796.00

## COVID-19 HMGP APPLICATIONS

- Applicants are encourage to submit the applications electronically through FDEM's new portal
- A complete digital submission of applications and all necessary supporting documents must be uploaded into the FDEM portal no later than DECEMBER 21, 2021 11:59pm.
- Hard copies of applications must be postmarked on or before December 21, 2021. Hand-delivered applications must be stamped in the division no later than 5:00pm on Dec. 21<sup>st</sup>.

## ELIGIBLE HMGP PROJECTS

- Eligible projects include, but are not limited to the following:
  - Acquisition or relocation of hazard-prone structures
  - Retrofitting of existing buildings and facilities that will result in increased protection from hazards
  - Elevation of flood-prone structures
  - Infrastructure protection measures
  - Stormwater management improvements
  - Minor structure flood control
  - Flood diversion and storage
  - Aquifer storage and recovery
  - Floodplain and stream restoration
  - Residential and community safe room construction
  - Generators for a critical facility

## INELIGIBLE HMGP PROJECTS

- Ineligible HMGP Projects include the following:
  - Construction of new facilities
  - Equipment such as emergency pumps, vehicles, and communication devices
  - Stand-alone studies, design and planning-related activities
  - Tree removal, debris removal, and other forms of maintenance
  - Projects already in progress

## HMGP PROJECT SUBMISSIONS

- Interested applicants to date:
  - SJC: Permanent emergency standby generator for special needs shelter at Freedom Crossing Academy – \$315,000

## FUNDING UPDATES

- BRIC and FMA 2021 NOFAs released
  - Application period opens September 30, 2021 and FDEM has set a deadline of **November 12, 2021 at 5:00pm**
  - Applications will be submitted in FEMA GO
  - NOFA webinars available for more information
    - Informational webinars have been recorded and posted to website <https://www.fema.gov/grants/mitigation/2021-building-resilient-infrastructure-and-communities-and-flood-mitigation-assistance-programs>

## BRIC & FMA 2021 NOTICE OF FUNDING

- Total FMA Available - \$160,000,000
- Projected number of awards- 30 awards; 145 subawards
- FMA Priorities
  - \$10 million for project scoping
  - \$70 million Community Flood Mitigation Projects
  - Technical assistance
  - Flood Hazard Mitigation Planning
  - Individual Flood Mitigation Projects
- Period of Performance – 36 months
- 100% federal funding for Severe Rep Loss structures; 90% for Rep Loss designated or 75% federal share for all other

## BRIC & FMA 2021 NOTICE OF FUNDING

- Total BRIC Available - \$1,000,000,000
- Funding Breakdown:
  - State/Territory Allocation Subtotal – \$56,000,000
  - Tribal Set-Aside Subtotal – \$25,000,000
  - National Competition Subtotal – \$919,000,000
- 75% federal cost share/ 25% local
- Period of performance – 36 months

## HMGP MATTHEW

Project Rank	Project	Jurisdiction	Cost	Local Match 25%	Project Status (April 2021)	Notes
1	John Mario Sanchez Flood Mitigation Project	City of St. Augustine	\$ 11,600,000.00	\$ 2,875,000.00	In progress	Integrated with project 47
2	Master Stormwater Pump Station Improvements	Augustine Beach	\$ 500,000.00	\$ 125,000.00	In progress	Integrated with project 47
3	Emergency Standby Generators at Primary Hurricane Shelters: Ocoee Elem. School, City A. Mason Elem. School, Mill Creek Elem. School	School District	\$ 750,000.00	\$ 187,500.00	Completed	Completed Feb. 2021
4	Upgrade Signage at US 1 @ County Road 210	St. Johns County	\$ 111,148.00	\$ 27,787.00	Completed	4th phase. Extended to March 2021
5	Upgrade Signage at US 1 @ Lewis Park Dr.	St. Johns County	\$ 93,148.00	\$ 23,287.00	In progress	4th phase. Extended to March 2021
6	Upgrade Signage at US 1 @ Shores Dr.	St. Johns County	\$ 93,148.00	\$ 23,287.00	In progress	4th phase. Extended to March 2021
7	Upgrade Primary Stormwater Outfall Capacity	City of St. Augustine Beach	\$ 300,000.00	\$ 75,000.00	In progress	Working on executed phase 2 contract
8	Upgrade Improvements at Potts Estate	St. Johns County	\$ 500,000.00	\$ 125,000.00	Completed	Completed March 2021
9	Install hurricane shutters and emergency standby generator at the St. Johns County Detention	St. Johns County	\$ 122,000.00	\$ 30,500.00	Completed	
10	Flood Mitigation Improvements on South Whitely and West King St.	Augustine/St. Johns County	\$ 800,000.00	\$ 200,000.00	In progress	Awaiting FEMA approval for phase 2
11	Seismic Drainage/Storage Tank Standby Generator	St. Johns County	\$ 180,000.00	\$ 45,000.00	Completed	No room on the property for a standby generator. Contract extended to Dec 2021
12	Drainage Improvements on Kings Road	St. Johns County	\$ 324,714.00	\$ 81,178.50	In progress	Phase 1 awarded. Highly unlikely to proceed. SCA might need to be withdrawn
13	Drainage Improvements at North Beach	St. Johns County	\$ 2,000,000.00	\$ 500,000.00	In progress	
14	South Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 250,000.00	\$ 62,500.00	In progress	
15	Shores Unit 2 Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 212,160.00	\$ 53,040.00	In progress	

## HMGP IRMA

St. Johns County Hurricane Irma HMGP Ranked Project List

Project Rank	Project	Applicant	Goal	Total Project Cost	Estimated Federal Share	Status Update (April 2021)
1	Flood Mitigation at Avenida Menéndez Seawall, Connectivity Project, Costa Rica Blvd #1	City of St. Augustine	2.3.4	\$1,475,000.00	\$1,106,250.00	in design
2	Drainage Improvements at Wilton Circle - SJC Priority #5	St. Johns County	2.3	\$1,400,000.00	\$1,120,000.00	awaiting FEMA moving forward with local funds
3	Wastewater Treatment Plant Shoreline Hardening and Flood Proofing - COSA Priority #2	City of St. Augustine	2.3.4.5	\$1,400,000.00	\$1,120,000.00	awaiting FEMA moving forward with local funds
4	Drainage Improvements at Wilton Circle - SJC Priority #2	St. Johns County	2.3.4.5	\$1,400,000.00	\$1,120,000.00	awaiting FEMA moving forward with local funds
5	Marine Outfall Resiliency Improvements at Wilton Circle - SJC Priority #2	City of St. Augustine	2.3.4	\$1,400,000.00	\$1,120,000.00	awaiting FEMA moving forward with local funds
6	Drainage Improvements at Wilton Circle - SJC Priority #2	St. Johns County	2.3	\$1,400,000.00	\$1,120,000.00	awaiting FEMA moving forward with local funds
7	Marine Outfall Resiliency Improvements at Wilton Circle - SJC Priority #2	City of St. Augustine	2.3.4	\$1,400,000.00	\$1,120,000.00	awaiting FEMA moving forward with local funds
8	Drainage Improvements at Wilton Circle - SJC Priority #2	St. Johns County	2.3	\$1,400,000.00	\$1,120,000.00	awaiting FEMA moving forward with local funds
9	Drainage Improvements at Wilton Circle - SJC Priority #2	St. Johns County	2.3	\$1,400,000.00	\$1,120,000.00	awaiting FEMA moving forward with local funds
10	Drainage Improvements at Wilton Circle - SJC Priority #2	St. Johns County	2.3	\$1,400,000.00	\$1,120,000.00	awaiting FEMA moving forward with local funds
11	Drainage Improvements at Wilton Circle - SJC Priority #2	St. Johns County	2.3	\$1,400,000.00	\$1,120,000.00	awaiting FEMA moving forward with local funds
12	Drainage Improvements at Wilton Circle - SJC Priority #2	St. Johns County	2.3	\$1,400,000.00	\$1,120,000.00	awaiting FEMA moving forward with local funds
13	Drainage Improvements at Wilton Circle - SJC Priority #2	St. Johns County	2.3	\$1,400,000.00	\$1,120,000.00	awaiting FEMA moving forward with local funds
14	Drainage Improvements at Wilton Circle - SJC Priority #2	St. Johns County	2.3	\$1,400,000.00	\$1,120,000.00	awaiting FEMA moving forward with local funds

## HMGP- DORIAN

St. Johns County HMGP Ranked Project List- Dorian

Project Rank	Project Score	Project	Applicant	Goal(s)	Total Project Cost	Estimated Federal Share
1	84	CR ATA Storm Surge Protection	COSA Public Works	2.3.3	\$68,000	\$412,500
2	76	Stormwater Resiliency Improvements Ocean Walk	COSA Public Works	2.3.3	\$84,000	\$520,500
3	75	Smart Valve System for S. Davis Shores	COSA Public Works	2.3.3	\$60,000	\$450,000
4	68	Phase 1 Flood Barrier for S. Davis Shores	COSA Public Works	2.3.3	\$1,536,000	\$5,202,000
5	66	Damage Improvements for S. Davis Shores	COSA Public Works	2.3.3	\$1,608,000	\$1,206,600

## COMPLETED PROJECTS

Project	Project Status	Jurisdiction*	Responsible for Project Implementation**
Rehabilitation of existing sewer system in the Abbott Tract	Completed	City of St. Augustine	COSA Public Works
Relocation of Fire Station 5 and 11 out of Elevation Zone	Complete	St. Johns County	SJC Fire Rescue
Flood Mitigation at S. Avenida Menéndez Seawall Project	Complete	City of St. Augustine	COSA Public Works
Upgrade Signification at A1A and Coastal Highway	Complete	St. Johns County	St. Johns County Public Works
Upgrade Signification at A1A and Solano	Complete	St. Johns County	St. Johns County Public Works
Upgrade Signification at U.S. 1 and Health Park Boulevard	Complete	St. Johns County	St. Johns County Public Works
Install Shutters and a generator for the St. Johns County Jail Center	Complete	St. Johns County	SJC EM and SJC Animal Control
Emergency Standby Generator for Special Needs Shelter at Freedom Crossing Academy (state of FL generator now on site)	Completed	St. Johns County	SJC Emergency Management
Emergency Standby Generators at Primary Hurricane Shelters: Occoosa Elem. School, Ota A. Mason Elem. School, Mill Creek Elem. School, May Street @ Douglas (flooding) and at San Marco (construction) - improve evacuation	Completed	St. Johns County	SJC School District
Wastewater Treatment Plant Shoreline Hardening and Flood Proofing	Completed	City of St. Augustine	COSA Public Works
Marine Outfall Resiliency Improvements at Wilton Circle	Completed	City of St. Augustine	COSA Public Works
North and South Davis Shores Outfall Improvements	Completed	City of St. Augustine	COSA Public Works
Enhance construction of a new Emergency Communications Center outside Altonville Jones	Completed	St. Johns County	SJC Public Safety
Upgrade Signification at US1 @ County Road 210	Completed	St. Johns County	SJC Public Works
Damage Improvements at Kings Estate Road	Completed	St. Johns County	SJC Public Works
Damage Improvements at Remington Forest	Completed	St. Johns County	SJC Public Works
Damage Improvements at Rio del Mar Street & Fountain of Youth Boulevard	Completed	St. Johns County	SJC Public Works
Emergency Standby Generator for Fuel Pumps at SJC Public Works Facility	Completed	St. Johns County	St. Johns County Public Works

## CRS/FLOOD UPDATES

- "CRS Next"
  - FEMA is seeking public comments on transforming the CRS to better align with the current understanding of flood risk and flood risk approaches to incentivize communities to manage and lower their flood risk through floodplain management initiatives
  - Written comments are due October 22 (Docket ID: FEMA-2021-0021, through the Federal eRulemaking Portal: <http://www.regulations.gov/>)

## NEXT LMS MEETING



- February 25, 2021
- May 27, 2021
- August 26, 2021
- November 18, 2021

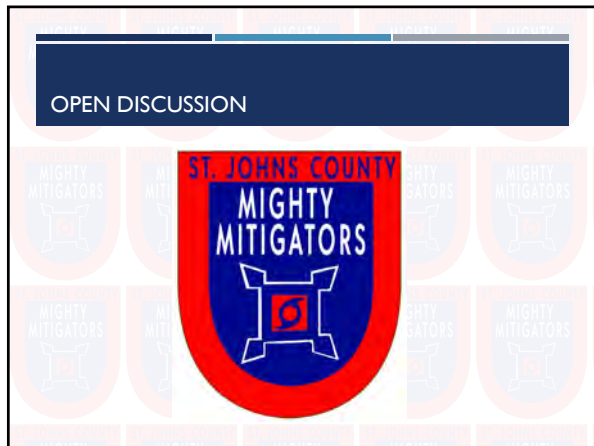
All meetings are Thursdays @ 9:00 am

## PROPOSED 2022 LMS MEETING DATES



- February 24, 2022
- May 26, 2022
- August 25, 2022
- November 17, 2022

All meetings are Thursdays @ 9:00 am



THE ST. AUGUSTINE RECORD  
Affidavit of Publication

**SJC EMERGENCY MANAGEMENT  
100 EOC DRIVE**

**SAINT AUGUSTINE, FL 32092**

ACCT: 15662  
AD# 0003382210-01  
PO#

PUBLISHED EVERY MORNING SUNDAY THROUGH SATURDAY  
ST. AUGUSTINE AND ST. JOHNS COUNTY, FLORIDA

STATE OF FLORIDA  
COUNTY OF ST. JOHNS

Before the undersigned authority personally appeared MELISSA RHINEHART who on oath says he/she is an Employee of the St. Augustine Record, a daily newspaper published at St. Augustine in St. Johns County, Florida; that the attached copy of advertisement being a **NOTICE OF MEETING** in the matter of **SJC LOCAL MITIGATION STRAG WRK GRP MTG 10/21/21** was published in said newspaper in the issue dated **10/11/2021**.

Affiant further says that the St. Augustine Record is a newspaper published at St. Augustine, in St. Johns County, Florida, and that the said newspaper heretofore has been continuously published in said St. Johns County, Florida each day and has been entered as second class mail matter at the post office in the City of St. Augustine, in said St. Johns County, Florida for a period of one year preceding the first publication of the attached copy of advertisement; and affiant further says the he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission, or refund for the purpose of securing this advertisement for publication in said newspaper.

Sworn to (or affirmed) and subscribed before me by means of

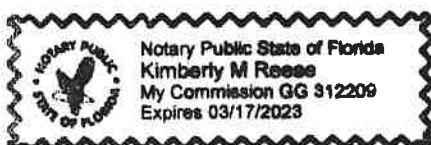
☒ physical presence or  
☐ online notarization

this \_\_\_\_\_ day of \_\_\_\_\_

OCT 12 2021

by *Melissa Rhinehart* who is personally known to  
me or who has produced as identification

*Kimberly M Reese*  
(Signature of Notary Public)



PUBLIC NOTICE

The St. Johns County Local Mitigation Strategy Working Group meeting will take place virtually via GoToMeeting at 9:00 am on Thursday, October 21, 2021. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.  
3382210, Oct. 11, 2021

Mon, Oct 11, 2021  
8:26:32AM

## Legal Ad Invoice

# The St. Augustine Record

Send Payments to:  
The St. Augustine Record Dept 1261  
PO BOX 121261  
Dallas, TX 75312-1261

**Acct:** 15662  
**Phone:** 9048245550

**E-Mail:**

**Client:** SJC EMERGENCY MANAGEMENT

**Name:** SJC EMERGENCY MANAGEMENT  
**Address:** 100 EOC DRIVE

**City:** SAINT AUGUSTINE

**State:** FL

**Zip:** 32092

**Ad Number:** 0003382210-01

**Start:** 10/11/2021

**Placement:** SA Legals

**Copy Line:** PUBLIC NOTICE The St. Johns County Local Mitigation Strategy Working Group meeting will take place virtually via GoToM

**Caller:** Laura Nelson

**Issues:** 1

**Rep:** Melissa Rhinehart

**Paytype:** BILL

**Stop:** 10/11/2021

Lines 16  
Depth 1.50  
Columns 1

Price \$26.93

### PUBLIC NOTICE

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3382210, Oct. 11, 2021





## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: February 24, 2022 @ 9:00 am

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, February 24, 2022 at 9:04 am at the St. Johns County Emergency Operations Center. Laura Nelson called the meeting to order with the following members:

Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Kelly Wilson – LMS Vice Chair, St. Johns County Emergency Management  
Brian Law – City of St. Augustine Beach  
Lacey Pierotti – City of St. Augustine Beach  
Jennifer Thompson – City of St. Augustine Beach  
Gavin Butler – St. Johns County Emergency Management  
Stephanie Massey – Taylor Engineering  
Don Cuevas – Beaches Energy  
Frank Cervasio – St. Johns County School District  
Tiffany Islam – Flagler County Emergency Management  
Jessica Beach – City of St. Augustine  
Doug Conkey – St. Johns River Water Management District  
Westley Woodward – St. Johns County Growth Management  
Tony Cubbedge – St. Johns County Utilities

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting.

#### II. **Approval of October 21<sup>st</sup> meeting minutes**

Motion to approve the minutes was made by Brian Law and seconded by Frank Cervasio.

#### III. **CRS/Flood Updates**

- a. Wesley Woodward provided an update on the submission of the Cycle Verification Visit with ISO for the Community Rating System. She also indicated that the County's floodplain management office also had a Community Assistance Visit (CAV) with the Florida Division of Emergency Management's (FDEM) Floodplain Office.
- b. Jessica Beach also discussed the City's visit with ISO and FDEM.
- c. Brian Law mentioned he also had a visit with FDEM and that he will be working on his annual recertification for CRS in the next few months. He is also working on items for their 5-year CRS cycle verification next year.

IV. **COVID-19 HMGP**

- a. Laura briefed on the projects that were submitted under the COVID-19 Hazard Mitigation Grant Program.

V. **Addition of New Projects\***

- a. Brian Law briefed the room on the three projects the City of St. Augustine Beach wants to add to the mitigation project list. All three projects received support from the group.
  - 1. Public Works Generator- Motioned to add by Jessica Beach and seconded by Tony Cubbedge
  - 2. Windstorm mitigation of City Hall, Police Station and Building C- Motioned by Kelly and seconded by Doug Conkey
  - 3. Drainage Improvements for 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> streets- Motioned by Tiffany Islam and seconded by Doug Conkey

VI. **Project Updates**

- a. Jessica updated the group on some recent funding the City of St. Augustine was awarded and how that will help with a number of ongoing mitigation and resiliency projects.

VII. **Upcoming Trainings, Meetings and Webinars**

- a. The State of Florida's Mitigation Working Group's meeting will be held March 9<sup>th</sup> at 1:00. See the attached slides for registration information.
- b. The next LMS Working Group meeting will be held May 26<sup>th</sup> at 9:00 am at the SJC EOC

VIII. **Adjournment**

Meeting adjourned at 9:57 am

\* Denotes action item

## MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

FEBRUARY 24, 2022  
9:00 A.M.

## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

- Introductions
- Old Information
  - Approval of Minutes from Oct. 21, 2021 LMS Working Group Meeting\*
- New Information
  - Flood/CRS Updates
  - Funding Updates
  - Approval of City of St. Augustine Beach's projects to Project List\*
  - Project Updates
- Open Discussion
- Adjournment

## APPROVAL OF MEETING MINUTES

- Approval of October 21, 2021 LMS Meeting Minutes

## CRS/FLOOD UPDATES

- City of St. Augustine and SJC recently had Cycle Visits with ISO

## COVID-19 HMGP

- The allocation for St. Johns County was \$1,403,978.95
- Projects submitted in SJC:
  - St. Johns County Special Needs Shelter Generator at Freedom Crossing Academy- \$315,000
  - City of St. Augustine Beach Windstorm mitigation of City Hall, Police Station and Building C- \$200,000
  - City of St. Augustine Beach Public Works Generator Replacement- \$70,000
  - City of St. Augustine Beach Drainage Improvements for 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> streets- \$150,000

## ADDITION OF NEW PROJECTS

- City of St. Augustine Beach Windstorm mitigation of City Hall, Police Station and Building C- \$200,000
- City of St. Augustine Beach Public Works Generator Replacement- \$70,000
- City of St. Augustine Beach Drainage Improvements for 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> streets- \$150,000

# PROTECTING TOGETHER

Project Sponsor	County	Project Title	Approximate Total Project Cost (dollars)	Local Match Amount	Expected RMGP Funding Total	Project Duration (years)
Polk County Parks & Natural Resources	Polk	Restoring Historic Wetlands - Minimize Flood Risk in the Peace Creek Canal Basin	\$15,000,000.00	\$7,500,000.00	\$7,500,000.00	4
Santa Rosa County	Santa Rosa	Flourtown Park Living Shoreline Implementation	\$800,057.00	\$0.00	\$800,057.00	1
City of St. Augustine	St. Johns	Total Backflow Prevention Improvements	\$461,282.00	\$230,643.00	\$230,643.00	4
City of St. Augustine	St. Johns	Lake Maria Sanchez Flood Mitigation/Drainage Improvements	\$29,830,178.00	\$11,037,165.86	\$18,793,012.14	3
City of St. Augustine	St. Johns	Flood Mitigation/Drainage Improvements for Court Theophelia Neighborhood	\$2,581,600.00	\$0.00	\$2,581,600.00	4
City of St. Augustine	St. Johns	South Whitney - West King Street Flood Mitigation	\$1,822,600.00	\$619,684.00	\$1,202,916.00	2
City of St. Augustine	St. Johns	Groundwater Monitoring Network for Sea Level Rise Impacts	\$237,300.00	\$15,197.00	\$201,903.00	3
City of St. Augustine	St. Johns	Inlet Drive Shoreline Resiliency	\$711,090.00	\$0.00	\$711,090.00	4
City of St. Augustine	St. Johns	South Davis Shores Flood Mitigation/Drainage Improvements	\$2,797,000.00	\$0.00	\$2,797,000.00	4
Wakulla County Board of County Commissioners	Wakulla	Coastal Evacuation Route Improvement	\$459,547.00	\$0.00	\$459,547.00	2

HMGP MATTHEW						
Project Rank	Project	Jurisdiction	Cost	Local Match 20%	Project Status (April 2021)	Notes
1	Lake Maria Sanchez Flood Mitigation Project	City of St. Augustine	\$ 11,800,000.00	\$ 2,376,000.00	in design with	
2	Lake Maria Sanchez Flood Mitigation Project	St. Johns County	\$ 400,000.00	\$ 80,000.00	in progress	merged with project #7
3	Emergency Standby Generators at Primary Hurricane Shelters: Ocoee	St. Johns County	\$ 760,000.00	\$ 152,000.00	completed	completed
4	Storm Signalization at US 1 & County Road 200	St. Johns County	\$ 111,148.00	\$ 22,229.60	completed	Completed Feb 2021
5	Storm Signalization at US 1 & Lees Point Rd	St. Johns County	\$ 551,148.00	\$ 110,229.60	in progress	in bid phase. Extended to March 2022
6	Storm Signalization at US 1 & Shaw Dr	St. Johns County	\$ 551,148.00	\$ 110,229.60	in progress	in bid phase. Extended to March 2022
7	Increase Primary Stormwater Outfall Capacity	City of St. Augustine	\$ 360,000.00	\$ 72,000.00	in progress	waiting on executed phase 2
8	Drainage Improvements at Kings Estate	St. Johns County	\$ 360,000.00	\$ 72,000.00	completed	Completed March 2021
9	Stormwater shelter and emergency standby generator at the St. Johns County Jail Center	St. Johns County	\$ 122,000.00	\$ 24,400.00	completed	completed
10	Flood Mitigation Improvements on South Whitney and West King St	City of St. Augustine	\$ 800,000.00	\$ 160,000.00	in progress	waiting FEMA approval for phase 2
11	Stormwater Treatment Plant Standby Generator	St. Johns County	\$ 163,000.00	\$ 32,600.00	in progress	in room on the property for a permanent generator
12	Drainage Improvements on Kings Road	St. Johns County	\$ 364,714.00	\$ 72,942.80	in progress	Phase 1 completed. Highly unlikely to meet FEMA. Might need to be postponed
13	Drainage Improvements at North Beach	St. Johns County	\$ 2,000,000.00	\$ 400,000.00	in progress	Phase 1 completed. Highly unlikely to meet FEMA. Might need to be postponed
14	Storm Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 253,200.00	\$ 50,640.00	completed	completed
15	Storm Unit 2 Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 212,160.00	\$ 42,432.00	completed	completed
16	Stormwater Treatment Plant Standby Generator	St. Johns County	\$ 163,000.00	\$ 32,600.00	in progress	in room on the property for a permanent generator
			\$ 18,968,580.00	\$ 3,793,716.00		

HMGP IRMA						
St. Johns County Hurricane Irma HMGP Ranked Project List						
Project Rank	Project	Applicant	Goal	Total Project Cost	Estimated Federal Share	Status Update (April 2021)
1	Flood Mitigation at Avenida Menéndez Seawall, Connectivity Project - COSA Priority #1	City of St. Augustine	2-3-4	\$1,475,000.00	\$1,180,200.00	in design
2	Drainage Improvements at Wilson Creek - SJC Priority #5	St. Johns County	2-3	\$1,400,000.00	\$1,120,000.00	in design
3	Stormwater Treatment Plant Shoreline Hardening and Flood Protection - COSA Priority #2	City of St. Augustine	2-3-4-5	\$1,400,000.00	\$1,120,000.00	withdrawn after award due to workload. Changed scope and completed floodprotection to a Call 2 instead of Call 5
4	Stormwater Treatment Plant Shoreline Hardening and Flood Protection - COSA Priority #2	St. Johns County	2-3-4-5	\$1,400,000.00	\$1,120,000.00	withdrawn
5	Stormwater Treatment Plant Shoreline Hardening and Flood Protection - COSA Priority #2	City of St. Augustine	2-3-4-5	\$1,400,000.00	\$1,120,000.00	withdrawn
6	Stormwater Treatment Plant Shoreline Hardening and Flood Protection - COSA Priority #2	St. Johns County	2-3	\$800,000.00	\$640,000.00	in progress
7	Stormwater Treatment Plant Shoreline Hardening and Flood Protection - COSA Priority #2	City of St. Augustine	2-3-4	\$800,000.00	\$640,000.00	in progress
8	Stormwater Treatment Plant Shoreline Hardening and Flood Protection - COSA Priority #2	St. Johns County	2-3	\$800,000.00	\$640,000.00	in progress
9	Stormwater Treatment Plant Shoreline Hardening and Flood Protection - COSA Priority #2	City of St. Augustine	2-3-4	\$800,000.00	\$640,000.00	in progress
10	Stormwater Treatment Plant Shoreline Hardening and Flood Protection - COSA Priority #2	St. Johns County	2-3	\$800,000.00	\$640,000.00	in progress
11	Stormwater Treatment Plant Shoreline Hardening and Flood Protection - COSA Priority #2	City of St. Augustine	2-3-4	\$800,000.00	\$640,000.00	in progress
12	Stormwater Treatment Plant Shoreline Hardening and Flood Protection - COSA Priority #2	St. Johns County	2-3	\$800,000.00	\$640,000.00	in progress
13	Stormwater Treatment Plant Shoreline Hardening and Flood Protection - COSA Priority #2	City of St. Augustine	2-3-4	\$800,000.00	\$640,000.00	in progress
14	Stormwater Treatment Plant Shoreline Hardening and Flood Protection - COSA Priority #2	St. Johns County	2-3	\$800,000.00	\$640,000.00	in progress
Total				\$18,475,000.00	\$15,184,200.00	

HMGP- DORIAN					
St. Johns County HMGP Ranked Project List- Dorian					
Project Rank	Project	Applicant	Goal(s)	Total Project Cost	Estimated Federal Share
1	CR A1A Storm Surge Protection	COSA Public Works	2 & 3	\$ 550,000	\$ 412,500
2	Stormwater Resiliency Improvements- Green-Walk Subdivision	COSA Public Works	2-3-4	\$ 604,000	\$ 463,000
3	Smart Valve System for S- Davis Shores	COSA Public Works	2-3-4	\$ 600,000	\$ 460,000
4	Phase 1 Flood Barrier for S- Davis Shores	COSA Public Works	2-3-4	\$ 6,006,000	\$ 4,604,500
5	Drainage Improvements for S- Davis Shores	COSA Public Works	2-3-4	\$ 1,608,800	\$ 1,206,600

updated February 2022

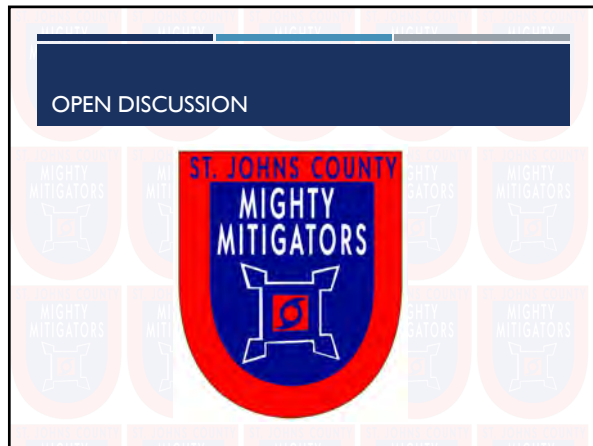
## UPCOMING TRAININGS, MEETINGS, WEBINARS

■ MitigateFL – State of Florida's Mitigation Working Group – March 8<sup>th</sup> at 1:00pm  
<https://fdem.webex.com/jfdem/j.php?MTID=m44b70b1bf5bb9f9597dad361a35f88f>  
 Join by Phone: 1-408-418-9388  
 Access Code: 233 477 81516  
 Webinar Password: 64844284

## 2022 LMS MEETING DATES

■ February 24, 2022  
 ■ May 26, 2022  
 ■ August 25, 2022  
 ■ November 17, 2022

All meetings are Thursdays @ 9:00 am





St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
February 24, 2022



Name	Organization	Email
Laura Nelson	SJC EM	LNelson@sjcf1.us
Tiffany Islam	Flagler County EM	TIslam@flagler-county.gov
Dan Cuevas	Beaches Energy Services	dcuevas@beachesenergy.com
Stephanie Massey	Taylor Engineering	smassey@taylorengineering.com
Gavin Butler	SJC EM	Gdbutler@SJCKL.US
Dan Conkey	SJRWD	dconkey@sjrwd.com
Kelly Wilson	SJC EM	Kwilson@sjcf1.us
WESTLY WOODWARD	GMD	woodward@sjcf1.us
Tony Cobbedge	SJC Utilities	twcobbedge@sjcf1.us
FRANK CERVASIO	SJCSD	frank.cervasio@stjohns.k12.fl.us
Brian Law	COSAB	blaw@cityofsab.org
JENNIFER THOMPSON	COSAB	jthompson@cityofsab.org
LACEY PIETROTTI	COSAB	lpietrotti@cityofsab.org
Jessica Beach	SOSA	



THE ST. AUGUSTINE RECORD  
Affidavit of Publication

PUBLIC NOTICE

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thursday, February 24, 2022 at the St. Johns County Emergency Operations Center located at 100 EOC Drive, St Augustine, FL 32092. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550

0003401239 February 10, 2022

**SJC EMERGENCY MANAGEMENT  
100 EOC DRIVE**

**SAINT AUGUSTINE, FL 32092**

ACCT: 15662  
AD# 0003401239-01

PO#

PUBLISHED EVERY MORNING SUNDAY THROUGH SATURDAY  
ST. AUGUSTINE AND ST. JOHNS COUNTY, FLORIDA

STATE OF FLORIDA  
COUNTY OF ST. JOHNS


Before the undersigned authority personally appeared MELISSA RHINEHART who on oath says he/she is an Employee of the St. Augustine Record, a daily newspaper published at St. Augustine in St. Johns County, Florida; that the attached copy of advertisement being a **NOTICE OF MEETING** in the matter of **Local Mitigation Strategy Wrk Grp February 24, 2022** was published in said newspaper in the issue dated **02/10/2022**.

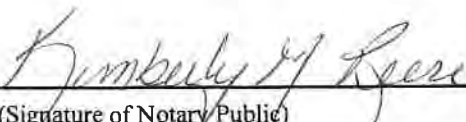
Affiant further says that the St. Augustine Record is a newspaper published at St. Augustine, in St. Johns County, Florida, and that the said newspaper heretofore has been continuously published in said St. Johns County, Florida each day and has been entered as second class mail matter at the post office in the City of St. Augustine, in said St. Johns County, Florida for a period of one year preceding the first publication of the attached copy of advertisement; and affiant further says the he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission, or refund for the purpose of securing this advertisement for publication in said newspaper.

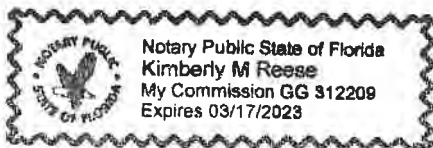
Sworn to (or affirmed) and subscribed before me by means of

☒ physical presence or  
☐ online notarization

this \_\_\_\_\_ day of **FEB 10 2022**

by  who is personally known to  
me or who has produced as identification

  
(Signature of Notary Public)



Thu, Feb 10, 2022  
8:23:46AM

## Legal Ad Invoice

# The St. Augustine Record

Send Payments to:  
The St. Augustine Record Dept 1261  
PO BOX 121261  
Dallas, TX 75312-1261

**Acct:** 15662  
**Phone:** 9048245550

**Name:** SJC EMERGENCY MANAGEMENT  
**Address:** 100 EOC DRIVE

**E-Mail:**  
**Client:** SJC EMERGENCY MANAGEMENT **City:** SAINT AUGUSTINE **State:** FL **Zip:** 32092

**Ad Number:** 0003401239-01

**Caller:** Laura Nelson

**Paytype:** BILL

**Start:** 02/10/2022

**Issues:** 1

**Stop:** 02/10/2022

**Placement:** SA Legals

**Rep:** Chris ISC-Landry

**Copy Line:** PUBLIC NOTICE The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thur:

### PUBLIC NOTICE

Lines 18  
Depth 1.50  
Columns 1

Price \$26.93

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thursday, February 24, 2022 at the St. Johns County Emergency Operations Center located at 100 EOC Drive, St. Augustine, FL 32092. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-3550.

0003401239 February 10, 2022





## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: May 26, 2022 @ 9:00 am

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, May 26, 2022 at 9:04 am at the St. Johns County Emergency Operations Center. Laura Nelson called the meeting to order with the following members:

Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Kelly Wilson – LMS Vice Chair, St. Johns County Emergency Management  
Brian Law – City of St. Augustine Beach  
Sydney Shaffer – City of St. Augustine Beach  
Jennifer Thompson – City of St. Augustine Beach  
Stephanie Massey – Taylor Engineering  
Don Cuevas – Beaches Energy  
Frank Cervasio – St. Johns County School District  
Doug Conkey – St. Johns River Water Management District  
Westley Woodward – St. Johns County Growth Management  
Ashlie Jordan – St. Johns County Growth Management  
Tony Cubbedge – St. Johns County Utilities  
Keith Oke – St. Johns County Sheriff's Office

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting.

#### II. **Approval of February 24<sup>th</sup> meeting minutes\***

Motion to approve the minutes was made by Brian Law and seconded by Frank Cervasio.

#### III. **CRS/Flood Updates**

- a. Laura Nelson explained that the City of St. Augustine and SJC's Cycle Verification Visit review from ISO revealed that the LMS does not adequately analyze repetitive loss properties to qualify for credit under Section 510 of the program. As a result ISO is requesting the City and County either revise the LMS repetitive loss property analysis section or conduct a full-fledged Repetitive Loss Area Analysis (RLAA), which consists of 5 steps. Either approach will require a re-adoption of the LMS.
- b. The timeline for revisions was discussed, as outlined in the attached slides.

- c. Florida Forest Services has submitted an updated wildfire risk assessment which can also be included in the update of the LMS. A draft copy is attached to the minutes for individuals to review and provide comments.

**IV. Project Updates**

- a. Brian Law and Sydney Shaffer explained that their weir project is approximately 75% complete and on target to finish in August 2022.
- b. Brian stated the Public Works Facility Generator project submitted under HMGP-COVID was not passing benefit cost analysis and they would seek another funding source.

**V. Funding Updates**

- a. Laura mentioned that FMA and BRIC funding programs will likely be opening mid-late summer.
- b. Laura also briefed the group on preliminary information that resulted from the Florida Legislature's recent Special Session regarding the My Safe Florida Home program. The program would provide residential wind retrofits to a special segment of residential homes, but that it would take time for the program to officially be built and more information would be forthcoming.

**VI. Open Discussion**

- a. Our partners at the Department of Environmental Protection wanted to share that the Nearshore ADCEP wave gauge station at the GTM Research Reserve's middle beach access, dune tower, and weather instruments are installed and collecting data. Dr. Bill Dally is working with St. Johns County & Friends of the GTM Reserve to host the data on SJC website. Data will soon be available.
- b. Laura mentioned that a new FEMA Local Hazard Mitigation Plan policy guide was released and will govern how FEMA officially interprets plan requirements. It will impact the next full update of the LMS.

**VII. Upcoming Trainings, Meetings and Webinars**

- a. The State of Florida's Mitigation Working Group's meeting will be held June 14<sup>th</sup> at 1:00.
- b. The next LMS Working Group meeting will be held August 25<sup>th</sup> at 9:00 am at the SJC EOC

**VIII. Adjournment**

Meeting adjourned at 9:50 am

\* Denotes action item

## MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

MAY 26, 2022  
9:00 A.M.

## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

- Introductions
- Old Information
  - Approval of Minutes from Feb. 24, 2022 LMS Working Group Meeting\*
- New Information
  - Flood/CRS Updates
    - Repetitive Loss Area Analysis
  - Funding Updates
  - Project Updates
- Open Discussion
- Adjournment

## APPROVAL OF MEETING MINUTES

- Approval of February 24, 2022 LMS Meeting Minutes

## CRS/FLOOD UPDATES

- City of St. Augustine and SJC recently had Cycle Visits with ISO
  - It was determined that the LMS only partially meets the new Repetitive Loss Area Analysis (RLAA) requirements
  - ISO is requiring an update to the LMS to include a thorough RLAA and it must be readopted to receive CRS credit/points
  - This affects the City of St. Augustine and SJC, not St. Augustine Beach

## RLAA

- Communities must include repetitive loss areas in their problem assessment. (REQUIRED of Category B and C repetitive loss communities)
- In order to receive the full credit under item (c), the community reviews ALL the addresses of properties that have received flood insurance claims, not just the repetitive loss properties.
- Assessment must include a review of historical damage to buildings, including all repetitive loss properties and all properties that have received flood insurance claims payments, and/or an estimate of the potential damage and dollar losses to vulnerable structures, including damage from mold and other flood-related hazards.
- Vulnerable structures must include all buildings within the community's defined repetitive loss area(s).
- Must also comply with The privacy Act of 1974
- [https://www.fema.gov/sites/default/files/documents/fema\\_community-rating-system\\_coordinators-manual\\_2017.pdf](https://www.fema.gov/sites/default/files/documents/fema_community-rating-system_coordinators-manual_2017.pdf)

## RLAA

- Must account for each of the 5 required steps:
  1. Advise all properties in repetitive loss areas that the analysis will be conducted and request their input on the hazard and recommended actions
  2. Contact agencies or organizations that may have plans or studies that could affect the cause or impacts of the flooding. The agencies or organizations must be identified in the analysis report.
  3. Visit each building in the repetitive loss area and collect basic data
  4. Review alternative approaches and determine whether any property protection measures or drainage improvements are feasible
  5. Document the findings. A separate analysis must be conducted for each area

## RLAA/LMS UPDATE PROPOSED TIMELINE

- First public meeting –Thursday, May 26 in conjunction with the LMS meeting
- Continue with updates to the RLAA/LMS in June and through mid-July
- Once finished, submit to administration to get on the BOCC agenda, targeting the first meeting in August
  - The BOCC meeting will serve as the 2<sup>nd</sup> public meeting
- The City can also adopt in August
- Additionally, Florida Forest Services has also drafted an updated wildfire risk assessment for inclusion into the LMS- a draft will be emailed for comment

## HMGP MATTHEW

Project Rank	Project	Jurisdiction	Cost	Local Match 25%	Project Status - Prior 2021
1	Jessie More Sanchez Flood Mitigation Project	City of St. Augustine	\$ 11,500,000.00	\$ 2,875,000.00	in design sub
2	Master Stormwater Pump Station Improvements	St. Johns County	\$ 600,000.00	\$ 150,000.00	in progress
3	Emergency Standby Generator at Primary Hurricane Shelters: Chocoma Elem. School, Ochs A. Mason Elem. School, Mt. Creek Elem. School	School District	\$ 750,000.00	\$ 187,500.00	completed
4	Upgrade Signation at US 1 @ County Road 279	St. Johns County	\$ 111,149.00	\$ 27,787.25	completed
5	Upgrade Signation at US 1 @ Lewis Point Rd	St. Johns County	\$ 551,149.00	\$ 137,787.25	in progress
6	Upgrade Signation at US 1 @ Shore Dr	St. Johns County	\$ 551,149.00	\$ 137,787.25	in progress
7	Increase Primary Stormwater Outfall Capacity	City of St. Augustine Beach	\$ 150,000.00	\$ 37,500.00	in progress
8	Drainage Improvements at Kings Island	St. Johns County	\$ 350,000.00	\$ 87,500.00	completed
9	Install hurricane shutters and emergency standby generator at the St. Johns County Pet Center	St. Johns County	\$ 122,000.00	\$ 30,500.00	completed
10	Flood Mitigation Improvements on South Whitney and West King St.	City of St. Augustine	\$ 900,000.00	\$ 225,000.00	in progress
11	Barham Oaks Wastewater Treatment Plant Standby Generator	St. Johns County	\$ 60,000.00	\$ 15,000.00	in progress
12	Drainage Improvements on Kings Road	St. Johns County	\$ 354,714.00	\$ 88,678.50	in progress
13	Drainage Improvements at North Beach	St. Johns County	\$ 2,000,000.00	\$ 500,000.00	in progress
14	South Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 253,200.00	\$ 63,300.00	completed
15	Shoreline Line 2 Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 212,150.00	\$ 53,037.50	completed
16	Trill Creek Wastewater Treatment Plant Standby Generator	St. Johns County			in progress

## HMGP IRMA

St. Johns County Hurricane Irma HMGP Ranked Project List					
Project Rank	Project	Applicant	Total Project Cost	Estimated Federal Share	Status Update (May 2022)
1	Flood Mitigation at Avenida Menéndez Segment, Connectivity Project	City of St. Augustine	\$1,475,000.00	\$1,180,000.00	Contracted
2	Drainage Improvements at Wilton Circle – SJC Priority #1	St. Johns County	\$3,600,000.00	\$1,440,000.00	Revised by FICEM moving forward with local funds. Withdrawn after award due to workload. Changed scope and completed funding for a Cat 2 instead of Cat 1
3	Wastewater Treatment Plant Diversion Hardening and Flood Resilience – CoSA Priority #2	City of St. Augustine	\$1,100,000.00	\$1,100,000.00	Withdrawn
4	Deep Creek Commuter Improvement – SJC Priority #3	St. Johns County	\$1,400,000.00	\$1,400,000.00	Revised by FICEM moving forward with local funds. Withdrawn after award due to workload. Changed scope and completed funding for a Cat 2 instead of Cat 1
5	Wastewater Treatment Plant Diversion Hardening and Flood Resilience – CoSA Priority #4	City of St. Augustine	\$1,100,000.00	\$1,100,000.00	Withdrawn
6	Flood Resilience and Flood Mitigation at Fire Station 6 – Groundwater	St. Johns County	\$33,000.00	\$33,000.00	Not submitted
7	Master Stormwater Outfall Resiliency District with Tide Check Valve	City of St. Augustine	\$300,000.00	\$225,000.00	Revised by state and others. Not submitted for HMGP funding.
8	Drainage Improvements by Retooling Stormwater Outfalls	City of St. Augustine	\$1,600,000.00	\$1,280,000.00	Withdrawn by SJC moving forward with local funding. Not submitted for HMGP funding.
9	Drainage Improvements at West Augustine Avenue 2 & 4	St. Johns County	\$600,000.00	\$480,000.00	Withdrawn by SJC moving forward with local funding. Not submitted for HMGP funding.
10	Drainage Improvements at Fire Station 6 & 7	St. Johns County	\$1,400,000.00	\$1,120,000.00	Withdrawn by SJC moving forward with local funding. Not submitted for HMGP funding.
11	Drainage Improvements on US 1	St. Johns County	\$1,400,000.00	\$1,120,000.00	Withdrawn by SJC moving forward with local funding. Not submitted for HMGP funding.
12	Drainage Improvement and Flood Mitigation of Co-Thompson	City of St. Augustine	\$1,400,000.00	\$1,120,000.00	Withdrawn by SJC moving forward with local funding. Not submitted for HMGP funding.
13	Drainage Improvement Fire Creek - Madison Blvd	St. Johns County	\$600,000.00	\$480,000.00	Withdrawn by SJC moving forward with local funding. Not submitted for HMGP funding.
14	Drainage Improvements at Fire Station 6	St. Johns County	\$300,000.00	\$225,000.00	Completed/contract
Total			\$30,410,000.00	\$11,734,000.00	

## HMGP & OTHER

Permanent Emergency Standby Generator for Special Needs Shelter at Freedom Crossing Academy	St. Johns County	SJC EM	HMGP – COVID-19
Windstorm Mitigation of St. Augustine Beach City Hall, Police Station and Bldg. C	City of St. Augustine Beach	COSAB Public Works	HMGP – COVID-19
City of St. Augustine Beach Drainage Improvements on 7th, 8th and 9th Streets	City of St. Augustine Beach	COSAB Public Works	HMGP – COVID-19
COSAB Public Works Critical Facility Generator	City of St. Augustine Beach	COSAB Public Works	HMGP – COVID-19
CR A1A Storm Surge Protection	City of St. Augustine Beach	COSAB Public Works	HMGP – COVID-19
City of St. Augustine residential Flood Mitigation Assistance	City of St. Augustine	COSA Public Works	FMA


## FUNDING UPDATES

- FMA and BRIC estimated to be released later this summer
  - FDEM and FEMA will host webinars to detail priorities
- HLMP opened with a very quick deadline
- HMGP-Fire Management cycle will open with a priority for wildfire projects in the panhandle. SJC could be eligible for Tier 3
- Stay tuned for possible grant opportunities for residential wind retrofits

## UPCOMING TRAININGS, MEETINGS, WEBINARS

- MitigateFL – State of Florida's Mitigation Working Group June 14<sup>th</sup> at 1:00  
<https://www.floridadisaster.org/dem/mitigation/statemitigationstrategy/>
- G-361- Flood Fight Operations Training Class in Flagler County – June 21-23 – registration in SERT Trac – possible CFM Credits  
<https://trac.floridadisaster.org/TRAC/EventDetailPublic.aspx?ID=5386&mode=MoDeEdit&lookupName=searcheventpublic&Board=Student>

OPEN DISCUSSION



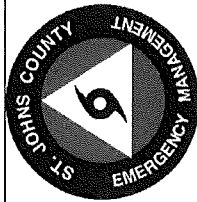
- Nearshore ADCEP wave gauge station at the GTM Research Reserve's middle beach access- The wave gauge, dune tower, and weather instruments are installed and collecting data. Dr. Bill Dally is working with St. Johns County & Friends of the GTM Reserve to host the data on SJC website. Data will soon be available
- Results of Special Session regarding residential housing insurance reform
- New LMS Planning Policy released by FEMA
- Other?

2022 LMS MEETING DATES

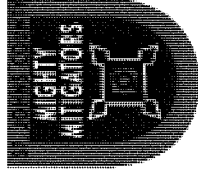


- February 24, 2022
- May 26, 2022
- August 25, 2022
- November 17, 2022

All meetings are Thursdays @ 9:00 am



St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
May 26, 2022



Name	Organization	Email
Laura Nelson	SJC EM	LNelson@sjcfl.us
FRANK CERVASIO	SJCSD	frank.cervasio@stjohns.k12.fl.us
Stephanie Massey	Taylor Engineering	smassey@taylorengineering.com
Keith Oke	SJSO	koke@sjso.org
Don Cuevas	Beach's Energy Services	dcuevas@beachenergyservices.com
Doug Conkle	SSR Wind	dconkle@ssrwind.com
Kelly Wilson	SJC EM	kwilson@sjcfl.us
WESTLY WOODWARD	SJCUM	woodward@sjcfl.us
ASHLIE JORDAN	SJCUM	ajordan@sjcfl.us
BRIAN CAL	COSAB	blaw@stjohns@cityofsab.org
Jeanine Thompson	COSAB	jthompson@cityofsab.org
Sydney Shaffer	COSAB	sshaffer@cityofsab.org
Tony Cambridge	SJC Utilities	twcambridge@sjcfl.us

THE ST. AUGUSTINE RECORD  
Affidavit of Publication

**SJC EMERGENCY MANAGEMENT  
100 EOC DRIVE**

**SAINT AUGUSTINE, FL 32092**

ACCT: 15662  
AD# 0003415543-01

PO#

PUBLISHED EVERY MORNING SUNDAY THROUGH SATURDAY  
ST. AUGUSTINE AND ST. JOHNS COUNTY, FLORIDA

STATE OF FLORIDA  
COUNTY OF ST. JOHNS

Before the undersigned authority personally appeared MELISSA RHINEHART who on oath says he/she is an Employee of the St. Augustine Record, a daily newspaper published at St. Augustine in St. Johns County, Florida; that the attached copy of advertisement being a **NOTICE OF MEETING** in the matter of **LOCAL MITIGATION STRATEGY WRKSHIP 5/26/22** was published in said newspaper in the issue dated **05/15/2022**.

Affiant further says that the St. Augustine Record is a newspaper published at St. Augustine, in St. Johns County, Florida, and that the said newspaper heretofore has been continuously published in said St. Johns County, Florida each day and has been entered as second class mail matter at the post office in the City of St. Augustine, in said St. Johns County, Florida for a period of one year preceding the first publication of the attached copy of advertisement; and affiant further says the he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission, or refund for the purpose of securing this advertisement for publication in said newspaper.

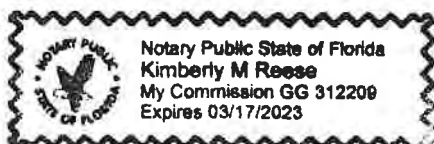
Sworn to (or affirmed) and subscribed before me by means of

☒ physical presence or  
☐ online notarization

this \_\_\_\_\_ day of **MAY 16 2022**

by *Melissa Rhinehart* who is personally known to  
me or who has produced as identification

*Kimberly M Reese*  
(Signature of Notary Public)



PUBLIC NOTICE

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thursday, May 26, 2022 at the St. Johns County Emergency Operations Center located at 100 EOC Drive, St. Augustine, FL 32092. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.  
0003415543 May 15, 2022



Sat, May 14, 2022  
11:47:21AM

Legal Ad Invoice

The St. Augustine Record

Send Payments to:  
The St. Augustine Record Dept 1261  
PO BOX 121261  
Dallas, TX 75312-1261

Acct: 15662  
Phone: 9048245550  
E-Mail:  
Client: SJC EMERGENCY MANAGEMENT

Name: SJC EMERGENCY MANAGEMENT  
Address: 100 EOC DRIVE

City: SAINT AUGUSTINE State: FL Zip: 32092

Ad Number: 0003415543-01 Caller: Laura Nelson Paytype: BILL  
Start: 05/15/2022 Issues: 1 Stop: 05/15/2022  
Placement: SA Legals Rep: Elexis ISC-Blum  
Copy Line: PUBLIC NOTICE The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thur.

PUBLIC NOTICE

Lines 18  
Depth 1.50  
Columns 1  
  
Price \$26.93

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In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.  
0003415543 May 15, 2022





## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: August 25, 2022 @ 9:00 am

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, August 25, 2022 at 9:07 am at the St. Johns County Emergency Operations Center. Laura Nelson called the meeting to order with the following members:

Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Kelly Wilson – LMS Vice Chair, St. Johns County Emergency Management  
Brian Law – City of St. Augustine Beach  
Lacey Pierotti – City of St. Augustine Beach  
Russel Adams – City of St. Augustine Beach  
Jessica Beach – City of St. Augustine  
Stephanie Massey – Taylor Engineering  
Don Cuevas – Beaches Energy  
Frank Cervasio – St. Johns County School District  
Doug Conkey – St. Johns River Water Management District  
Westley Woodward – St. Johns County Growth Management  
Ashlie Jordan – St. Johns County Growth Management  
Tony Cubbedge – St. Johns County Utilities  
Julie Allen – Florida Forest Service  
Gavin Butler – St. Johns County Emergency Management  
Tyler Nolen – Northeast Florida Regional Council  
Jason Sparks – St. Johns County Public Works

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting.

#### II. **Approval of May 26<sup>th</sup> meeting minutes\***

Motion to approve the minutes was made by Brian Law and seconded by Frank Cervasio.

#### III. **Florida Forest Service Update\***

- a. Julie Allen provided updates on the Wildfire Risk Assessment Document. The document serves as the Community Wildfire Protection Plan (CWPP), which is required to receive wildfire mitigation funds. The LMS Working Group agreed to approve the updates to the plan. The motion for approval was made by Kelly Wilson and seconded by Brian Law.

- b. There are two fire mitigation projects planned—one in the Walden Chase neighborhood and one in World Golf Village.
- c. The current risk for wildfires remains low.

#### **IV. CRS/Flood Updates**

- a. The LMS with the new Repetitive Loss Area Analysis (RLAA) (Appendix I) was approved at the St. Johns County Board of County Commission meeting on August 16<sup>th</sup> by resolution.
- b. The City of St. Augustine and City of St. Augustine Beach will adopt the revised LMS soon.

#### **V. Project Updates**

- a. Brian Law explained that their weir project is on target to finish in the next month and their backflow valve project is out for bids.
- b. Jessica Beach explained that the City had a meeting with FDEP and FDEM to discuss their funding and reworking some projects to maximize funds for the Lake Maria Sanchez project. She also stated that their seawall extension project is moving forward nicely.
- c. The City of St. Augustine is hosting workshops next week for homeowners interested in Flood Mitigation Assistance program. The project submitted in the previous fiscal year was not awarded. The City intends to resubmit the project this year with any additional eligible participants.
- d. The County received a grant from the Florida Department of Environmental Protection (FDEP) to conduct a countywide vulnerability assessment. The County is in the process of completing contracting phase to hire a vendor.
- e. SJC is planning to submit two projects to Resilient Florida for Alpine Groves Park shoreline stabilization and one for San Julian Wetland Drainage Improvement.

#### **VI. Funding Updates**

- a. Laura Nelson gave a quick update on the My Safe Florida Home mitigation program. More information is available in the attached slides.
- b. Laura mentioned that notice of funding for FMA and BRIC have been released and provided some information. Beaches Energy is interested in applying for BRIC and the City of St. Augustine for FMA.

#### **VII. Upcoming Training/Webinars**

- a. Laura discussed the FEMA Summer Engagement Series webinars and that recordings are available for viewing from the website.
- b. Mitigate Florida meeting is coming up on Sept 13<sup>th</sup> at 1:00 PM.

#### **VIII. Open Discussion**

- a. New Hazard Mitigation Assistance Guide has been released for public comment. The document is available for download here:  
<https://www.regulations.gov/document/FEMA-2022-0023-0002>

- b. Tom Frick has been designated the Chief Resiliency Officer for the St. Johns River Water Management District.
- c. The next LMS Working Group meeting will be held November 17<sup>th</sup> at 9:00 AM at the SJC EOC.

IX. **Adjournment**

Meeting adjourned at 10:10 am

\* Denotes action item

## MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

AUGUST 25, 2022  
9:00 A.M.

## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

- Introductions
- Old Information
  - Approval of Minutes from May 26, 2022 LMS Working Group Meeting\*
- New Information
  - Florida Forest Updates
  - Flood/CRS Updates
    - Repetitive Loss Area Analysis
  - Funding Updates
    - FMA & BRIC Notice of Funding
  - Project Updates
- Open Discussion
- Adjournment

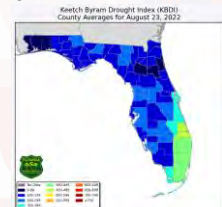
## APPROVAL OF MEETING MINUTES

- Approval of May 26, 2022 LMS Meeting Minutes

## FLORIDA FOREST SERVICE



- Wildfire Risk Assessment updated by Florida Forest Service
- Current wildfire risk remains low due to saturated grounds



## CRS/FLOOD UPDATES

- ISO tentatively approved the draft of the Repetitive Loss Area Analysis (RLAA)
- Draft was distributed to LMS partners for review and comment
- Revised LMS with RLAA appendix was approved by SJC BOCC on Aug 16<sup>th</sup>
- Updated LMS is available on the website
- Repetitive Loss Data Sharing Agreement

## HMGP MATTHEW

Project Rank	Project	Jurisdiction	Cost	Local Match	Project Status (last 2021)
1	Lake Maria Sanchez Flood Mitigation Project	City of St. Augustine	\$ 11,500,000.00	\$ 2,875,000.00	in design sub
2	Master Stormwater Pump Station Improvements	City of St. Augustine-Beach	\$ 600,000.00	\$ 125,000.00	in progress
3	Emergency Standby Generator at Primary Hurricane Shelters: Osceola Elem. School, Ochs A. Mason Elem. School, Mill Creek Elem. School	St. Johns County School District	\$ 750,000.00	\$ 187,500.00	completed
4	Upgrade Signalization at US 1 @ County Road 219	St. Johns County	\$ 511,148.00	\$ 127,787.00	completed
5	Upgrade Signalization at US 1 @ Lewis Point Rd	St. Johns County	\$ 551,148.00	\$ 137,787.00	in progress
6	Upgrade Signalization at US 1 @ Shore Dr	St. Johns County	\$ 551,148.00	\$ 137,787.00	in progress
7	Increase Primary Stormwater Outfall Capacity	St. Johns County	\$ 350,000.00	\$ 87,500.00	in progress
8	Change Improvements at Kings 5 State	St. Johns County	\$ 350,000.00	\$ 87,500.00	completed
9	Install Hurricane shutters and emergency standby generator at the St. Johns County Pet Center	St. Johns County	\$ 172,000.00	\$ 35,500.00	completed
10	Flood Mitigation Improvements on South Whitney and West King St.	City of St. Augustine	\$ 800,000.00	\$ 200,000.00	in progress
11	Bartram Oaks Wastewater Treatment Plant Standby Generator	St. Johns County	\$ 463,000.00	\$ 49,750.00	in progress
12	Drainage Improvements on Kings Road	St. Johns County	\$ 354,114.00	\$ 86,679.00	in progress
13	Drainage Improvements at North Beach	St. Johns County	\$ 2,000,000.00	\$ 500,000.00	in progress
14	South Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 253,260.00	\$ 63,315.00	completed
15	Shoreline 2 Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 212,180.00	\$ 53,045.00	completed
16	Frank Creek Wastewater Treatment Plant Standby Generator	St. Johns County			in progress

## HMGP IRMA

St. Johns County Hurricane Irma HMGP Ranked Project List						
Project Rank	Project	Applicant	Goal	Total Project Cost	Estimated Federal Share	Status (update May 2022)
1	Flood Mitigation at Avenida Hernandez Seawall, Connectivity Project - CoSA Priority #1	City of St. Augustine	2.3-4	\$1,475,000.00	\$1,106,250.00	contracting
2	Drainage Improvements at Market Circle - SJC Priority #1	St. Johns County	2-3	\$1,400,000.00	\$1,120,000.00	contracting, denied by FEMA, money forwarded with Local Funds withdrawn after award due to withdrawal. Changed scope and completed restoration to a Cal 5 instead of Cal 5.
3	Watershed Treatment Plant Shoreline Hardening and Flood Mitigation - COSA Priority #2	City of St. Augustine	2.3-4.5	\$1,400,000.00	\$1,120,000.00	withdrawn
4	Deep Creek Culvert Improvements - SJC Priority #2	St. Johns County	2.3-4.5	\$1,500,000.00	\$1,125,000.00	withdrawn
5	Marathon Lakeside - Installation of pilations to allow the City to remove debris from	City of St. Augustine	2.3-5	\$750,000.00	\$570,000.00	being funded in-house not under HMGP with CR
6	Flood Dredging and Flood Mitigation at Fire Station 6 - Crescent Beach	St. Johns County	2-3	\$51,000.00	\$25,500.00	not submitted
7	Maroon Riverway - Critical Driveway Detention with Tide Check Valve	City of St. Augustine	2.3-4	\$200,000.00	\$150,000.00	funded by state cost share, grants not HMGP. Changes in program 43 of 100 done not submitted for HMGP
8	Drainage Improvements by Reducing Stormwater Outlets - Citywide	City of St. Augustine	2.3-4.5	\$1,400,000.00	\$1,120,000.00	withdrawn due to BSA money forward with local funding
9	Drainage Improvements at St. Augustine Service Area 2 & 4	St. Johns County	2-3	\$600,000.00	\$480,000.00	withdrawn with local funding
10	Drainage Improvements at Sun-Settle Street & Fountain of Health - Boulevard	St. Johns County	2-3	\$1,400,000.00	\$1,120,000.00	withdrawn BSA completed with local funds
11	Drainage Improvements on CR 313	St. Johns County	2-3	\$1,400,000.00	\$1,120,000.00	withdrawn because of funding considerations
12	Drainage Improvements and Flood Mitigation at 12-Townships	City of St. Augustine	2-3	\$1,400,000.00	\$1,120,000.00	started in CR not submitted for HMGP
13	Drainage Improvement Fire Station - Highway 90A	St. Johns County	2-3	\$425,000.00	\$339,750.00	formally withdrawn 2/7/2020
14	Drainage Improvements at Pegasus Point	St. Johns County	2.3-4	\$900,000.00	\$720,000.00	Completed
Total				\$20,419,300.00	\$11,734,250.00	

## HMGP & OTHER

Permanent Emergency Standby Generator for Special Needs Shelter at Freedom Crossing Academy	St. Johns County	SJC EM	HMGP - COVID-19
City of St. Augustine Beach Drainage Improvements on 7th, 8th and 9th Streets	City of St. Augustine Beach	COSAB Public Works	HMGP - COVID-19
CR 17A Storm Surge Protection	City of St. Augustine Beach	COSAB Public Works	HMGP - COVID-19
City of St. Augustine residential Flood Mitigation Assistance	City of St. Augustine	COSA Public Works	FMA
DEP Resiliency Grant - Vulnerability Assessment	St. Johns County	SJC Growth Mgmt	DEP

## MY SAFE FL HOME

- The Department of Financial Services is currently in the process of implementing the My Safe Florida Home Program, recently re-enacted by the Florida Legislature
- Free wind mitigation inspections and matching grants (2:1) to mitigate/harden single family residences against wind
  - Grants up to \$10,000
  - Homeowners would be responsible for up to \$5,000
- Only available to homeowners within one mile of the coast in our County, plus other criteria
- For more information and to sign up for program updates visit <https://myfloridacfo.com/mysafehome>



## FUNDING UPDATES



## FUNDING UPDATES - FMA

- Flood Mitigation Assistance (FMA) – Apps due to State (ahead of FEMA deadline) November 14, 2022. **Notice of Interest form is due September 20, 2022**
- Nationally competitive
- Changes for 2022:
  - Increase in total available funding from \$160 million to \$800 million!
  - Added Capability and Capacity Building Activities as a priority
  - Increased funding cap for Capability and Capacity Building Project Scoping sub-applications to \$900,000
  - Allowing for phased Localized Flood Risk Reduction Projects
- Ranking Criteria:
  - Tiered scoring system with points for socially vulnerable communities, NFIP communities in good standing with no violations, CRS participants, buildings worth >\$750k and projects that incorporate strong labor standards to ensure high-quality work and promote efficiency.
- More info: <https://www.floridadisaster.org/contentassets/bb655a5b18714acba8b2a5546c325c60/fy-2022-fma-notice-of-funding-opportunity-fact-sheet.pdf>

## FUNDING UPDATES - BRIC

- Building Resilient Infrastructure and Communities (BRIC) Apps due to State (ahead of FEMA deadline) November 14, 2022. **Notice of Interest form is due September 20, 2022**
- Cost share for this program is 75% federal funding and 25% non-federal funding (90/10 for economically disadvantaged rural communities)
- Nationally competitive
  - \$112 million available for State or Territory Allocation (up to \$2 million per applicant)
  - \$2.133 billion for national competition for Hazard Mitigation Projects
- Changes for 2022:
  - Increased total funding available from \$1 billion to \$2.295 billion
- More info: <https://www.floridadisaster.org/contentassets/0e4576c6e05c4a25b4f71add12b30920/fy-2022-bric-notice-of-funding-opportunity-fact-sheet.pdf> or <https://www.floridadisaster.org/em/mitigation/building-resilient-infrastructure-and-communities-bric-grant-program/>

## UPCOMING TRAININGS, MEETINGS, WEBINARS

- MitigateFL – State of Florida's Mitigation Working Group September 13<sup>th</sup> at 1:00  
<https://www.floridadisaster.org/dem/mitigation/statemitigationstrategy/>
- Register for FEMA 2022 Summer Engagement Series below or find previously recorded webinars  
<https://femacqpubl1.connectsolutions.com/content/connect/cl/7/en/events/catalog.html?folder-id=231780422&from-origin=fema.connectsolutions.com>
- Upcoming FEMA Engagement webinars:
  - **Sep 1, 2022 2:00 p.m. EST - Sep 1, 2022 3:30 p.m. EST**  
BRIC/FMA Notice of Funding Opportunity Webinar  
This webinar will be a review of the fiscal year 2022 Notices of Funding Opportunity (NOFOs) for BRIC and FMA.
  - **Sep 22, 2022 2:00 p.m. EST - Sep 22, 2022 3:30 p.m. EST**  
BRIC FY 2022 Notice of Funding Opportunity Technical and Qualitative Criteria  
This webinar will provide an overview and information about the Fiscal Year (FY) 2022 BRIC Technical and Qualitative Criteria, as outlined in the Notice of Funding Opportunity.
  - **Sep 29, 2022 2:00 p.m. EST - Sep 29, 2022 3:30 p.m. EST**  
Environmental Historic Preservation Review 101  
This webinar will provide details on how communities should factor in environmental historic preservation, regulations, executive orders, and laws when planning projects.

## OPEN DISCUSSION



## 2022 LMS MEETING DATES



- February 24, 2022
- May 26, 2022
- August 25, 2022
- November 17, 2022

All meetings are Thursdays @ 9:00 am





St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
August 25, 2022



Name	Organization	Email
Laura Nelson	SJC EM	LNelson@sjcf1.us
Tyler Nolen	NEERC	Tnolen@netrc.org
Jessica Beach	City of St Aug	jbeach@citystaug.com
Tony Cabbage	SJC Utilites	twcabbage@sjcf1.us
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Stephanie Massey	Taylor Engineering	smassey@taylorengineering.com
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# LOCALiQ

## FLORIDA

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### PROOF OF PUBLICATION

Sjc Emergency Management  
Sjc Emergency Management  
100 Eoc Drive

Saint Augustine FL 32092

STATE OF FLORIDA, COUNTY OF ST JOHNS

The St Augustine Record, a daily newspaper published in St Johns County, Florida; and of general circulation in St Johns County; and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issues dated or by publication on the newspaper's website, if authorized, on:

08/14/2022

and that the fees charged are legal.  
Sworn to and subscribed before on 08/14/2022

### PUBLIC NOTICE

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thursday, August 25, 2022 at the St. Johns County Emergency Operations Center located at 100 EOC Drive, St. Augustine, FL 32092. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.

SAR Aug 14, 2022 (7647332)

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## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: November 17, 2022 @ 9:00 am

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, November 17, 2022 at 9:00 am at the St. Johns County Emergency Operations Center. Laura Nelson called the meeting to order with the following members:

Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Kelly Wilson – LMS Vice Chair, St. Johns County Emergency Management  
Russel Adams – City of St. Augustine Beach  
Jennifer Thompson – City of St. Augustine Beach  
Jessica Beach (via phone) – City of St. Augustine  
Stephanie Massey – Taylor Engineering  
Don Cuevas – Beaches Energy  
Frank Cervasio – St. Johns County School District  
Paul Rose - St. Johns County School District  
Westley Woodward – St. Johns County Growth Management  
Tony Cubbedge – St. Johns County Utilities  
Jason Sparks – St. Johns County Public Works  
Sarah Newell – St. Johns County Administration  
Ryan Mauch – St. Johns County Growth Management Environmental  
Keith Oke – St. Johns County Sheriff's Office  
Jessica Deaton – Resident/Homeowner  
Debbie Dickinson – Resident/Homeowner  
Maureen O'Connor – Resident/Homeowner  
Thomas Guz – Resident/Homeowner  
Kylie Guz - Resident/Homeowner

#### I. **Introductions**

Laura Nelson and Kelly Wilson welcomed everyone to the meeting.

#### II. **Approval of August 25<sup>th</sup> meeting minutes\***

Motion to approve the minutes was made by Kelly Wilson and seconded by Frank Cervasio.

#### III. **Annual Elections\***

- a. Per the adopted bylaws, elections of the 11-member Executive Committee are to be held annually. The attached Powerpoint presentation contains a list of the current Executive Committee. After a discussion and recommendation made by Laura Nelson, a motion to adjust the Executive

Committee from 11 to 9 and keep the current 8 committee positions was made by Frank Cervasio and seconded by Don Cuevas. The motion passed unanimously.

- b. A motion to add Keith Oke to the 9<sup>th</sup> position (currently vacant) was made by Kelly Wilson and seconded by Tony Cubbedge. The motion passed unanimously.

#### IV. **City of St. Augustine Update**

- a. Jessica Beach who was joining by phone provided an update on the City's projects:
  - The 13 lift stations mitigated after Hurricane Matthew were all tested during Ian and Nicole and they had a highly successful outcome. During Matthew 30 lift stations went down and only 2 went down during Ian.
  - After careful consideration the Lake Maria Sanchez project will be withdrawn from HMGP funding and the City will utilize FDEP funding.
  - South Whitney/West King mitigation project will be removed from FDEP funding program and the city will seek additional funding under Matthew's HMGP.
  - The Avenida Menendez Seawall project is awaiting an H&H analysis before Phase 1 can be completed and they can move into Phase 2.
  - The City submitted two FMA applications to mitigate 61 flood prone residential properties.

#### V. **New Projects**

- a. Mr. and Mrs. Guz presented their proposed project to elevate their house. A motion was made by Kelly Wilson to add the Guz House Elevation Project to the LMS Project List and the motion was seconded by Westley Woodward.

#### VI. **CRS/Flood Updates**

- a. St. Johns County has officially maintained its Class 5 rating in the Community Rating System (CRS) program.

#### VII. **Project Updates**

- a. The St. Augustine Beach project for drainage improvements to 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> street is expected to be withdrawn from HMGP and funded utilizing a different method.
- b. SJC has submitted two projects to Resilient Florida- one for Alpine Groves Park shoreline stabilization and one for San Julian Wetland Drainage Improvement. A funding determination is expected soon.

#### VIII. **Funding Updates**

- a. Laura Nelson mentioned there has been no new information added to the MySafeFL Home website but when/if updates are made she will let the LMS Working Group know.
- b. Laura gave a brief overview of the expected timeline for HMGP from hurricanes Ian and Nicole.
- c. Laura provided a bit of information about FEMA's 406 Public Assistance Mitigation funding and recommended applicable parties (governments and non-profits) look to maximize that option when conducting repairs to equipment damaged by the hurricanes.

**IX. Upcoming Training/Webinars**

- a. Mitigate Florida meeting is coming up on December 13<sup>th</sup> at 1:00 PM.

**X. Open Discussion**

- a. The LMS Working Group meetings for 2023 have been set for the following dates at 9:00 AM:
  - February 16, 2023
  - May 18, 2023
  - August 17, 2023
  - November 16, 2023

**XI. Adjournment**

Meeting adjourned at 9:50 am

\* Denotes action item

## MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

NOVEMBER 17, 2022  
9:00 A.M.



## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

- Introductions
- Old Information
  - Approval of Minutes from August 25, 2022 LMS Working Group Meeting\*
- Annual Elections\*
- New Information
  - Addition of New Projects\*
  - Flood/CRS Updates
  - Project Updates
  - Funding Updates
    - FMA
    - HMGP
- Open Discussion
  - 2023 Meetings
- Adjournment

## APPROVAL OF MEETING MINUTES

- Approval of August 21, 2022 LMS Meeting Minutes

## ELECTIONS

- Per the current adopted Bylaws:
  - Membership of the Executive Committee shall be comprised of 11 members, including a Chairperson and Vice-Chairperson
  - Executive Committee shall consist of representatives from the government of St. Johns County, each participating incorporated municipality and participating special taxing districts
  - Members of the Executive Committee must be in good standing (attended at least 50% of the meetings during the last 12 months)
  - Members are elected for a term of 1 year and eligible for re-election for an unlimited number of terms
    - Members may select a proxy to fulfill their duties in the event of their absence
  - Temporary subcommittees may be established at any time for special purposes by the Chairperson

## ELECTIONS

- Current Members:
  1. St. Johns County (Chair) – Laura Nelson, Emergency Management
  2. St. Johns County (Vice-Chair) – Kelly Wilson, Emergency Management
  3. City of St. Augustine – Jessica Beach
  4. City of St. Augustine Beach – Brian Law
  5. School District – Frank Cervasio
  6. Wesley Woodward – Resiliency Manager
  7. Tony Cubbedge – SJC Utilities
  8. Vacant – SJC Floodplain Manager
  9. Vacant
  10. Vacant
  11. Vacant

## NEW PROJECTS

- Elevation of 409 14<sup>th</sup> Street

## CRS/FLOOD UPDATES

- SJC has officially maintained a CRS Class rating of 5

## HMGP MATTHEW

Project Rank	Project	Jurisdiction	Cost	Local Match 25%	Project Status Post 2021
1	Lake Maria Sanchez Flood Mitigation Project	City of St. Augustine	\$ 11,500,000.00	\$ 2,875,000.00	in design roll
2	Waste Water Treatment Plant Station Improvements	City of St. Augustine Beach	\$ 400,000.00	\$ 100,000.00	in progress
3	Emergency Standby Generator at Primary Hurricane Shelters: Ochsle School, Ochsle A. Mason Elem. School, MM Creek Elem. School	St. Johns County School District	\$ 750,000.00	\$ 187,500.00	completed
4	Upgrade Signification at US 1 @ County Road 219	St. Johns County	\$ 111,148.00	\$ 27,787.00	completed
5	Upgrade Signification at US 1 @ Lower Point Rd	St. Johns County	\$ 551,149.00	\$ 137,787.00	in progress
6	Upgrade Signification at US 1 @ Shore Dr	St. Johns County	\$ 551,149.00	\$ 137,787.00	in progress
7	Increase Primary Stormwater Outfall Capacity	City of St. Augustine Beach	\$ 300,000.00	\$ 75,000.00	in progress
8	Drainage Improvements at Kings Circle	St. Johns County	\$ 360,000.00	\$ 90,000.00	completed
9	Install hurricane shutters and emergency standby generator at the St. Johns County Pet Center	City of St. Augustine	\$ 122,000.00	\$ 30,500.00	completed
10	Flood Mitigation Improvements on South Whitney and Wood King St.	St. Johns County	\$ 800,000.00	\$ 200,000.00	in progress
11	Bartram's Bay Wastewater Treatment Plant Standby Generator	St. Johns County	\$ 650,000.00	\$ 162,500.00	in progress
12	Drainage Improvements on Kings Road	St. Johns County	\$ 354,714.00	\$ 88,678.00	in progress
13	Drainage Improvements at North Beach	St. Johns County	\$ 2,000,000.00	\$ 500,000.00	in progress
14	South Beach Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 255,200.00	\$ 63,800.00	completed
15	Generator	St. Johns County	\$ 212,190.00	\$ 53,048.00	completed
16	East Cove Wastewater Treatment Plant Standby Generator	St. Johns County			in progress

## HMGP IRMA

St. Johns County Hurricane Irma HMGP Ranked Project List						
Project Rank	Project	Applicant	Cost	Total Project Cost	Estimated Federal Share	Status (Update May 2022)
1	Flood Mitigation at Avenida Monrovia Seawall Connectivity Project - CalSA Priority #1	City of St. Augustine	2.3-4	\$1,475,000.00	\$1,180,000.00	completed
2	Drainage Improvements at Watson Creek - SJC Priority #1	St. Johns County	2-3	\$1,400,000.00	\$1,120,000.00	in progress
3	Wastewater Treatment Plant Stormwater Handling and Flood Storage - COSA Priority #2	City of St. Augustine	2.3-4.5	\$1,400,000.00	\$1,120,000.00	in progress
4	Deep Creek Stormwater Improvements - SJC Priority #2	St. Johns County	2.3-4.5	\$1,400,000.00	\$1,120,000.00	in progress
5	Wastewater Treatment Plant Stormwater Handling and Flood Storage - COSA Priority #2	City of St. Augustine	2.3-4.5	\$1,400,000.00	\$1,120,000.00	in progress
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8	Drainage Improvements at Redoubt Creek and Tule Creek Valley	City of St. Augustine	2.3-4.5	\$1,400,000.00	\$1,120,000.00	in progress
9	Drainage Improvements at Redoubt Creek and Tule Creek Valley	City of St. Augustine	2.3-4.5	\$1,400,000.00	\$1,120,000.00	in progress
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13	Drainage Improvements at Redoubt Creek and Tule Creek Valley	City of St. Augustine	2.3-4.5	\$1,400,000.00	\$1,120,000.00	in progress
14	Drainage Improvements at Redoubt Creek and Tule Creek Valley	City of St. Augustine	2.3-4.5	\$1,400,000.00	\$1,120,000.00	in progress
Total				\$20,419,000.00	\$11,734,250.00	

## HMGP & OTHER

Permanent Emergency Standby Generator for Special Needs Shelter at Freedom Crossing Academy	St. Johns County	SJC EM	HMGP - COVID-19 Safety
City of St. Augustine Beach Drainage Improvements on 7th, 8th and 9th Streets	City of St. Augustine Beach	COSA Public Works	HMGP - COVID-19 Safety
CR A1A Storm Surge Protection	City of St. Augustine Beach	COSA Public Works	HMGP - COVID-19 Safety
City of St. Augustine residential Flood Mitigation Assistance	City of St. Augustine	COSA Public Works	FMA
DEP Resiliency Grant - Vulnerability Assessment	St. Johns County	SJC Growth Mgmt	DEP

## MY SAFE FL HOME

- The Department of Financial Services is currently in the process of implementing the My Safe Florida Home Program, recently re-enacted by the Florida Legislature
- Free wind mitigation inspections and matching grants (2:1) to mitigate/harden single family residences against wind
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  - Homeowners would be responsible for up to \$5,000
- Only available to homeowners within one mile of the coast in our County plus other criteria
- For more information and to sign up for program updates visit <https://myfloridafco.com/mysafehome>



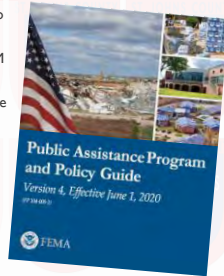
## FUNDING UPDATES

- Flood Mitigation Assistance (FMA) and Building Resilient Infrastructure and Communities (BRIC) application cycle closed November 14, 2022.
- Hazard Mitigation Grant Program (HMGP) notice of funding (Hurricane Ian) expected at the end of January/beginning of February
- An HMGP allocation for Hurricane Nicole is expected
  - The allocation will increase if declarations for Public Assistance and Individual Assistance occur

DR-4673 Hurricane Ian HMGP Timeline	
September 24, 2022	Major Disaster Declaration
November 13, 2022	Emergency Assistance
January 27, 2023	County Assistance Request
Week of January 30, 2023	HMGP Public Notice
Week of February 13, 2023	Application Review Period
October 29, 2023	12-month Allocation Period

## 406 (PA) MITIGATION

- One of FEMA's goals in their Strategic Plan is to create a resilient nation
- There's a renewed effort from FEMA and FDEM to implement 406 Mitigation
- The PAPPG – Appendix J identifies cost effective Public Assistance Mitigation measures



## UPCOMING TRAININGS, MEETINGS, WEBINARS

- MitigateFL – State of Florida's Mitigation Working Group December 13<sup>th</sup> at 1:00  
<https://www.floridadisaster.org/dem/mitigation/statemitigationstrategy/>

## OPEN DISCUSSION



## PROPOSED 2023 LMS MEETING DATES

- February 16, 2023
- May 18, 2023
- August 17, 2023
- November 16, 2023

All meetings are Thursdays @ 9:00 am





St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
November 17, 2022



Name	Organization	Email
Jessica Deaton	NRWC Resident	jessica@deatonlaw.org
Tony Cabbedge	SJCUD	twcabbedge@sjcfl.us
Sanfah Newell	SJC Admin	snnewell@sjcfl.us
Don Cuenas	Beach Energy	dcuenas@beachenergy.com
Stephanie Massey	Taylor Engineering	smassey@taylorengineering.com
Frank Cfrusio	SJCSD	frank.cfrusio@stjohns.k12.fl.us
Paul Rose	SJCSD	paul.rose@stjohns.k12.fl.us
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Russel Adams	SAB	radams@cityofsab.org
Ryan March	Sic GM-Environmental	rmarch@sjcfl.us
Keith Oke	SJSO	koke@sjso.org
Tason Sparks	SJC	tsparks@sjcfl.us
Thomas Guz	Resident	tomiguz@gmail.com
Kylie Guz	" "	kyschaff@gmail.com
Debbie Dickinson	Homeowner-Vilano	oldcicinson06@gmail.com
Maureen O'Connor	Homeowner-Vilano	oconnor.maureen@gmail.com

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# LOCALiQ

## FLORIDA

PO Box 631244 Cincinnati, OH 45263-1244

### **PROOF OF PUBLICATION**

Sjc Emergency Management  
Sjc Emergency Management  
100 Eoc Drive

Saint Augustine FL 32092

STATE OF FLORIDA, COUNTY OF ST JOHNS

The St Augustine Record, a daily newspaper published in St Johns County, Florida; and of general circulation in St Johns County; and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issues dated or by publication on the newspaper's website, if authorized, on:

11/01/2022

and that the fees charged are legal.  
Sworn to and subscribed before on 11/01/2022

### **PUBLIC NOTICE**

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thursday, November 17, 2022 at the St. Johns County Emergency Operations Center located at 100 EOC Drive, St. Augustine, FL 32092. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.

Pub: Nov. 1, 2022; #7968913

Legal Clerk

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Publication Cost: \$28.56

Order No: 7968913

# of Copies:

Customer No: 764141

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MARIAH VERHAGEN  
Notary Public  
State of Wisconsin



### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: February 16, 2023 @ 9:00 am

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, February 16, 2023 at 9:05 am at the St. Johns County Emergency Operations Center. Laura Nelson called the meeting to order with the following members:

Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Gavin Butler – St. Johns County Emergency Management  
Russel Adams – City of St. Augustine Beach  
Brian Law – City of St. Augustine Beach  
Jennifer Thompson – City of St. Augustine Beach  
Jessica Beach – City of St. Augustine  
Stephanie Massey – Taylor Engineering  
Frank Cervasio – St. Johns County School District  
Paul Rose - St. Johns County School District  
Westly Woodward – St. Johns County Growth Management  
Sara Perez – St. Johns County Growth Management  
Tony Cubbedge – St. Johns County Utilities  
Jason Sparks – St. Johns County Public Works  
Keith Oke – St. Johns County Sheriff's Office  
Debbie Dickinson – Resident/Homeowner  
Cliff Dickinson – Resident/Homeowner  
Thomas Guz – Resident/Homeowner  
Tyler Nolen – Northeast Florida Regional Council

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting and individuals introduced themselves.

#### II. **Approval of November 17, 2022 meeting minutes\***

Motion to approve the minutes was made by Brian Law and seconded by Keith Oke. The motion passed.

#### III. **Funding Updates**

- a. Laura updated the group on the status of the Flood Mitigation Assistance (FMA), Building Resilient Infrastructure and Communities (BRIC), Hurricane Loss Mitigation Program (HLMP) and the Hazard Mitigation Grant Program (HMGP). Additional details can be found on the attached PowerPoints.

#### IV. **Addition/Ranking of New Projects\***

- a. 5 new projects were presented to be added to the project list and 6 were presented for scoring/ranking. A breakdown of scores has been attached to the minutes.
  - 3 home elevations were presented:
    1. Elevation of a home in the 400 block of 16<sup>th</sup> street
      - a. A motion to add this project to the list was made by Westly Woodward and seconded by Sara Perez. The motion passed with one objection.
      - b. This project scored a 62.
    2. Elevation of a home in the 500 block of 14<sup>th</sup> street
      - a. A motion to add this project to the list was made by Westly Woodward and seconded by Sara Perez. The motion passed with one objection.
      - b. Due to the similarities to the project previously scored, this project was also assigned a score of 62.
    3. The elevation of a house in the 400 block of 14<sup>th</sup> street was presented for ranking. This project was previously added to the LMS list.
      - a. This project was also assigned a score of 62.
  - Generator upgrades at Pedro Menendez and Bartram Trail high schools was presented by Frank Cervasio
    1. A motion to add this project to the list was made by Brian Law and seconded by Tony Cubbedge. The motion pass unanimously.
    2. This project scored 74 points.
  - Barrier Island Lift Station Mitigation was presented by Tony Cubbedge
    1. A motion to add this project to the list was made by Brian Law and seconded by Jason Sparks. The motion pass unanimously.
    2. This project scored 94 points.
  - Solomon Calhoun Community Center Generator
    1. A motion to add this project to the list was made by Gavin Butler and seconded by Frank Cervasio. The motion pass unanimously.
    2. This project scored 72 points.

#### V. **Project Updates**

- a. Applicants provided updates on ongoing projects:
  - St. Augustine has officially withdrawn the Lake Maria Sanchez project from HMGP and continues to move forward with the flood mitigation improvements on S. Whitney and West King St.
  - St. Augustine Beach is working on the design for the drainage improvements and storm surge protection.

- SJC received word that two projects would be funded under the Resilient Florida grant program- one for Alpine Groves Park shoreline stabilization and one for San Julian Wetland Drainage Improvement.
- Laura reminded attendees that the My Safe Florida Home program remains open for inspections and homes within a mile of the coast might be eligible for wind mitigation grants to help harden their homes.

**VI. CRS/Flood Updates**

- a. St. Johns County has officially maintained its Class 5 rating in the Community Rating System (CRS) program.
- b. St. Augustine Beach recently completed their 5-year cycle visit and will remain a Class 8 in the CRS.
- c. City of St. Augustine also received word that they will remain a Class 5.

**VII. Upcoming Training/Webinars**

- a. Mitigate Florida meeting is coming up on March 14<sup>th</sup> at 1:00 PM.
- b. St. Johns County EOC will be hosting a Community Resiliency training on May 16<sup>th</sup>. Flyers were available for interested individuals.

**VIII. Open Discussion**

- a. The next LMS Working Group meetings is expected to be held on Thursday, May 18<sup>th</sup> at 9:00 at the EOC.

**IX. Adjournment**

Meeting adjourned at 10:30 am

\* Denotes action item

Hurricane Ian Project Rankings - St. Johns County												
Thursday, February 16, 2023												
	Population benefited	Environ impact	LMS Goals	Risk Reduction	Critical Inf/Fac	Funding	Feasibility	CRS	Sponsorship	Social Equity	Total	Final Rank
Barrier Island Lift Station Mitigation	6	10	10	10	10	10	8	10	10	10	94	1
Generator upgrades at Pedro Menendez and Bartram Trail high schools	4	6	10	8	10	6	10	0	10	10	74	2
Standby Generator for Post-disaster sheltering at Solomon Calhoun Community Center	4	6	10	8	10	6	8	0	10	10	72	3
Elevation of Residential Homes	2	6	10	8	2	6	8	10	0	10	62	4

## MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

FEBRUARY 16, 2023  
9:00 A.M.

## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

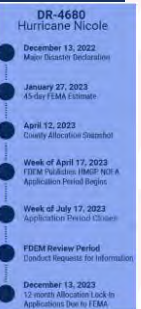
- Introductions
- Old Information
  - Approval of Minutes from November 17, 2022 LMS Working Group Meeting\*
- New Information
  - Addition of New Projects\*
  - Scoring of Projects for Hurricane Ian HMGP\*
  - Funding Updates
  - Project Updates
  - Flood/CRS Updates
- Open Discussion
- Adjournment

## APPROVAL OF MEETING MINUTES

- Approval of November 17, 2022 LMS Meeting Minutes

## FUNDING UPDATES

- Flood Mitigation Assistance (FMA) and Building Resilient Infrastructure and Communities (BRIC) application cycle closed November 14, 2022.
- Hurricane Loss Mitigation Program (HLMGP) Request for proposals is expected out in March – usually a quick turn around and has a 1 year period of performance
  - 100% state funded
  - Maximum Grant Award is \$194,000
- Hazard Mitigation Grant Program (HMGP) notice of funding (Hurricane Ian) out this week.
  - Application deadline May 31<sup>st</sup>
  - Estimate of SJC allocation: \$3.3 million
- An HMGP Notice of Funding for Hurricane Nicole is expected in late April.



## ADDITION/RANKING OF NEW PROJECTS

- Elevation of 413 16<sup>th</sup> Street
- Elevation of 506 14<sup>th</sup> Street
- Elevation of 409 14<sup>th</sup> Street (previously added)
- Solomon Calhoun Community Center Generator
- Barrier Island Life Station Mitigation
- Generator upgrades at Pedro Menendez and Bartram Trail high schools

## RANKING CRITERIA

	10 Points	8 Points	6 Points	4 Points	2 Points	0 Points
<b>Population Benefited</b>	Project would benefit 75% or more of the population.	Project would benefit 50-74% of the population.	Project would benefit 25-49% of the population.	Project would benefit 24-1% of the population.	Project would benefit less than 1% of the population.	
<b>Environmental Impact</b>	Project improves the environment.		Project has no effect on environment.			Project poses risk to environment. Risk is undetermined.
<b>Consistency with Local Mitigation Strategy Goals</b>	Project is consistent with multiple SJC goals.	Project is consistent with one SJC goal.	Project is consistent with one SJC goal.			Project is not consistent with any SJC goals.
<b>Reduce Risk of Future Project Damage</b>	Mitigates a hazard of high probability of future occurrence or risk.	Mitigates a hazard of medium probability of future occurrence or risk.	Mitigates a hazard of low probability of future occurrence or risk.	Mitigates a hazard of low probability of future occurrence or risk.	Mitigates a hazard of negligible frequency or risk.	
<b>Supports Essential or Critical Services/Infrastructure</b>	Project will ensure continuity of operations for primary critical/essential services or infrastructure.	Project will support secondary critical/essential infrastructure or services with low damage history.	Project will support secondary critical/essential infrastructure or services without low damage history.	Project will support public convenience services or infrastructure.	Project will have no impact on community infrastructure or services.	
<b>Funding Availability</b>	Matching funds are identified and available.		Matching funds can be made available in a short timeframe.			Matching funds are not available.
<b>Feasibility of Implementation</b>	Project could be implemented in one year.	Project could be implemented in three years.	Project could be implemented in five years.		Project implementation would be greater than 5 years.	Project would be difficult to implement.
<b>Community Rating System</b>	Project supports all four elements of CRS (preparedness, public information, mapping and regulations, flood damage reduction, and warning and response).	Project supports three CRS elements.	Project supports two CRS elements.	Project supports one CRS element.		Project does not support any CRS element.
<b>Sponsorship</b>	Project has an identified sponsor willing to maintain funds.		Project has identified sponsor.			Project has no identified sponsor.
<b>Social Equity</b>	Does not exclude or negatively affect any people.		Project negatively affects very few people.			Project negatively affects many people.

## LMS GOALS

1. Protect the lives of the residents of St. Johns County and its Municipalities.
2. Protect property to ensure that its intrinsic value is preserved.
3. Protect infrastructure so that it is available during and after a disaster.
4. Protect business activities so that they continue to provide economic strength to the community.
5. Protect the environment to ensure that quality of life and economic wellbeing are preserved.

## HMGP MATTHEW

Project Rank	Project	Jurisdiction	Cost	Local Match 25%	Project Status (Feb 2023)
1	Lake Meade Sanitary Flood Mitigation Project	City of St. Augustine	\$ - 11,600,000.00	\$ - 2,875,000.00	in design and
2	Master Stormwater Pump Station Improvements	City of St. Augustine	\$ - 400,000.00	\$ - 100,000.00	in progress
3	Emergency Standby Generators at Primary Hurricane Shelters: Osceola Elem. School, Ochs A. Mason Elem. School, Mill Creek Elem. School	St. Johns County School District	\$ 750,000.00	\$ 187,500.00	completed
4	Upgrade Signalization at US 1 @ County Road 210	St. Johns County	\$ 511,149.00	\$ 127,787.00	completed
5	Upgrade Signalization at US 1 @ Lenoir Pines Rd	St. Johns County	\$ 551,149.00	\$ 137,787.00	in progress
6	Upgrade Signalization at US 1 @ Shore Dr	St. Johns County	\$ 551,149.00	\$ 137,787.00	in progress
7	Increase Primary Stormwater Outfall Capacity	City of St. Augustine	\$ 350,000.00	\$ 87,500.00	in progress
8	Drainage Improvements at Kings Estate	St. Johns County	\$ 350,000.00	\$ 87,500.00	completed
9	Install hurricane shutters and emergency standby generator at the St. Johns County Pet Center	St. Johns County	\$ 122,000.00	\$ 30,500.00	completed
10	Flood Mitigation Improvements on South Whitney and West King St	City of St. Augustine/St. Johns County	\$ 900,000.00	\$ 225,000.00	in progress
11	Stormwater Management Treatment Plant Standby Generator	St. Johns County	\$ 463,000.00	\$ 115,750.00	design/withdrawn
12	Drainage Improvements on Kings Road	St. Johns County	\$ 354,714.00	\$ 88,679.00	in progress
13	Drainage Improvements at North Beach	St. Johns County	\$ - 2,000,000.00	\$ - 500,000.00	design/withdrawn
14	South Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 253,260.00	\$ 63,315.00	completed
15	Shoreline 2 Ground Storage Tank & Pumping Facility Standby Generator	St. Johns County	\$ 212,150.00	\$ 53,040.00	completed
16	Flood Creek Wastewater Treatment Plant Standby Generator	St. Johns County			design/withdrawn

## HMGP & OTHER

Permanent Emergency Standby Generator for Special Needs Shelter at Freedom Crossing Academy	St. Johns County	SJC EM	HMGP - COVID/ Sally
City of St. Augustine Beach Drainage Improvements on 7th, 8th and 9th Streets	City of St. Augustine Beach	COSAS Public Works	HMGP - COVID
CR A1A Storm Surge Protection	City of St. Augustine Beach	COSAS Public Works	HMGP - Doran
City of St. Augustine residential Flood Mitigation Assistance	City of St. Augustine	COSA Public Works	FMA
DEP Resiliency Grant - Vulnerability Assessment	St. Johns County	SJC Growth Mgmt.	DEP

St. Johns County Hurricane Irma HMGP Ranked Project List					
Project Rank	Project	Applicant	Cost	Total Project Cost	Estimated Federal Share
1	Flood Mitigation at Bandida Morandis Seawall, Connectivity Project - CrSA Priority #1	City of St. Augustine	2.3.4	\$1,475,000.00	\$1,136,250.00

## CRS/FLOOD UPDATES

- SJC has officially maintained a CRS Class rating of 5

## MY SAFE FL HOME

- The Department of Financial Services is currently in the process of implementing the My Safe Florida Home Program, recently re-enacted by the Florida Legislature
- Free wind mitigation inspections and matching grants (2:1) to mitigate/harden single family residences against wind
  - Grants up to \$10,000
  - Homeowners would be responsible for up to \$5,000
- Only available to homeowners within one mile of the coast in our County, plus other criteria
- For more information and to sign up for program updates visit <https://myfloridafco.com/mysafehome>



## UPCOMING TRAININGS, MEETINGS, WEBINARS

- MitigateFL – State of Florida's Mitigation Working Group March 14<sup>th</sup> at 1:00 <https://www.floridadisaster.org/dem/mitigation/statemitigationstrategy/>
- AVR-228 Community Resilience – May 16<sup>th</sup> at the SJC EOC from 8:00-5:00
  - Register on [SERT Trac](#)
  - 6.5 CEC for CFM and AICP
- AVR 347 Climate Adaptation Planning for Emergency Management – February 22<sup>nd</sup> from 8:30-5:00 at the Flagler County EOC in Bunnell
  - Register on [SERT Trac](#)
  - 6.5 CEC for CFM and AICP

## OPEN DISCUSSION



## PROPOSED 2023 LMS MEETING DATES



- February 16, 2023
- May 18, 2023
- August 17, 2023
- November 16, 2023

All meetings are Thursdays @ 9:00 am





St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
February 16, 2023



Name	Organization	Email
Laura Nelson	SJC EMA	LNelson@sjcf1.us
Thomas Guz	Resident / Home owner	Tomiguze@gmail.com
FRANK CERVASIO	SJCSD	frank.cervasio@sjchs.k12.fl.us
PAUL ROSE	SJCSD	paul.rose@sjchs.k12.fl.us
Sara Perez	SJC - Growth Management	Sperez@sjcf1.us
Tyler Nolen	NEMRC	Tnolen@netrc.org
WESTLY WOODWARD	SJC	woodward@sjcf1.us
Jessica Beach	City of St Augustine	jbeach@citystaugustine.com
Tom Curbidge	SJC Utilities	twc@sjcf1.us
Heith Oke	SJSD	koke@sjso.org
Garin Butler	SJCEM	gbutler@sjcf1.us
JASON SPARKS	SJC Public Works	JSPARKS@sjcf1.us
Lobbie: (Lobby) Dickson	NBCA - Home Owner	obdickson@sjcf1.us
Brian Law	COSAB	blaw@cityofsa.org
Jenn. Per Thompson	COSAB	jthompson@cityofsa.org
Russell Adams	COSAB	radams@cityofsa.org

[illegible]

# Local Mitigation Strategy Plan (LMS)

## PUBLIC NOTICE

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 A.M. on Thursday, February 16, 2023 at the Emergency Operations Center. All interested persons are invited to attend. For more information please call 904-824-5550 or email [LNelson@sjcfl.us](mailto:LNelson@sjcfl.us).

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.

In the spring of 1998, the Florida Department of Community Affairs initiated a program to assist local government in developing plans to reduce or eliminate risks to people and property from natural and man-made hazards known as the Local Mitigation Strategy (LMS).

The primary objective of the Local Mitigation Strategy is to remove, if possible, or otherwise to limit the losses of life and property due to a disaster. In August of 1998 a St. Johns County LMS Taskforce was organized from a broad cross-section of the County including elected officials, County Staff, representatives from the cities of St. Augustine, Hastings, and St. Augustine Beach, Flagler Estates Road and Water District, Florida Department of Health – St. Johns, Florida Forest Service and Flagler Hospital alongside local businesses and residents. The LMS Taskforce, led by the St. Johns County Division of Emergency Management, has been responsible for developing all work products for the Local Mitigation Strategy including the development of a set of guiding principles, identification of potential hazards affecting the community; identification of people and infrastructure which are vulnerable to hazards; identification of critical facilities which are necessary for maintaining health, safety and welfare of residents before, during, and after a catastrophic event; and the development of a prioritized list of pre and post hazard mitigation initiatives (projects) eligible for funding. The Local Mitigation Strategy is intended to provide one unified program for St. Johns County and its incorporated municipalities.

The original Local Mitigation Strategy was presented to the St. Johns County Commission, City of St. Augustine, St. Augustine Beach, and Town of Hastings Councils in 2004 for their approval and adoption. After the LMS was approved at the local level it was forwarded to the State of Florida and the Federal Emergency Management Agency (FEMA) for approval. FEMA requires the Local Mitigation Strategy to be updated and submitted for approval, and then re-adopted, every 5 years. The most current St. Johns County LMS received its five year approval from FEMA in June of 2015.

Since the initial creation of the first St. Johns County Local Mitigation Strategy, the St. Johns County LMS Taskforce has worked continuously to maintain and update the LMS as needed and to add new mitigation initiatives as projects are completed and new projects are initiated. The St. Johns County LMS Taskforce meets quarterly to review the LMS and mitigation projects. These meetings are announced in the St. Augustine Record two weeks prior to the meeting date and all interested individuals are invited to attend.

For any questions or suggestions regarding St. Johns County Local Mitigation Strategy please contact:

Laura Nelson  
[lnelson@sjcfl.us](mailto:lnelson@sjcfl.us)  
(904) 824-5550

## Hazard Mitigation Assistance

For more information on Hazard Mitigation Assistance please read the:

**[Hazard Mitigation Assistance Program Fact Sheet](#)**

## Plan

- **[Local Mitigation Strategy](#)**

The purpose of this document is to provide an annual progress report of activities associated with St. Johns County Local Mitigation Strategy.

**[St. Johns County Floodplain Management Plan](#)**  
**[2020/2021 Annual Progress Report](#)**

# LOCALiQ

## FLORIDA

PO Box 631244 Cincinnati, OH 45263-1244

### PROOF OF PUBLICATION

Sjc Emergency Management  
100 Eoc Drive

Saint Augustine FL 32092

STATE OF FLORIDA, COUNTY OF ST JOHNS

The St Augustine Record, a daily newspaper published in St Johns County, Florida; and of general circulation in St Johns County; and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issues dated or by publication on the newspaper's website, if authorized, on:

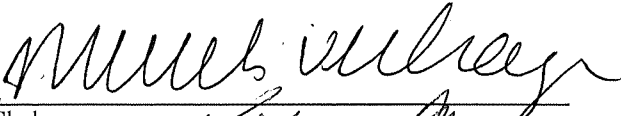
02/02/2023

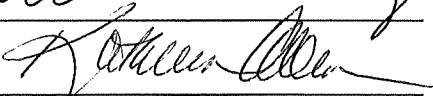
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Sworn to and subscribed before on 02/02/2023

### PUBLIC NOTICE

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thursday, February 16, 2022 at the St. Johns County Emergency Operations Center located at 100 EOC Drive, St. Augustine, FL 32092. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.

  
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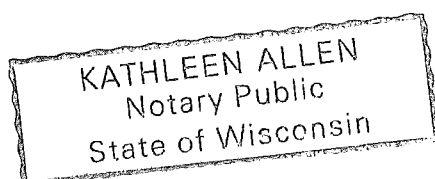
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## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: May 18, 2023 @ 9:00 am

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, May 18, 2023 at 9:05 am at the St. Johns County Emergency Operations Center. Laura Nelson called the meeting to order with the following members:

Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Gavin Butler – St. Johns County Emergency Management  
Kelly Wilson – St. Johns County Emergency Management  
Gil Timmons – City of St. Augustine Beach  
Brian Law – City of St. Augustine Beach  
Jennifer Thompson – City of St. Augustine Beach  
Jessica Beach – City of St. Augustine  
Stephanie Massey – Taylor Engineering  
Paul Rose - St. Johns County School District  
Westly Woodward – St. Johns County Growth Management  
Sara Perez – St. Johns County Growth Management  
Tony Cubbedge – St. Johns County Utilities  
Jason Sparks – St. Augustine Beach Engineering  
Keith Oke – St. Johns County Sheriff's Office  
Cliff Dickinson – Resident/Homeowner  
Tyler Nolen – Northeast Florida Regional Council  
Joshua Sanders – Florida Division of Emergency Management  
Scott Maynard – St. Johns County Chamber of Commerce  
Kaitlyn Dietz – GTM Research Reserve  
Doug Conkey – St. Johns River Water Management District  
Ryan Mauch – St. Johns County Environmental  
Don Cuevas – Beaches Energy

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting and individuals introduced themselves.

#### II. **Approval of February 16, 2023 meeting minutes\***

Motion to approve the minutes was made by Brian Law and seconded by Jessica Beach. The motion passed.

### **III. Funding Updates**

- a. Laura updated the group on the status of the Flood Mitigation Assistance (FMA), Building Resilient Infrastructure and Communities (BRIC), and the Hazard Mitigation Grant Program (HMGP). Additional details can be found on the attached PowerPoints.

### **IV. Addition/Ranking of New Projects\***

- a. 1 new project, Barrier Island Force Main Improvements, was presented to be added to the project list and scored for funding priority.
  - Kelly Wilson made a motion to add the project to the list; it was seconded by Brian Law. The motion passed.
  - The project scored a 90.
- b. A list of proposed projects to be submitted under Hurricane Nicole's HMGP funding was presented by Laura. A motion to accept the proposed list was made by Brian Law and seconded by Jason Sparks. The list is as follows:
  1. Barrier Island Force Main Improvements, St. Johns County Utilities
  2. Generator Upgrades at Bartram Trail and Pedro Menendez Shelters, St. Johns County School District
  3. Elevation of Residential Homes, St. Johns County.
  - A recommendation was made by Doug Conkey to determine a better approach to ranking projects by the percent of population benefitted. Laura agreed to investigate potential revisions and include them in the next update of the LMS, if not before.

### **V. Project & Program Updates**

- a. Laura mentioned all the CRS annual reports were submitted.
- b. Laura updated on the progress of the County's efforts for creating a residential flood mitigation program.
  - A consultant has been selected and contract development is underway.
  - The contract will be presented to the BOCC for approval at the June 6<sup>th</sup> meeting.
- c. Applicants provided updates on ongoing projects:
  - The City of St. Augustine received an increase in cost share for the flood mitigation improvements on S. Whitney and West King St. The project is now funded at the full 75% federal cost share.
  - City of St. Augustine plans to submit for residential flood mitigation under the next FMA cycle. They are still waiting to hear on last year's submission. They currently have one FMA mitigation reconstruction project underway.
  - Phase 1 of the Avenida Menendez Seawall is wrapping up and hoping to move into phase 2 soon.

- St. Augustine Beach has finished the design for the storm surge protection of A1A and Pope Road. They have submitted it to FDEM for approval to move into phase 2.
  - SJC is collecting data and feedback from stakeholders for the FDEP vulnerability assessment. The consultant working on the project is also updating the current exposure models.
  - SJC Utilities was successful in securing \$10 million in state funds for barrier island lift station mitigation.
  - SJC is waiting to hear if the \$5 million currently in the state budget for Summer Haven buyouts will make the final budget.
- d. Doug at SJRWMD recommended individuals keep an eye on the legislative changes in case any of them have impacts on our LMS related programs and funding.
  - e. Laura reminded attendees that the My Safe Florida Home program remains open for inspections. She informed them that revisions resulting from legislative changes will mean even more homes and now townhomes could be eligible for wind mitigation grants to help harden their homes.
  - f. A brief discussion was held on the importance of maintaining wind and flood insurance despite increasing costs and how it needs to be a strong message to our residents as we approach hurricane season.

#### **VI. Upcoming Training/Webinars**

- a. Florida Division of Emergency Management's Mitigation Bureau is offering HMGP application development assistance. More information can be found in the attached slides
- b. Mitigate Florida meeting is coming up on June 13<sup>th</sup> at 1:00 PM.
- c. The GTM NERR will be hosting a virtual Flood Hazard Training July 11-12<sup>th</sup>. Flyers were available for interested individuals.
- d. The GTM NERR is also hosting a session on FDEP's Coastal Partnership Initiative (CPI) funding programs on May 31<sup>st</sup> from 9:30-12:00. Register [here](#).

#### **VII. Open Discussion**

- a. The next LMS Working Group meetings is expected to be held on Thursday, August 17<sup>th</sup> at 9:00 at the EOC.

#### **VIII. Adjournment**

Meeting adjourned at 9:55 am

\* Denotes action item



## MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

MAY 18, 2023  
9:00 A.M.

## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

- Introductions
- Old Information
  - Approval of Minutes from February 16, 2023 LMS Working Group Meeting\*
- New Information
  - Funding Updates
  - Addition and Scoring of Projects for Hurricane Nicole HMGP\*
  - Project/Program Updates
  - Training Opportunities
- Open Discussion
- Adjournment

## APPROVAL OF MEETING MINUTES

- Approval of February 16, 2023 LMS Meeting Minutes

## FUNDING UPDATES

- Flood Mitigation Assistance (FMA) and Building Resilient Infrastructure and Communities (BRIC) application cycle expected to be announced in the next month or two.
- Hazard Mitigation Grant Program (HMGP) notice of funding (Hurricane Ian) deadline extended to August 29, 2023
  - Estimate of SJC allocation: \$3.3 million
  - Projects were ranked at February 16<sup>th</sup> meeting
- An HMGP Notice of Funding for Hurricane Nicole is expected in any day
  - SJC initial allocation is approximately \$1,000,000
  - Application deadline is expected to be Sept/October timeframe

## HMGP PROJECTS - HURRICANE NICOLE

- Barrier Island Force Main Improvements
  - Scored a 90
- Generator Upgrades at Bartram Trail and Pedro Menendez
  - Previously scored 74
- Elevation of residential homes
  - Previously scored 62

## RANKING CRITERIA

	48 Points	6 Points	6 Points	4 Points	2 Points	0 Points
<b>Population Benefited</b>	Project would benefit 75% or more of the population.	Project would benefit 50-75% of the population.	Project would benefit 25-49% of the population.	Project would benefit less than 24-1% of the population.	Project would benefit less than 1% of the population.	Project would benefit less than 1% of the population.
<b>Environmental Impact</b>	Project improves the environment.	Project has no effect on environment.	Project has no effect on environment.	Project has no effect on environment.	Project has no effect on environment.	Project poses risk to environment. Risk to environment is undetermined.
<b>Consistency with Local Mitigation Strategy Goals</b>	Project is consistent with multiple LMS goals.	Project is consistent with one LMS goal.	Project is consistent with one LMS goal.	Project is consistent with one LMS goal.	Project is consistent with one LMS goal.	Project is not consistent with any LMS goals.
<b>Reduce Risk of Future Property Damage</b>	Mitigates a hazard of high probability of future occurrence or risk.	Mitigates a hazard of medium probability of future occurrence or risk.	Mitigates a hazard of low probability of future occurrence or risk.	Mitigates a hazard of low probability of future occurrence or risk.	Mitigates a hazard of negligible frequency or risk.	Mitigates a hazard of negligible frequency or risk.
<b>Supports Essential or Critical Services/Infrastructure</b>	Project will ensure continuity of operations for primary infrastructure or services with no interruption history.	Project will support secondary critical/essential infrastructure or services with no interruption history.	Project will support secondary critical/essential infrastructure or services with no interruption history.	Project will support secondary critical/essential infrastructure or services with no interruption history.	Project will support secondary critical/essential infrastructure or services with no interruption history.	Project will support secondary critical/essential infrastructure or services with no interruption history.
<b>Funding Availability</b>	Matching funds are identified and available.	Matching funds can be made available in a short timeframe.	Matching funds can be made available in a short timeframe.	Matching funds can be made available in a short timeframe.	Matching funds can be made available in a short timeframe.	Matching funds are not available.
<b>Feasibility of Implementation</b>	Project could be implemented in one year.	Project could be implemented in two years.	Project could be implemented in five years.	Project could be implemented in five years.	Project could be implemented in five years.	Project implementation would be greater than 5 years.
<b>Community Rating System</b>	Project supports all four elements of CRS (risk reduction, public information, mapping and regulation, flood damage reduction, and warning and evacuation).	Project supports three CRS elements.	Project supports two CRS elements.	Project supports one CRS element.	Project supports one CRS element.	Project does not support any CRS element.
<b>Stewardship</b>	Project has an identified sponsor willing to maintain funds.	Project has an identified sponsor.	Project has an identified sponsor.	Project has an identified sponsor.	Project has an identified sponsor.	Project has no identified sponsor.
<b>Social Equity</b>	Does not displace or negatively affect any people.	Project might only affect very few people.	Project might only affect very few people.	Project might only affect very few people.	Project might only affect very few people.	Project will impact only affect many people.



## LMS GOALS

1. **Protect the lives of the residents of St. Johns County and its Municipalities.**
2. **Protect property to ensure that its intrinsic value is preserved.**
3. **Protect infrastructure so that it is available during and after a disaster.**
4. **Protect business activities so that they continue to provide economic strength to the community.**
5. **Protect the environment to ensure that quality of life and economic wellbeing are preserved.**

## PROJECT & PROGRAM UPDATES

- Previously funded HMGP & FMA projects
- State & local funded projects
- County Residential Flood Mitigation Program
  - County is in the process of contracting with a consultant to establish a program and assist with applications
  - Contract and program are being drafted and requires BOCC approval
- CRS Annual Updates all submitted

## MY SAFE FL HOME

- My Safe Florida Home Program being implemented by Florida's Chief Financial Office
- Free wind mitigation inspections and matching grants (2:1) to mitigate/harden single family residences against wind
  - Grants up to \$10,000
  - Homeowners would be responsible for up to \$5,000
- **Effective July 1, 2023, the windborne debris region requirement removed and townhomes eligible**
- For more information and to sign up for inspections, visit <https://myfloridacfo.com/mysafeflhome>



## UPCOMING TRAININGS, MEETINGS, WEBINARS

- Florida Division of Emergency Management Bureau of Mitigation is offering technical assistance with development of sub-applications
- Only available to potential sub-applicants that have not hired a contractor for sub-application development support for HMGP
- Offered at no cost to the potential sub-applicants
- Will include assistance with completing sub-applications and gathering supporting documentation for BCA and EHP requirements
- Can be onsite at your preferred location or virtual
- Reach out to [Lnelson@sjcfl.us](mailto:Lnelson@sjcfl.us) for more info on how to register for assistance
- MitigateFL – State of Florida's Mitigation Working Group June 13<sup>th</sup> at 1:00 <https://www.floridadisaster.org/dem/mitigation/statemitigationstrategy/>
- Flooding Hazards: Science and Preparedness (AWR-362) - NDPTC

- <https://ndptc.hawaii.edu/training/delivery/3418/>

### AWR-362

### FLOODING HAZARDS: SCIENCE AND PREPAREDNESS



Join us for our Flooding Hazards: Science and Preparedness course. Learn about the current science behind the causes of floods, flood forecasting, flood risk assessment, and best practices for preparation and mitigation for both short- and long-term flooding events. Gain a better understanding regarding the factors that contribute to flooding and how they determine flood risk. Enhance your abilities to read and interpret forecasts, watches, and warnings from the National Weather Service and hydrographs from the U.S. Geological Survey. Increase your knowledge of how to plan for properly preparation for sudden flooding, such as flash flooding and dam breaks, and long-term flood events such as river flooding.

DATE: July 11th-12th, 2023  
TIME: 1:00pm - 5:00pm ET

**\*\*THIS IS A VIRTUAL COURSE. YOU MUST ATTEND BOTH DAYS TO RECEIVE CREDIT\*\***

HOSTING AGENCY:  
Guana Tohomato Matanzas National Estuarine Research Reserve

## OPEN DISCUSSION



PROPOSED 2023 LMS MEETING DATES



- February 16, 2023
- May 18, 2023
- August 17, 2023
- November 16, 2023

All meetings are Thursdays @ 9:00 am



St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
May 18, 2023



Name	Organization	Email
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[illegible]



# LOCALiQ

## FLORIDA

PO Box 631244 Cincinnati, OH 45263-1244

### PROOF OF PUBLICATION

Sjc Emergency Management  
100 Eoc Drive

Saint Augustine FL 32092

STATE OF FLORIDA, COUNTY OF ST JOHNS

The St Augustine Record, a daily newspaper published in St Johns County, Florida; and of general circulation in St Johns County; and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issues dated or by publication on the newspaper's website, if authorized, on:

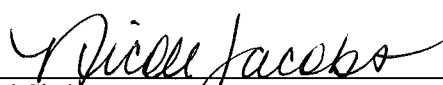
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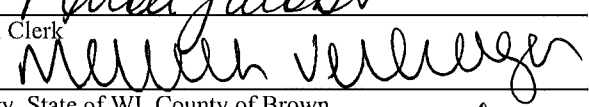
and that the fees charged are legal.  
Sworn to and subscribed before on 05/04/2023

### PUBLIC NOTICE

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thursday, May 18, 2023 at the St. Johns County Emergency Operations Center located at 100 EOC Drive, St. Augustine, FL 32092. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.

  
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Notary, State of WI, County of Brown

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Notary Public  
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## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: August 17, 2023 @ 9:00 am

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, August 17, 2023 at 9:05 am at the St. Johns County Emergency Operations Center. Laura Nelson called the meeting to order with the following members:

Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Kelly Wilson – St. Johns County Emergency Management  
Brian Law – City of St. Augustine Beach  
Jennifer Thompson – City of St. Augustine Beach  
Lacey Pierotti – City of St. Augustine Beach  
Jessica Beach – City of St. Augustine  
Stephanie Massey – Taylor Engineering  
Jason Sparks – St. Augustine Beach Engineering  
Keith Oke – St. Johns County Sheriff's Office  
Cassidy Taylor – Northeast Florida Regional Council  
Kaitlyn Dietz – GTM Research Reserve  
Doug Conkey – St. Johns River Water Management District  
Don Cuevas – Beaches Energy  
Ashlie Jordan – St. Johns County Growth Management

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting.

#### II. **Approval of May 18, 2023 meeting minutes\***

Motion to approve the minutes was made by Brian Law and seconded by Kelly Wilson. The motion passed.

#### III. **Funding Updates**

- a. Laura updated the group on the status of the Flood Mitigation Assistance (FMA), Building Resilient Infrastructure and Communities (BRIC), the Hazard Mitigation Grant Program (HMGP) and the Legislative Pre-Disaster Mitigation (L-PDM) program. Additional details can be found on the attached PowerPoints.

#### IV. **Project & Program Updates**

- a. Laura updated on the progress of the County's efforts for creating a residential flood mitigation program.
- b. Applicants provided updates on ongoing projects:

- St. Augustine Beach has finished the design for the storm surge protection of A1A and Pope Road. They have submitted it to FDEM for approval to move into phase 2.
- St. Augustine Beach's weir project is complete; awaiting FEMA closeout.
- Design of the drainage project on 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> street is starting soon.
- City of St. Augustine is working on the interlocal with St. Johns County for South Whitney drainage project. The City is working through the permitting process. The project is ready to be bid out.
- Phase 2 of the Avenida Menendez Seawall is awaiting FEMA's approval.
- Lake Maria Sanchez project is in progress with State funding.
- The GTM NERR received a set aside under the Inflation Reduction Act and are looking at possible water level gauges.

V. **Upcoming Training/Webinars**

- a. Florida Division of Emergency Management's Mitigation Bureau is offering HMGP application development assistance. More information can be found in the attached slides.
- b. Mitigate Florida meeting is coming up on September 12<sup>th</sup> at 1:00 PM.

VI. **Open Discussion**

- a. The next LMS Working Group meetings is expected to be held on Thursday, November 16<sup>th</sup> at 9:00 at the EOC.

VII. **Adjournment**

Meeting adjourned at 9:50 am

\* Denotes action item

## MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

AUGUST 17, 2023  
9:00 A.M.



## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

- Introductions
- Old Information
  - Approval of Minutes from May 18, 2023 LMS Working Group Meeting\*
- New Information
  - Funding Updates
  - Project/Program Updates
  - Training Opportunities
- Open Discussion
- Adjournment

## APPROVAL OF MEETING MINUTES

- Approval of May 18, 2023 LMS Meeting Minutes

## FUNDING UPDATES

- Flood Mitigation Assistance (FMA) and Building Resilient Infrastructure and Communities (BRIC) application cycle expected to be announced later this month.
- A Notice of Intent (NOI) is now required for anyone intending to apply for BRIC or FMA this year.
  - NOI is due 8/31/2023
- BRIC offers Direct Technical Assistance option which will help scope or plan projects
  - Nationally competitive
- Legislative Pre-Disaster Mitigation (L-PDM)
  - Must get project on congressional list then you might be invited to apply for funds.

## FUNDING UPDATES

- Hazard Mitigation Grant Program (HMGP) notice of funding (Hurricane Ian) deadline August 29, 2023
  - Estimate of SJC allocation: \$3.3 million
  - Projects were ranked at February 16<sup>th</sup> meeting
- Hurricane Nicole HMGP initial allocation is
  - SJC initial allocation is approximately \$1,032,764
  - Application deadline October 20, 2023

## PROJECT & PROGRAM UPDATES

- Previously funded HMGP & FMA projects
- State & local funded projects
- County Residential Flood Mitigation Program
  - Quality Engineering and Survey have been hired to assist with the program
  - Outreach meetings took place July 31 - August 2nd



## UPCOMING TRAININGS, MEETINGS, WEBINARS

- Florida Division of Emergency Management Bureau of Mitigation is offering technical assistance with development of sub-applications
  - Only available to potential sub-applicants that have not hired a contractor for sub-application development support for HMGP
  - Offered at no cost to the potential sub-applicants
  - Will include assistance with completing sub-applications and gathering supporting documentation for BCA and EHP requirements
  - Deadline to request assistance is September 22<sup>nd</sup>
  - Reach out to Lnelson@sjcd.us for more info on how to register for assistance.
- MitigateFL – State of Florida's Mitigation Working Group Sept. 12<sup>th</sup> at 1:00  
<https://www.floridadisaster.org/dem/mitigation/statemitigationstrategy/>

## OPEN DISCUSSION



## PROPOSED 2023 LMS MEETING DATES



- February 16, 2023
- May 18, 2023
- August 17, 2023
- November 16, 2023

All meetings are Thursdays @ 9:00 am



St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
August 17, 2023



Name	Organization	Email
Laura Nelson	SJC EM	lnelson@sjcf1.us
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Stephanie Massey	Taylor Engineering	smassey@tayloringrading.com
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# LOCALiQ

## FLORIDA

PO Box 631244 Cincinnati, OH 45263-1244

### **PROOF OF PUBLICATION**

Sjc Emergency Management  
100 Eoc Drive

Saint Augustine FL 32092

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### **PUBLIC NOTICE**

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thursday, August 17, 2023 at the St. Johns County Emergency Operations Center located at 100 EOC Drive, St. Augustine, FL 32092. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.

Pub: August 3, 2023; #9099211

KAITLYN FELTY  
Notary Public  
State of Wisconsin



## St. Johns County Emergency Management

---

### Minutes

St. Johns County

Local Mitigation Strategy Working Group

Meeting: November 16, 2023 @ 9:00 am

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, November 16, 2023 at 9:07 am at the St. Johns County Emergency Operations Center. Laura Nelson called the meeting to order with the following members:

Laura Nelson – LMS Chairperson, St. Johns County Emergency Management

Kelly Wilson – St. Johns County Emergency Management

Brian Law – City of St. Augustine Beach

Jennifer Thompson – City of St. Augustine Beach

Lacey Pierotti – City of St. Augustine Beach

Jason Sparks – St. Augustine Beach Engineering

Doug Conkey – St. Johns River Water Management District

Don Cuevas – Beaches Energy

Westly Woodward – St. Johns County Growth Management

Tony Cubbedge – St. Johns County Utilities

Gina Birmingham – SJC VOAD/St. Johns Housing Partnership

Paul Rose – St. Johns County School District

Frank Cervasio – St. Johns County School District

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting.

#### II. **Approval of August 17, 2023 meeting minutes\***

Motion to approve the minutes was made by Brian Law and seconded by Frank Cervasio. The motion passed.

#### III. **Funding Updates**

- a. Laura updated the group on the status of the Flood Mitigation Assistance (FMA), Building Resilient Infrastructure and Communities (BRIC), the Hazard Mitigation Grant Program (HMGP) and the Legislative Pre-Disaster Mitigation (L-PDM) program. Additional details can be found on the attached PowerPoints.
- b. Westly Woodward talked about seeking a Habitat Conservation Grant as match to Summer Haven buyout funds provided by the State of FL.

#### IV. **Project & Program Updates**

- a. The City of St. Augustine, St. Augustine Beach, and St. Johns County are all working on their vulnerability studies required for Resilient Florida.

- b. The County and City of St. Augustine have closed their 2023 FMA application window. Quality Engineering
- c. Applicants provided updates on ongoing projects:
  - St. Johns County submitted 5 grant applications under the Resilient FL Grant Program.
    1. Santa Rosa Drainage Improvements – \$6,600,000 (50% match)
    2. Big Sooeey Stormwater Pond and Pump (Hastings) - \$6,447,500 (50% match)
    3. Porpoise Point Flood Mitigation - \$575,000 (50% match)
    4. Porpoise Point Beach Stabilization - \$18,000,000 (50% match) \*\*Requested 7 million only. \$2 million already awarded through Hurricane Legislative Appropriation program
    5. Adaptation Plan (Planning Grant) - \$200,000 (no match)
  - St. Augustine Beach has finished the design for the storm surge protection of A1A and Pope Road. They have submitted it to FDEM for approval to move into phase 2.
  - St. Augustine Beach's weir project is complete; awaiting FEMA closeout.
  - Design of the drainage project on 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> street is about 80% complete.
  - City of St. Augustine is working on the interlocal with St. Johns County for South Whitney drainage project. The City is working through the permitting process. The project is ready to be bid out.
  - Phase 2 of the Avenida Menendez Seawall is awaiting FEMA's approval.
  - Lake Maria Sanchez project is in progress with State funding; working through design and related challenges.
  - St. Augustine is working on their 2021 FMA application – the structure has been demolished.
  - St. Augustine is awaiting the contract for their 2 pending FMA awards which would include mitigating 61 residential properties.

#### V. **Upcoming Training/Webinars**

- a. Mitigate Florida meeting is coming up on December 12<sup>th</sup> at 1:00 PM.
- b. NWS SKYWARN Storm Spotter Training at the EOC January 23<sup>rd</sup> 6:30-8:30
- c. Nature Based Solutions for Mitigating Hazards – 8:00-12PM on February 6<sup>th</sup> at the EOC.

#### VI. **Open Discussion**

- a. The next LMS Working Group meetings is expected to be held on Thursday, November 16<sup>th</sup> at 9:00 at the EOC.

VII. **2024 Meeting Dates**

- a. February 15, 2024  
May 16, 2024  
August 15, 2024  
November 21, 2024
- b. All meetings will be held at 9:00 AM at the EOC.

VIII. **Adjournment**

Meeting adjourned at 10:10 am

\* Denotes action item

## MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

NOVEMBER 16, 2023  
9:00 A.M.



## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

- Introductions
- Old Information
  - Approval of Minutes from August 17, 2023 LMS Working Group Meeting\*
- New Information
  - Funding Updates
  - Project/Program Updates
  - Training Opportunities
- 2024 Meeting Dates
- Open Discussion
- Adjournment



## APPROVAL OF MEETING MINUTES

- Approval of August 17, 2023 LMS Meeting Minutes

## FUNDING UPDATES

- FEMA FMA "Swift Current" – FMA money to help individual flood mitigation projects for repetitively flooded or substantially damaged properties following a flood-related disaster event
  - <https://www.fema.gov/grants/mitigation/flood-mitigation-assistance/swift-current>
  - Hoping to learn more soon on this funding source
- Flood Mitigation Assistance (FMA) and Building Resilient Infrastructure and Communities (BRIC) application cycle are open to communities who submitted a Notice of Intent (NOI).
  - Florida's deadline is December 1, 2023 at 5:00 PM
  - FEMA's deadline February 29, 2024 at 3:00 PM
  - City of St. Augustine & SJC submitting applications for residential flood mitigation projects.
- Legislative Pre-Disaster Mitigation (L-PDM)
  - Must get project on congressional list then you might be invited to apply for funds.

## FUNDING UPDATES

- All Hazard Mitigation Grant Program (HMGP) application cycles have closed.
- Initial estimate for Ian HMGP in SJC: \$3.3 million
  - 12-month lock-in: \$4.33 million
  - 4 projects were submitted:
    1. Barrier Island Lift Station Hardening/Elevations
    2. Generator enhancements (upsizing) at 2 Hurricane Shelters (Bartram & Pedro Menendez High Schools)
    3. Stand-by Generator at Solomon Calhoun Community Center
    4. Elevation of 3 residential properties
- All project applications undergoing review process
- Hurricane Nicole HMGP
  - SJC initial allocation is approximately \$1,032,764
  - Only one project submitted (Stand-by Generator at Solomon Calhoun Community Center)

## PROJECT & PROGRAM UPDATES

- Previously funded HMGP & FMA projects
  - FY 2021 – City of St. Augustine (COSA) awarded FMA grant for one mitigation reconstruction. Demolition has been completed.
  - FY 2022 – COSA's FMA Applications were "Identified for Further Review"
    - Applications cover 61 flood-prone properties
- State & local funded projects
  - FDEP funded Countywide Vulnerability Study



## UPCOMING TRAININGS, MEETINGS, WEBINARS

- MitigateFL – State of Florida's Mitigation Working Group Dec. 12<sup>th</sup> at 1:00  
<https://www.floridadisaster.org/dem/mitigation/statemitigationstrategy/>
- National Weather Service SKYWARN Storm Spotter at SJC EOC – Jan 23<sup>rd</sup> 6:30-8:30 PM
- Nature Based Solutions for Mitigating Hazards at SJC EOC  
February 6<sup>th</sup>, 8:00 - 12:00  
<https://ndptc.hawaii.edu/training/delivery/3531>
  - This class is also being offered in Jacksonville on Feb. 7<sup>th</sup>.  
<https://ndptc.hawaii.edu/training/delivery/3539>



## UPCOMING TRAININGS, MEETINGS, WEBINARS

- Resilient First Coast Collaborative
  - Organized by the Northeast Florida Regional Council
  - Upcoming meeting on November 29<sup>th</sup> @ 11:30 AM at the St Johns County EOC
  - Collaborative is working on a regional resilience action plan
  - More information and to be involved visit: <https://resilientfirstcoast.com/>

## OPEN DISCUSSION



## 2023 LMS MEETING DATES

- February 16, 2023
- May 18, 2023
- August 17, 2023
- November 16, 2023

All meetings are Thursdays @ 9:00 am

## PROPOSED 2024 LMS MEETING DATES



- February 15, 2024
- May 16, 2024
- August 15, 2024
- November 21, 2024

All meetings are Thursdays @ 9:00 am

# NATURE BASED SOLUTIONS FOR MITIGATING HAZARDS



**DATE:**

**TIME:**

**HOSTING AGENCY:**

**REGISTRATION POC:**

**REGISTRATION LINK/ INFORMATION:**

**LOCATION:**

## WHO SHOULD TAKE THIS COURSE

## MODULES

**ELIGIBLE CONTINUING EDUCATION:**



NOAA Inouye Regional Center  
1845 Wasp Blvd Building 176, Honolulu, HI 96818  
PHONE: 808.725.5220 • FAX: 808.725.5230



As a member of the National Domestic Preparedness Consortium, the NDPTC is a DHS/ FEMA training partner dedicated to providing critical all-hazards training throughout the United States and its territories with an emphasis on natural hazards and island and coastal communities



**FEMA**



St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
November 16, 2023



Name	Organization	Email
Laura Nelson	SJC EM	LNelson@sjcf1.us
JASON SPARKS	CSAB	ISPARKS@STJCF1.US.c.tyofsab.org
Tony Cibley	SJC Utilities	twcibley@sjcf1.us
Don Cuevas	B.F.S.	dcuevas@beachenergy.com
Gina Birmingham	SJC VOAD / 3rd Johns Housing Partnership	ginab@sjhp.org
Doug Conkey	SIRWMD	dconkey@sjrmd.com
Paul Rose	SJCSD	paul.rose@stjohns.k12.fl.us
Frank Gervasio	SJCSD	Frank.Gervasio@stjohns.k12.fl.us
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Brian Law	COSAB	blaw@cityofsab.org
Casey Pierotti	COSAB	lpierotti@cityofsab.org
Jennifer Thompson	COSAB	jthompson@cityofsab.org
Kelly Wilson	SJC EM	Kwilson@sjcf1.us

# LOCALiQ

## FLORIDA

PO Box 631244 Cincinnati, OH 45263-1244

### **PROOF OF PUBLICATION**

Sjc Emergency Management  
Sjc Emergency Management  
100 Eoc Drive

Saint Augustine FL 32092

STATE OF WISCONSIN, COUNTY OF BROWN

Before the undersigned authority personally appeared, who on oath says that he or she is the Legal Coordinator of the St Augustine Record, published in St Johns County, Florida; that the attached copy of advertisement, being a Govt Public Notices, was published on the publicly accessible website of St Johns County, Florida, or in a newspaper by print in the issues of, on:

11/03/2023

Affiant further says that the website or newspaper complies with all legal requirements for publication in chapter 50, Florida Statutes.

Subscribed and sworn to before me, by the legal clerk, who is personally known to me, on 11/03/2023

Legal Clerk

Notary, State of WI, County of Brown

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### **PUBLIC NOTICE**

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thursday, November 16, 2023 at the St. Johns County Emergency Operations Center located at 100 EOC Drive, St. Augustine, FL 32092. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.

9477557 11/3/23

MARIAH VERHAGEN  
Notary Public  
State of Wisconsin





## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: February 15, 2024 @ 9:00 AM

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, February 15, 2024 at 9:01 AM at the St. Johns County Emergency Operations Center. Laura Nelson called the meeting to order with the following members:

Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Kelly Wilson – St. Johns County Emergency Management  
Brian Law – City of St. Augustine Beach  
Jennifer Thompson – City of St. Augustine Beach  
Lacey Pierotti – City of St. Augustine Beach  
Jason Sparks – St. Augustine Beach Engineering  
Doug Conkey – St. Johns River Water Management District  
Westly Woodward – St. Johns County Growth Management  
JW Brown – St. Johns County Growth Management  
Mathieu deBruin – St. Johns County Growth Management  
Ashlie Jordan – St. Johns County Growth Management  
Tony Cubbedge – St. Johns County Utilities  
Scott Maynard – St. Johns County Chamber  
Joe Giammanco – St. Johns County Emergency Management  
Jessica Beach – City of St. Augustine

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting.

#### II. **Approval of November 16, 2023 meeting minutes\***

Motion to approve the minutes was made by Kelly Wilson and seconded by Doug Conkey. The motion passed.

#### III. **Funding Updates**

- a. Laura updated the group on the status of the Flood Mitigation Assistance (FMA), FMA Swift Current, Building Resilient Infrastructure and Communities (BRIC), the Hazard Mitigation Grant Program (HMGP) and the Legislative Pre-Disaster Mitigation (L-PDM) program. Additional details can be found on the attached PowerPoints.

#### IV. **New Projects\***

- a. The City of St. Augustine requested to add a new project to the list – MLK Streetscape and Drainage Improvements. Brian Law made a motion to

add the project and it was seconded by Tony Cubbedge. The motion passed.

**V. Project & Program Updates**

- a. The City of St. Augustine, St. Augustine Beach, and St. Johns County are all working on their vulnerability studies required for Resilient Florida.
  - City of St. Augustine is working on the interlocal with St. Johns County for South Whitney drainage project. The project is out for bid.
  - Phase 2 of the Avenida Menendez Seawall is awaiting FEMA's approval.
  - Lake Maria Sanchez project is in progress with State funding; working through design and related challenges.
  - St. Augustine is working on their 2021 FMA application – the structure has been demolished and the construction plans are being finalized.
  - St. Augustine is awaiting the contract for their 2 pending FMA awards which would include mitigating 61 residential properties.

**VI. Upcoming Training/Webinars**

- a. Mitigate Florida meeting is coming up on March 12<sup>th</sup> at 1:00 PM.
- b. Nature Based Solutions for Mitigating Hazards was rescheduled to February 28<sup>th</sup> from 8:00-12PM at the EOC. Extra spaces are now available.
- c. The Florida Floodplain Managers Conference is coming up April 26-26<sup>th</sup> in Miramar Beach, FL.

**VII. Open Discussion**

- a. Emergency Management has a newly designed website. Send any comments or suggestions to Laura.
- b. The next LMS Working Group meetings is expected to be held on Thursday, November 16<sup>th</sup> at 9:00 at the EOC.

**VIII. Adjournment**

- a. Meeting adjourned at 9:50 AM.
- b. The next meeting will be held at 9:00 AM on May 16<sup>th</sup> at the EOC.

\* Denotes action item

## MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

FEBRUARY 15, 2024  
9:00 A.M.

## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

- Introductions
- Old Information
  - Approval of Minutes from November 16, 2023 LMS Working Group Meeting\*
- New Information
  - Funding Updates
  - Addition of new Projects\*
  - Project/Program Updates
  - LMS Update Cycle
  - Training Opportunities
- Open Discussion
- Adjournment



## APPROVAL OF MEETING MINUTES

- Approval of November 16, 2023 LMS Meeting Minutes

## FUNDING UPDATES

- FEMA FMA "Swift Current" – FMA money to help individual flood mitigation projects for repetitively flooded or substantially damaged properties following a flood-related disaster event.
- FDEM Announced Notice of Funding on 2/12/24
- FMA Swift only covers individual flood mitigation projects (residential mitigation for the following:
  - Repetitive Loss
  - Severe Repetitive Loss
  - Properties deemed Substantially Damaged (after the applicants disaster declaration date – August 31, 2023)
- Sub-applications due to FDEM by March 15, 2024 at 5:00 PM

## FUNDING UPDATES

- Flood Mitigation Assistance (FMA) and Building Resilient Infrastructure and Communities (BRIC) application cycle is closed to sub-applicants
  - State is reviewing sub-applications for completeness
  - FEMA's deadline February 29, 2024 at 3:00 PM
  - City of St. Augustine & SJC submitted applications for residential flood mitigation projects.
- Legislative Pre-Disaster Mitigation (L-PDM)
  - Must get project on congressional list then you might be invited to apply for funds.

## FUNDING UPDATES

- Hurricane Ian
  - 12-month lock-in: \$4.33 million
  - 4 projects were submitted:
    1. Barrier Island Lift Station Hardening/Elevations
    2. Generator enhancements (upsizing) at 2 Hurricane Shelters (Bartram & Pedro Menendez High Schools)
    3. Stand-by Generator at Solomon Calhoun Community Center
    4. Elevation of 3 residential properties
- All project applications undergoing review process
- Hurricane Nicole HMGP
  - SJC initial allocation is approximately \$1,032,764
  - Only one project submitted (Stand-by Generator at Solomon Calhoun Community Center)



## FUNDING UPDATES

- HMGP for Severe Storms, Tornadoes and Flooding (FEMA 4709-DR-FL) (Broward/Ft. Lauderdale Flooding)
  - Total initial estimate- \$8,159,739
  - St. Johns County is Tier 3 (eligible for leftover funds)
  - Applications due in DEMES by 11:59 PM on March 19, 2024
- Hurricane Idalia HMGP
  - St. Johns County's initial allocation \$2,768,098 (\$922,699 local match)
  - Applications due in DEMES by 11:59 PM on April 30, 2024

## NEW PROJECTS

- MLK Streetscape and Drainage Improvements – City of St. Augustine
  - The MLK Streetscape Improvement Project is an overall improvement to the street's aesthetics; introducing opportunities to improve vehicular safety by decreasing the width of travel lanes encouraging traffic calming, pedestrian connectivity with wider sidewalks, flood mitigation, utility improvements, stormwater improvements and undergrounding of overhead utilities.
  - Approximately \$6,000,000

## PROJECT & PROGRAM UPDATES

- Previously funded HMGP & FMA projects
  - FY 2021 – City of St. Augustine (COSA) awarded FMA grant for one mitigation reconstruction. Demolition has been completed.
  - FY 2022 – COSA's FMA Applications were "Identified for Further Review"
    - Applications cover 61 flood-prone properties
- State & local funded projects
  - FDEP funded vulnerability studies
- CRS/Floodplain Updates
  - Annual Updates

## LMS UPDATES

- LMS Plan is within 18 months of expiring
  - Plan expires June 6, 2025
- FDEM requests plans be submitted 6 months prior to expiration to reduce odds of approval lapsing
- Proposed Changes
  - Applying "Smart Brevity" concepts to plan where possible
    - Condensing information into tables
    - Utilizing bulleted lists
  - Expanding hazard section to serve as risk assessment for Comprehensive Emergency Management Plan (CEMP) as well
  - Tweaking project ranking categories
    - Will provide options and recommendations at upcoming LMS meetings
  - Incorporating FDEP vulnerability studies, Repetitive Loss Area Analysis and Wildfire Plan
- Updates to plan will be distributed via email for review and discussed at LMS meetings

## UPCOMING TRAININGS, MEETINGS, WEBINARS

- MitigateFL – State of Florida's Mitigation Working Group March 12<sup>th</sup> at 1:00  
<https://www.floridadisaster.org/dem/mitigation/statemitigationstrategy/>
- RESCHEDULED: Nature Based Solutions for Mitigating Hazards at SJCEOC February 28<sup>th</sup>, 8:00 - 12:00  
<https://ndptc.hawaii.edu/training/delivery/3531>
  - This class is also being offered in Jacksonville on Feb. 29<sup>th</sup>.  
<https://ndptc.hawaii.edu/training/delivery/3539>
- Florida Floodplain Managers Conference
  - 4/23-4/26 – Miramar Beach, FL
  - <https://ffloods.org/event/ffmaconference2024>



## OPEN DISCUSSION



## 2023 LMS MEETING DATES



- February 15, 2024
- May 16, 2024
- August 15, 2024
- November 21, 2024

All meetings are Thursdays @  
9:00 am



St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
February 14, 2024



Name	Organization	Email
Laura Nelson	SJC EM	LNelson@sjcfl.us
JW Brown	Floodplains	jbrown@sjcfl.us
Ashlie Jordan	Growth Man.	ajordan@sjcfl.us
Scott Maynard	St. Johns County Chamber	Scott.Maynard@sjcchamber.com
Doug Longley	SSRWM	dlongley@ssrwm.com
Tony Cubbedy	SJC Utilities	tcubbedy@sjcfl.us
Jessica Beach	City of St Augustine	jbeach@citystaug.ca
Kelly Wilson	St. John EM	Kwilson@sjcfl.us
Matthew de Bruijn	Growth Management	mdebruijn@sjcfl.us
Weston Woodward	SJC EM	woodward@sjcfl.us
Jason Sparks	CITY OF St. Augustine Beach	jsparks@cityofsab.org
Jennifer Thompson	City of SAB	jthompson@cityofsab.org
Lacey Pierotti	City of SAB	lpierotti@cityofsab.org
Brian Law	City of SAB	blaw@cityofsab.org
Joe Giannamico	SJC EM	JGiannamico@sjcfl.us







## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: May 16, 2024 @ 9:00 AM

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, May 16, 2024 at 9:07 AM at the St. Johns County Emergency Operations Center. Laura Nelson called the meeting to order with the following members:

Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Jason Sparks – St. Augustine Beach Engineering  
Doug Conkey – St. Johns River Water Management District  
JW Brown – St. Johns County Growth Management  
Mathieu deBruin – St. Johns County Growth Management  
Ashlie Young – St. Johns County Growth Management  
Tony Cubbedge – St. Johns County Utilities  
Scott Maynard – St. Johns County Chamber  
Kaitlyn Dietz – GTM Research Reserve  
Don Cuevas – Beaches Energy Services

I. **Introductions**

Laura Nelson welcomed everyone to the meeting.

II. **Approval of February 15, 2024 meeting minutes\***

Motion to approve the minutes was made by Scott Maynard and seconded by Tony Cubbedge. The motion passed.

III. **Funding Updates**

Laura updated the group on the status of the Flood Mitigation Assistance (FMA), FMA Swift Current, Building Resilient Infrastructure and Communities (BRIC), the Hazard Mitigation Grant Program (HMGP), the Legislative Pre-Disaster Mitigation (L-PDM) program and the My Safe Florida Home program. Additional details can be found on the attached PowerPoints.

IV. **Project & Program Updates**

- a. The City of St. Augustine, St. Augustine Beach, and St. Johns County are all working on their vulnerability studies required for Resilient Florida.
  - City of St. Augustine is working on the interlocal with St. Johns County for South Whitney drainage project. The project is out for bid.
  - Phase 2 of the Avenida Menendez Seawall is awaiting FEMA's approval.

- Lake Maria Sanchez project is in progress with State funding; working through design and related challenges.
  - St. Augustine is working on their 2021 FMA application – the structure has been demolished and the construction plans are being finalized.
  - St. Augustine is awaiting the contract for their 2 pending FMA awards which would include mitigating 61 residential properties.
- b. The permanent generator at Freedom Crossing Academy, a COVID-19 HMGP project, was installed last month. Pictures available in the attached slides.

#### V. **LMS Updates**

- a. Laura provided an update on the revisions underway for the LMS Update.
- b. Laura held a discussion with the group on these topics:
- The group agreed to delete the page of founding agencies and current participating agencies since the current participants are listed again in another section of the plan.
  - Location of the goals: The group preferred to leave them at the front of the plan where they can be easily found and they will look at them for potential updates/recommendations over the quarter.
  - Conflict resolution- the group wanted to look to see if the NEFLRC conflict resolution process is still relevant, has been updated since the development of the original LMS or if the current by laws would address any conflicts should they arise.
  - Outline of the hazard sections.

#### VI. **Upcoming Training/Webinars**

- a. Mitigate Florida meeting is coming up on June 18<sup>th</sup> at 1:00 PM.
- b. Virtual Substantial Damage and Post Disaster Training for Floodplain Administrators – June 5<sup>th</sup> from 10:00-3:00 – [Register Here](#)
- c. Multiple mitigation related sessions are being offered at [FDEM's FTEM](#). Register for more information.
- d. The GTM is hosting two virtual trainings being offered by the NDPTC –
- Part I- Coastal Hazards Awareness – July 9-10 1:00 PM – 5:00 PM
  - Part II- Coastal Hazards and Vulnerability Assessment Tools – August 6-7 – 1:00 PM – 5:00 PM. Laura will email info to the group.

#### VII. **Open Discussion**

- a. The next LMS Working Group meetings is expected to be held on Thursday, August 15<sup>th</sup> at 9:00 at the EOC.

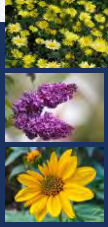
#### VIII. **Adjournment**

- a. Meeting adjourned at 9:50 AM.
- b. The next meeting will be held at 9:00 AM on August 15<sup>th</sup> at the EOC.

\* Denotes action item

## MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

MAY 16, 2024  
9:00 A.M.



## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

- Introductions
- Old Information
  - Approval of Minutes from February 15, 2024 LMS Working Group Meeting\*
- New Information
  - Funding Updates
  - Project/Program Updates
  - LMS Update Cycle
  - Training Opportunities
- Open Discussion
- Adjournment



## APPROVAL OF MEETING MINUTES

- Approval of February 15, 2024 LMS Meeting Minutes

## FUNDING UPDATES

- Hurricane Ian HMGP
  - 4 projects were submitted:
    1. Barrier Island Lift Station Hardening/Elevations
    2. Generator enhancements (upsizing) at 2 Hurricane Shelters (Bartram & Pedro Menendez High Schools)
    3. Stand-by Generator at Solomon Calhoun Community Center
    4. Elevation of 3 residential properties
  - All project applications still undergoing review/RFI process
- Hurricane Nicole HMGP
  - SJC initial allocation is approximately \$1,032,764
  - Only one project submitted (Stand-by Generator at Solomon Calhoun Community Center)

## FUNDING UPDATES

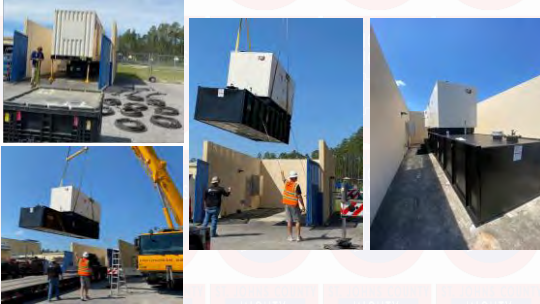
- Hurricane Idalia HMGP
  - St. Johns County's initial allocation \$2,768,098 (\$922,699 local match)
  - Applications due in DEMES by 11:59 PM on June 7, 2024
- Flood Mitigation Assistance (FMA) and Building Resilient Infrastructure and Communities (BRIC) application cycle is closed to sub-applicants
  - City of St. Augustine & SJC submitted applications for residential flood mitigation projects.
  - New cycle of funding expected in mid/late summer 2024
- Legislative Pre-Disaster Mitigation (L-PDM)
  - Must get project on congressional list then you might be invited to apply for funds.
- My Safe Florida Home will receive a new round of funding beginning July 1.

## PROJECT & PROGRAM UPDATES

- Previously funded HMGP & FMA projects
  - FY 2021 – City of St. Augustine (COSA) awarded FMA grant for one mitigation reconstruction. Demolition has been completed.
  - FY 2022 – COSA's FMA Applications were "Identified for Further Review"
    - Applications cover 61 flood-prone properties
  - COVID-HMGP generator project at Freedom Crossing has been installed.
- State & local funded projects
  - FDEP funded vulnerability studies
- CRS/Floodplain Updates
  - Annual Updates



## FREEDOM CROSSING GENERATOR INSTALL



## LMS UPDATES

- LMS Plan is within 18 months of expiring
  - Plan expires June 6, 2025
- FDEM requests plans be submitted 6 months prior to expiration to reduce odds of approval lapsing
- Proposed Changes
  - Applying "Smart Brevity" concepts to plan where possible
    - Condensing information into tables
    - Utilizing bulleted lists
  - Expanding hazard section to serve as risk assessment for Comprehensive Emergency Management Plan (CEMP) as well
  - Tweaking project ranking categories
    - Will provide options and recommendations at upcoming LMS meetings
  - Incorporating FDEP vulnerability studies, Repetitive Loss Area Analysis and Wildfire Plan
- Updates to plan will be distributed via email for review and discussed at LMS meetings

## LMS PLAN UPDATE

- Founding agencies
- National Risk Index relevancy
- Conflict Resolution/Dispute Resolution Document
- Goals – updates? Location in plan?

## RISK & VULNERABILITY ASSESSMENT

- Proposed outline for each hazard:
  - Overview – definition of hazard and potential impacts
  - Location
  - History – including previous impacts
  - Probability of future events – including extent (how bad) and how climate change will affect the hazard
  - Vulnerability
- Each write up will include information on the municipalities/participating jurisdictions

## UPCOMING TRAININGS, MEETINGS, WEBINARS

- MitigateFL – State of Florida's Mitigation Working Group June 18th at 1:00 <https://www.floridadisaster.org/dem/mitigation/statemitigationstrategy/>
- FDEM hosting virtual Substantial Damage and Post-Disaster Training for Floodplain Administrators- June 5<sup>th</sup> 10:00-3:00 [Registration Link for the Webex Webinar](#)
- Multiple mitigation sessions at FDEM's Florida Training for Emergency Managers (FTEM)- June 10-14 at World Golf Village Renaissance St. Augustine



## OPEN DISCUSSION & 2023 LMS MEETING DATES



- February 15, 2024
- May 16, 2024
- August 15, 2024
- November 21, 2024

All meetings are Thursdays @ 9:00 am



St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
May 16, 2024



Name	Organization	Email
Laura Nelson	SJC EM	LNelson@sjcfi.us
Don Cuevas	Beaches Energy Services	dcuevas@beachesenergy.com
Kaitlyn Dietz	GTM Research Reserve	Kaitlyn.dietz@floridadep.gov
Douglas Conkley	SIR wind	dconkley@sirwind.com
Tony Cibulka	SJC Utilities	twcibulka@sjcfi.us
Scott Maynard	SJC Chamber of Commerce	Scott.Maynard@sjchamber.com
JW Brown	SJC Growth Management	jbrown@sjcfi.us
Mathieu de Bruin	SJC Intergovernmental Affairs	mdbruin@sjcfi.us
Ashlie Young	SJC Building	ajordan@sjcfi.us
JASON SPARKS	ST. AUGUSTINE BEACH	JSPARKS@CITYOFSTAB.ORG

# Emergency Management Plans

CEMP

LMS

## Local Mitigation Strategy Plan (LMS)

**Public Notice**

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 A.M. on Thursday, May 16, 2024 at the Emergency Operations Center. All interested persons are invited to attend. For more information please call [\(904\) 824-5550](tel:9048245550) or email [LNelson@sjcfl.us](mailto:LNelson@sjcfl.us).

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at [\(904\) 824-5550](tel:9048245550).

The Local Mitigation Strategy (LMS) is a multi-hazard plan which identifies local hazards, vulnerabilities, and potential mitigation solutions. This FEMA-approved plan is required to be eligible for federal mitigation grants and must be updated every five years.

The planning process requires the development of an LMS Working Group comprised of county staff, municipal representatives, special districts, relevant state agencies, local nonprofits, and any interested residents or businesses. The LMS Working Group meets publicly every quarter to review the plan and any new or ongoing mitigation projects. For any questions or suggestions regarding St. Johns County Local Mitigation Strategy please contact: [lnelson@sjcfl.us](mailto:lnelson@sjcfl.us).

## Hazard Mitigation Assistance

- [FEMA Hazard Mitigation Assistance Programs](#)

## Plan

- [Local Mitigation Strategy](#)
- [St. Johns County Floodplain Management Plan 2023/2024 Annual Progress Report](#)

## Resources

[Alert St. Johns](#)

[FEMA](#)





## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: August 15, 2024 @ 9:00 AM

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, August 15, 2024 at 9:06 AM at the St. Johns County Emergency Operations Center. Laura Nelson called the meeting to order with the following members:

Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Gavin Butler – St. Johns County Emergency Management  
Josh Saunders – Florida Division of Emergency Management  
Don Cuevas – Beaches Energy Services  
Keith Oke – St. Johns County Sheriff's Office  
Shane Lockwood – Florida Department of Health  
JW Brown – St. Johns County Growth Management  
Kelly Steffens – Flagler County Emergency Management  
Paul Rose – St. Johns County School District  
Steve Pauly – St. Johns County School District  
Jennifer Thompson – City of St. Augustine Beach  
Ray Deschler – City of St. Augustine  
Kenneth Rainer – NOAA Office of Coastal Management  
Lacey Pierotti – City of St. Augustine Beach  
Jessica Beach – City of St. Augustine  
Brian Law – City of St. Augustine Beach  
Jason Sparks – St. Augustine Beach Engineering  
Doug Conkey – St. Johns River Water Management District  
Mathieu deBruin – St. Johns County Growth Management  
Tony Cubbedge – St. Johns County Utilities  
Kaitlyn Dietz – GTM Research Reserve

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting.

#### II. **Approval of May 16, 2024 meeting minutes\***

Motion to approve the minutes was made by Keith Oke and seconded by Gavin Butler. The motion passed.

#### III. **Voting Member Change**

Steve Pauly has taken over Frank Cervasio's position with the School District. As such, he will assume Frank's position as the voting member for the School

District. A motion of approval was made by Brian Law and seconded by Keith Oke. The motion passed.

#### **IV. Funding Updates**

- a. Laura updated the group on the status of the Flood Mitigation Assistance (FMA), FMA Swift Current, Building Resilient Infrastructure and Communities (BRIC), the Hazard Mitigation Grant Program (HMGP), the Legislative Pre-Disaster Mitigation (L-PDM) program and the My Safe Florida Home program. Additional details can be found on the attached PowerPoints.
- b. The City of St. Augustine and St. Johns County are hosting residential flood mitigation workshops next week at various times and locations in anticipation of applying for FY 2024 FMA funds.

#### **V. Project & Program Updates**

- a. St. Augustine is awaiting the contract for their 2 pending FMA awards which would include mitigating 61 residential properties.
- b. The permanent generator at Freedom Crossing Academy, a COVID-19 HMGP project his awaiting closeout.
- c. The City of St. Augustine, St. Augustine Beach, and St. Johns County are all working on their vulnerability studies required for Resilient Florida. Once complete they will move on to the adaptation plan components.
- d. Both cities and the county submitted their CRS annual reports. Nobody has any outstanding changes requested by ISO.

#### **VI. Addition of New Projects**

- a. Laura reminded the group of the two new projects from Beaches Energy that were circulated via email for support so they could attempt to utilize Hurricane Idalia's HMGP funds by the deadline. A motion to formally add these projects to the list was made by Brian Law and seconded by Jason Sparks. The motion passed.
- b. St. Johns County's Office of Intergovernmental Affairs has requested to add a seawall project to mitigate flooding along the Intracoastal in North Beach. A motion to add the project was made by Jessica Beach and seconded by Brian Law. The motion passed.

#### **VII. LMS Updates**

- a. Laura provided an update on the revisions underway for the LMS Update.
- b. A discussion was held on possible changes to the project scoring methodology.
  - The group agreed to drop the points for how many LMS goals projects address in lieu of making it a pre-requisite to being able to submit a project for scoring.
  - The group also agreed to change the population benefit question to be a proportion of the jurisdiction the project is located in versus the proportion of the total county.

- In order to better capture environmental impacts, Laura will expand the current project information sheet to include a specific box for a discussion on how proposed projects are expected to benefit or impact the environment.
  - Jason Sparks recommended holding a focus group meeting on this topic. The room agreed. Laura will send an invite to the LMS Working Group for a separate meeting. A revised prioritization method will be presented at the next LMS meeting.
- c. Laura asked the group whether the hazards quick reference appendix and the guiding principles were necessary to keep included with the next version of the plan. The group felt strongly both pieces could be removed in order to condense and more easily update the plan. Group members indicated neither piece was useful to them.

#### VIII. **Upcoming Training/Webinars**

- a. Mitigate Florida meeting is coming up on September 10<sup>th</sup> at 1:00 PM.
- b. FEMA is hosting a webinar on plan implementation September 5 from 1-2:30. This webinar is also worth 1.5 CEUs for CFMs. [Register here](#)
- c. The GTM is hosting a virtual Planning for Coastal Hazards class from the NDPTC. The course is September 19<sup>th</sup> from 1-5:00 PM. Register here: <https://ndptc.hawaii.edu/training/delivery/3775> Registration code: 84652.

#### IX. **Open Discussion**

The next LMS Working Group meetings is expected to be held on Thursday, November 21<sup>th</sup> at 9:00 at the EOC.

#### X. **Adjournment**

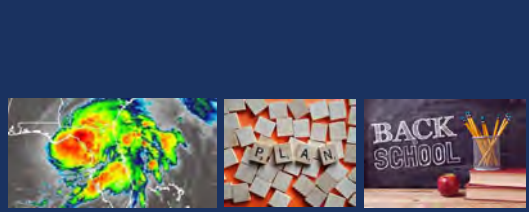
Meeting adjourned at 10:30 AM.

\* Denotes action item



## MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

AUGUST 15, 2024  
9:00 A.M.



## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

- Introductions
- Old Information
  - Approval of Minutes from May 16, 2024 LMS Working Group Meeting\*
- New Information
  - Voting Member Change\*
  - Funding Updates
  - Project/Program Updates
  - New Projects\*
  - LMS Update Cycle
    - Hazard Profile Updates
    - Project Ranking
  - Training Opportunities
- Open Discussion
- Adjournment



## ACTION ITEMS

- Approval of May 16, 2024 LMS Meeting Minutes
- Voting Member Change
  - Frank Cervasio, a voting member with St. Johns County School District has taken another position; Stephen (Steve) Pauly has taken over as the Director of Facilities and Construction

## FUNDING UPDATES

- Hurricane Ian HMGP
  - 4 projects were submitted:
    1. Barrier Island Lift Station Hardening/Elevations – **Not Eligible**
    2. Generator enhancements (upsizing) at 2 Hurricane Shelters (Bartram & Pedro Menendez High Schools) - **TBD**
    3. Stand-by Generator at Solomon Calhoun Community Center - **Withdrawn**
    4. Elevation of 3 residential properties - **TBD**
- Hurricane Nicole HMGP
  - SJC initial allocation is approximately \$1,032,764
  - Only one project submitted (Stand-by Generator at Solomon Calhoun Community Center) – **undergoing final technical review**

## FUNDING UPDATES

- Hurricane Idalia HMGP
  - St. Johns County's initial allocation \$2,768,098 (\$922,699 local match)
- Beaches Energy submitted two projects:
  1. Ft. Diego Substation Elevation and Mitigation - \$5,177,266
  2. Backup generator at Guana Substation - \$220,500
- More HMGP in FL for:
  - Tallahassee Tornadoes
  - Hurricane Debby
- Legislative Pre-Disaster Mitigation (L-PDM)
  - Must get project on congressional list then you might be invited to apply for funds.

## BRIC AND FMA

- Flood Mitigation Assistance (FMA) and Building Resilient Infrastructure and Communities (BRIC) application cycle is closed to sub-applicants
  - City of St. Augustine & SJC submitted applications for residential flood mitigation projects in 2023
  - City and County intend to apply for residential flood mitigation projects again
  - Residential outreach meetings will be held next week- August 19<sup>th</sup> - 22<sup>nd</sup>
- A Notice of Intent (NOI) was released by the Florida Division of Emergency Management
  - NOI is **Mandatory** if you intend to apply for either BRIC or FMA
  - NOI is due by 5:00 PM on August 30, 2024
  - New cycle of funding expected in mid/late summer 2024





## ELEVATING YOUR HOME THROUGH FEMA GRANTS

**Monday, August 19th - 6:00pm**  
St. Augustine City Hall - Alcázar Room  
75 King St. St. Augustine, FL 32084

**Wednesday, August 21st - 3:00pm**  
St. Johns County Wind Mitigation Building  
3111 Agricultural Center Drive, St. Augustine FL 32092

**Wednesday, August 21st - 6:00pm**  
Southeast Library Branch  
6670 US 1 South, St. Augustine, FL 32086

If you are unable to attend any of these meetings, please email Andy at [Andy@AQary@COESA.com](mailto:Andy@AQary@COESA.com) for more information.

## MY SAFE FLORIDA HOME PROGRAM UPDATES

- All initial inspections have been awarded.
- MSFH has grant funds available.
- Grant Group 3 may apply starting July 31.
- We recommend using a computer with Chrome to access your portal account online.

Hurricanes are a fact of life in Florida, and if you have the ability to harden your home without the use of grant funding, please do so immediately! Home hardening improvements are the best way to protect your home from storms and save on insurance.

- The My Safe Florida Home Condo Pilot program was appropriated \$30 million and is expected to launch in Fall 2024. [Click here](#) for more information.

## PROJECT & PROGRAM UPDATES

- Previously funded HMGP & FMA projects
  - FY 2021 – City of St. Augustine (COSA) awarded FMA grant for one mitigation reconstruction. Demolition has been completed.
  - FY 2022 – COSA's FMA Applications were "Identified for Further Review"
    - Applications cover 61 flood-prone properties
  - COVID-HMGP generator project at Freedom Crossing awaiting closeout.
- State & local funded projects
- CRS/Floodplain Updates

## ADDITION OF NEW PROJECTS

- Beaches Energy
  - Project information sheets were distributed via email to LMS Working Group to obtain support in order to apply for HMGP Idalia funds
  - Received no emails or phone calls opposing the additions
    1. Ft. Diego Substation Elevation and Mitigation - \$5,177,266
    2. Backup generator at Guana Substation - \$220,500
- St. Johns County
  - North Beach Sea Wall – \$25,000,000

## LMS UPDATES

- LMS Plan expires June 6, 2025
- FDEM requests plans be submitted 6 months prior to expiration
- Changes completed so far:
  - Condensing information where possible
  - Community profile
  - Combined hazard and vulnerability sections
  - Updated hazard information
    - Incorporated Wildfire Plan

## LMS PLAN UPDATE

- Changes still to occur:
  - Add additional information related to how hazard are changing
  - Incorporate hazards from CEMP
  - Tweaking of project ranking categories
  - Incorporating FDEP vulnerability studies and Repetitive Loss Area Analysis
- Questions for the group:
  - Do we need a hazards quick reference table?
  - Is the table of guiding principles necessary?
  - Would you like to see write ups of successful projects in the plan?

## WORKING GROUP MEMBER DUTIES

- Review community profile
- Review hazard profiles for accuracy and jurisdiction specific information
  - Provide any missing information
- Provide feedback on all plan components
- Adopt the new plan

## UPCOMING TRAININGS, MEETINGS, WEBINARS

- MitigateFL – State of Florida's Mitigation Working Group Sept 10<sup>th</sup> at 1:00  
<https://www.floridadisaster.org/dem/mitigation/statemitigationstrategy/>
- FEMA Webinar –From Policy to Action: Putting Plans to Work through Plan Implementation  
<https://www.eventbrite.com/e/putting-plans-to-work-through-plan-implementation-tickets-979776094647aff=oddtcreator>
- Virtual Planning for Coastal Hazards- September 19<sup>th</sup> from 1:00-5:00pm  
<https://ndpcr.hawaii.edu/training/delivery/3775>  
 Registration code: 84652

**MGT-486 PLANNING FOR COASTAL HAZARDS**

**WHO SHOULD TAKE THIS COURSE:**

- Planners
- Emergency Management
- Public Works
- Local Officials

**TOPICS:**

- Planning for Coastal Hazards
- Coastal Planning Process
- Emergency for Coastal Hazards Planning

**DATE:** September 19th, 2024

**TIME:** 1:00 pm - 5:00 pm ET

**THIS IS A VIRTUAL COURSE. YOU MUST ATTEND ALL OF THE COURSE RECORDING SESSIONS.**

**HOSTING AGENCY:** National Disaster Mitigation Research Center

**REGISTRATION CODE:** 84652

**REGISTRATION LINK:** <https://ndpcr.hawaii.edu/training/delivery/3775>

## OPEN DISCUSSION & 2023 LMS MEETING DATES



- February 15, 2024
- May 16, 2024
- August 15, 2024
- November 21, 2024

All meetings are Thursdays @ 9:00 am



St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
August 15, 2024



Name	Organization	Email
Laura Nelson	SJC EM	LNelson@sjcf1.us
Gavin Butler	SJC EM	gdbutle@sjcf1.us
Sasha Sanders	FDEM	Sasha.Sanders@em.mylorida.com
Don Cuevas	Beaches Energy	dcuevas@beachesenergy.com
Heith Oke	SJSD	hoke@sjso.org
Shane Lockwood	KROTH	Shane.Lockwood@krothell.com
JW Brown	SJC Growth Management	jbrown@sjcf1.us
Kelly Steffens	FCEM	KSteffens@flaglercounty.gov
Paul Rose	SJCSB	paul.rose@stjohns.k12.fl.us
Steve Pauly	SJCSB	stephen.pauly@stjohns.k12.fl.us
Jennifer Thompson	SAB	jthompson@cityofsab.org
Rog Deschler	City of St. Augustine	rdeschler@citystaug.com
Kenneth Rainer	NOAA Office Coastal Management	Kenneth.Rainer@noaa.gov
Gary Piretti	SAB	lpiretti@cityofsab.org
Jessica Beach	City of St. Aug	jbeach@citystaug.com
Brian Cal	SAB	brian@cityofsab.org

[illegible]



# LOCALiQ

## FLORIDA

PO Box 631244 Cincinnati, OH 45263-1244

### **AFFIDAVIT OF PUBLICATION**

Sjc Emergency Management  
Sjc Emergency Management  
100 Eoc Drive

Saint Augustine FL 32092

STATE OF WISCONSIN, COUNTY OF BROWN

Before the undersigned authority personally appeared, who on oath says that he or she is the Legal Coordinator of the St Augustine Record, published in St Johns County, Florida; that the attached copy of advertisement, being a Govt Public Notices, was published on the publicly accessible website of St Johns County, Florida, or in a newspaper by print in the issues of, on:

08/06/2024

Affiant further says that the website or newspaper complies with all legal requirements for publication in chapter 50, Florida Statutes.

Subscribed and sworn to before me, by the legal clerk, who is personally known to me, on 08/06/2024

Legal Clerk

Notary, State of WI, County of Brown

My commission expires

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### **PUBLIC NOTICE**

The St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 am on Thursday, August 15, 2024 at the St. Johns County Emergency Operations Center located at 100 EOC Drive, St. Augustine, FL 32092. All interested persons are invited to attend.

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.

MARIAH VERHAGEN  
Notary Public  
State of Wisconsin



St. Johns County Emergency Management  
Local Mitigation Strategy Working Group  
Project Ranking Sub-Group Meeting  
September 11, 2024

[illegible]



## St. Johns County Emergency Management

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### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: November 21, 2024 @ 9:00 AM

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, November 21, 2024, at 9:03 AM at the St. Johns County Emergency Operations Center. Laura Nelson called the meeting to order with the following members:

Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Kelly Wilson – LMS Vice Chair, St. Johns County Emergency Management  
Gavin Butler – St. Johns County Emergency Management  
Josh Saunders – Florida Division of Emergency Management  
Don Cuevas – Beaches Energy Services  
Keith Oke – St. Johns County Sheriff's Office  
JW Brown – St. Johns County Growth Management  
Kelly Steffens – Flagler County Emergency Management  
Jennifer Thompson – City of St. Augustine Beach  
Ray Deschler – City of St. Augustine  
Kenneth Rainer – NOAA Office of Coastal Management  
Brian Law – City of St. Augustine Beach  
Doug Conkey – St. Johns River Water Management District  
Tony Cubbedge – St. Johns County Utilities  
Kaitlyn Dietz – GTM Research Reserve  
Jenny Harvey – St. Johns County Housing  
Aliyah Meyer – St. Johns County Chamber of Commerce

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting.

#### II. **Approval of August 15, 2024 meeting minutes\***

Motion to approve the minutes was made by Brian Law and seconded by Keith Oke. The motion passed.

#### III. **Annual Elections**

Per the Bylaws, elections must take place annually. After a discussion about the number of St. Johns County employees on the Executive Committee, a motion was made by Brian Law and seconded by Keith Oke to replace the County Resiliency Planning Analyst position as a voting member and add Scott Maynard from the Chamber of Commerce. The motion passed and Scott accepted his new



role.

#### IV. **Funding Updates**

- a. Laura updated the group on the status of the Flood Mitigation Assistance (FMA), FMA Swift Current, Building Resilient Infrastructure and Communities (BRIC), the Hazard Mitigation Grant Program (HMGP), and the PROTECT funding programs. Additional details can be found on the attached PowerPoints.

#### V. **Project & Program Updates**

- a. St. Augustine is awaiting the contract for their 2 pending FMA awards which would include mitigating 61 residential properties.
- b. St. Johns County and St. Augustine's FMA projects for FY 2023 were both "identified for further review." This status means projects will most likely be funded.
- c. The permanent generator at Freedom Crossing Academy, a COVID-19 HMGP project is awaiting closeout.
- d. The City of St. Augustine, St. Augustine Beach, and St. Johns County are all working on their vulnerability/adaptation plans required for Resilient Florida.
- e. GTM has some funding for water level sensors. They are working out the final details and locations.
- f. Both cities and the county submitted their CRS annual reports. Nobody has any outstanding changes requested by ISO.

#### VI. **LMS Updates**

- a. Laura provided an update on the revisions underway for the LMS Update.
- b. Laura explained that some additional community demographic information was added to meet CEMP criteria and went through the remaining sections that required input.
  - A brief discussion was held on the capability assessments and the ranking method changes. The group agreed to make #8 a sliding scale for Implementation Impacts with a score of 0 for temporary disturbances or inconveniences.

#### VII. **Open Discussion**

The 2025 LMS Working Group meetings were presented. All meetings are on Thursdays at 9:00 at the EOC.

- **February 13, 2025**
- **May 8, 2025**
- **August 21, 2025**
- **November 20, 2025**

#### VIII. **Adjournment** - Meeting adjourned at 10:03 AM.

\* Denotes action item

## MIGHTY MITIGATORS' LOCAL MITIGATION STRATEGY WORKING GROUP MEETING

NOVEMBER 21, 2024  
9:00 A.M.

1

## WELCOME TO THE ST. JOHNS COUNTY LMS WORKING GROUP MEETING

- Introductions
- Old Information
  - Approval of Minutes from August 15, 2024 LMS Working Group Meeting\*
- New Information
  - Annual Elections
  - Funding Updates
  - Project/Program Updates
  - New Projects\*
  - LMS Update
    - Project Ranking
- Open Discussion
- Adjournment



2

## ACTION ITEMS

- Approval of August 15, 2024 LMS Meeting Minutes
- Annual Elections
  - Current Voting Positions:
    - Chair
    - Vice-Chair
    - St. Augustine
    - St. Augustine Beach
    - County Floodplain Manager
    - County Resiliency Planning Analyst
    - Sheriff's Office
    - St. Johns County Utilities
    - St. Johns County School District
- Any potential replacements must be in good standing (50% attendance)

3

## FUNDING UPDATES

- Hurricane Ian HMGP
  - 4 projects were submitted:
    1. Barrier Island Lift Station Hardening/Elevations – **Not Eligible-Might be eligible after all**
    2. Generator enhancements (upsizing) at 2 Hurricane Shelters (Bartram & Pedro Menendez High Schools) – **engineering has finished recommendation; undergoing final environmental review**
    3. Stand-by Generator at Solomon Calhoun Community Center - **Withdrawn**
    4. Elevation of 3 residential properties – **awaiting award**
- Hurricane Nicole HMGP
  - SJC initial allocation is approximately \$1,032,764
  - Only one project submitted (Stand-by Generator at Solomon Calhoun Community Center) – **undergoing final technical review**

4

## FUNDING UPDATES

- Hurricane Idalia HMGP
  - St. Johns County's initial allocation: \$2,768,098 (\$922,699 local match)
  - 12-month lock-in: \$2,613,428.44 (\$871,142.81 local match) (**\$154,670 less**)
  - Beaches Energy submitted two projects:
    1. Ft. Diego Substation Elevation and Mitigation - \$5,177,266
    2. Backup generator at Guana Substation - \$220,500
- More HMGP in FL for:
  - Tallahassee Tornadoes – SJC is Tier III
  - Hurricane Debby – SJC is Tier I
  - Hurricane Helene (30-day estimate is approx. \$772,000,000 statewide!) – SJC is Tier III
  - Hurricane Milton – SJC is Tier I

5

## FUNDING UPDATES

- FY 23 Flood Mitigation Assistance (FMA) and Building Resilient Infrastructure and Communities (BRIC) application cycle is closed to sub-applicants
  - City of St. Augustine and St. Johns County's residential flood mitigation projects have been "Identified for Further Review"
- New cycle of funding expected in Winter 2024-2025
- FMA Swift Current announcements coming soon
  - Expect \$40+ million for residential flood projects
- State of Florida developing a program to run residential flood mitigation projects
- PROTECT Grant- FHWA 80/20 grant Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) (Resilience Improvement, Community Resilience and Evacuation Route, and At-Risk Coastal Infrastructure grant categories). Planning grants also available at 100% federal share. Deadline Feb 24, 2025. <https://grants.gov/search-results-detail/356840>

6

## PROJECT & PROGRAM UPDATES

- Previously funded HMGP & FMA projects
  - FY 2021 – City of St. Augustine (COSA) awarded FMA grant for one mitigation reconstruction. Demolition has been completed.
  - FY 2022 – COSA's FMA Applications were "Identified for Further Review"
    - Applications cover 61 flood-prone properties
    - COVID-HMGP generator project at Freedom Crossing awaiting closeout
- State & local funded projects
  - Northeast Florida Resilient First Coast Initiative
  - CRS/Floodplain Updates

7

## LMS UPDATES

- LMS Plan expires June 6, 2025
- FDEM requests plans be submitted 6 months prior to expiration
- Changes completed so far:
  - Condensing information where possible
  - Community profile – (updated further since LMS was distributed)
  - Combined hazard and vulnerability sections
  - Updated hazard information
    - Incorporated Wildfire Plan
  - Updated ranking method
  - Appendices updated and re-ordered
- Plan distributed to LMS distribution list and posted for public comment
- Plan will be sent to FDEM at the beginning of December

8

## RECENT LMS UPDATES

- Community Profile
- Capability Assessment
  - Guiding principles vs capability assessment
  - SJC Adaptation plan capability assessment
- Ranking Method:
  - A sub-committed meeting was held on 9/11. Attendance was light
  - Comments were collected via email and incorporated
  - Open for comment on #8 – Implementation Impacts
  - Thank you everyone who sent in comments and participated in the discussions!

9

## OPEN DISCUSSION & 2024 LMS MEETING DATES



- February 15, 2024
- May 16, 2024
- August 15, 2024
- November 21, 2024

All meetings are Thursdays @ 9:00 am

10

## PROPOSED 2025 MEETING DATES

- February 13, 2025
- May 8, 2025
- August 21, 2025
- November 20, 2025

All meetings are Thursdays @ 9:00 am



11



St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
November 21, 2024



Name	Organization	Email
Laura Nelson	SJC EM	L.Nelson@sjcf1.us
Don Cuevas	Beaches Energy	dcuevas@beachesenergy.com
Scott Maynard	SJC Chamber	Scott.Maynard@sjcchamber.com
Kenneth Rainer	NOTA Office for Coastal Management	Kenneth.Rainer@noaa.gov
Keith Oke	SJC	koke@sjco.org
Jennifer Thompson	SAB	jthompson@cityofsab.org
Brian Law	SAB	blaw@cityofsab.org
Kaitlyn Dietz	GTM Research Reserve	Kaitlyn.dietz@floridadep.gov
Kelly Wilson	St. John EM	Kwilson@sjcf.us
Jenny Harvey	SJC Housing	Jharvey@sjcf.us
JW Brown	SJC Growth Man.	jbrown@sjcf.us
Josha Sanders	FDEM	Josha.Sanders@sjcf.us
Kelly Steffens	FC EM	Ksteffens@flaglercounty.gov
Aliyah Meyer	SJC Chamber	Aliyah.Meyer@sjcchamber.com
Gavin Butler	SJC EM	gdbutler@sjcf.us
Tony Cubbedge	SJC Utilities	tcubbedge@sjcf.us

[illegible]

# Local Mitigation Strategy Plan (LMS)

## Public Notices

### LMS Working Group Meeting

A special St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 A.M. on Thursday, November 21, 2024 at the Emergency Operations Center. A draft of the 2025 Local Mitigation Strategy Plan will be presented. All interested persons are invited to attend. For more information please call [\(904\) 824-5550](tel:9048245550) or email [LNelson@sjcfl.us](mailto:LNelson@sjcfl.us).

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at [\(904\) 824-5550](tel:9048245550).

### Draft Local Mitigation Strategy

A draft of the 2025 St. Johns County Local Mitigation Strategy (LMS) is available for public comment until November 25th, 2024. All comments can be emailed to [Lnelson@sjcfl.us](mailto:Lnelson@sjcfl.us) or discussed via phone at 904-824-5550. A printed copy of the plan can also be made available at the Emergency Operations Center located at 100 EOC Dr. St. Augustine, FL 32092. Please call ahead.

[2025 Draft LMS](#)

### Hazard Mitigation Grant Program

[North Beach Elevation Project – Public Notice](#)

## Overview

The Local Mitigation Strategy (LMS) is a multi-hazard plan which identifies local hazards, vulnerabilities, and potential mitigation solutions. This FEMA-approved plan is required to be eligible for federal mitigation grants and must be updated every five years.

The planning process requires the development of an LMS Working Group comprised of county staff, municipal representatives, special districts, relevant state agencies, local nonprofits, and any interested residents or businesses. The LMS Working Group meets publicly every quarter to review the plan and any new or ongoing mitigation projects. For any questions or suggestions regarding St. Johns County Local Mitigation Strategy please contact: [lnelson@sjcfl.us](mailto:lnelson@sjcfl.us).

## Hazard Mitigation Assistance

[!\[\]\(5abce1a84a655b073239ab33e1199487\_img.jpg\) FEMA Hazard Mitigation Assistance Programs](#)

## Plan

[!\[\]\(097cdd6c9c875b64d9b8c9a2409491c4\_img.jpg\) Local Mitigation Strategy](#)

[!\[\]\(f9f168a9979beed8b01f8750d577d508\_img.jpg\) St. Johns County Floodplain Management Plan 2023/2024 Annual Progress Report](#)





Resources

[Alert St. Johns](#)

[FEMA](#)

[National Weather Service](#)

Dept. Contact

Email: [SJC-EOC@sjcfl.us](mailto:SJC-EOC@sjcfl.us)

[\(904\) 824-5550](tel:9048245550)



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Sjc Emergency Management  
100 Eoc Drive

Saint Augustine FL 32092

STATE OF WISCONSIN, COUNTY OF BROWN

Before the undersigned authority personally appeared, who on oath says that he or she is the Legal Coordinator of the St Augustine Record, published in St Johns County, Florida; that the attached copy of advertisement, being a Govt Public Notices, was published on the publicly accessible website of St Johns County, Florida, or in a newspaper by print in the issues of, on:

11/08/2024

Affiant further says that the website or newspaper complies with all legal requirements for publication in chapter 50, Florida Statutes.

Subscribed and sworn to before me, by the legal clerk, who is personally known to me, on 11/08/2024

Legal Clerk

*Keegan Cleoran*  
*M. M. M.*

Notary, State of WI, County of Brown

*8.25.26*

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### **PUBLIC NOTICE**

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In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at 904-824-5550.

MARIAH VERHAGEN  
Notary Public  
State of Wisconsin



## St. Johns County Emergency Management

---

### Minutes

St. Johns County  
Local Mitigation Strategy Working Group  
Meeting: February 13, 2025 @ 9:00 AM

A meeting of the St. Johns County Local Mitigation Strategy Working Group was held Thursday, February 13, at 9:03 AM at the St. Johns County Emergency Operations Center. Laura Nelson called the meeting to order with the following members:

Laura Nelson – LMS Chairperson, St. Johns County Emergency Management  
Kelly Wilson – LMS Vice Chair, St. Johns County Emergency Management  
Don Cuevas – Beaches Energy Services  
Keith Oke – St. Johns County Sheriff's Office  
JW Brown – St. Johns County Growth Management  
Kelly Steffens – Flagler County Emergency Management  
Jennifer Thompson – City of St. Augustine Beach  
Brian Law – City of St. Augustine Beach  
Tony Cubbedge – St. Johns County Utilities  
Kaitlyn Dietz – GTM Research Reserve  
Jenny Harvey – St. Johns County Housing  
Ryan King – UF Health Flagler  
Stephen Pauly – St. Johns County School District  
Jack Mitchell – St. Johns County CRA  
Jessica Beach – City of St. Augustine  
Jason Sparks – City of St. Augustine Beach

#### I. **Introductions**

Laura Nelson welcomed everyone to the meeting.

#### II. **Approval of November 21, 2024 meeting minutes\***

Motion to approve the minutes was made by Brian Law and seconded by Tony Cubbedge. The motion passed.

#### III. **Funding Updates**

- a. Laura updated the group on the status of the Flood Mitigation Assistance (FMA), FMA Swift Current, Building Resilient Infrastructure and Communities (BRIC), Hazard Mitigation Grant Program (HMGP), PROTECT, Hurricane Loss Mitigation Program (HLMP), and the Elevate Florida funding programs. Additional details can be found on the attached PowerPoints and the flyers.

IV. **Project & Program Updates**

- a. Project updates can be found on the attached slides.
- b. Jessica Beach spoke briefly about the Northeast Florida Resilient First Coast Initiative meeting occurring in Jacksonville on February 19<sup>th</sup>.
- c. The County and Cities are preparing for CRS recertifications and Flood Awareness Week.

V. **LMS Updates**

- a. Laura provided an update on the review and revision process for the LMS Update.
- b. The LMS is currently with FDEM for a 2<sup>nd</sup> review and posted online for further public comment.
- c. Laura advised the participating jurisdictions once FDEM finds the plan acceptable that they will be notified to take the plan to their governing boards for adoption.

VI. **Open Discussion**

- a. St. Johns County Utilities is watching for potential legislative impacts that could occur because of the upcoming Session. So far there is one weather-related law proposed regarding disconnecting utilities. Tony will continue to monitor the status.

VII. **Adjournment** - Meeting adjourned at 10:00 AM.

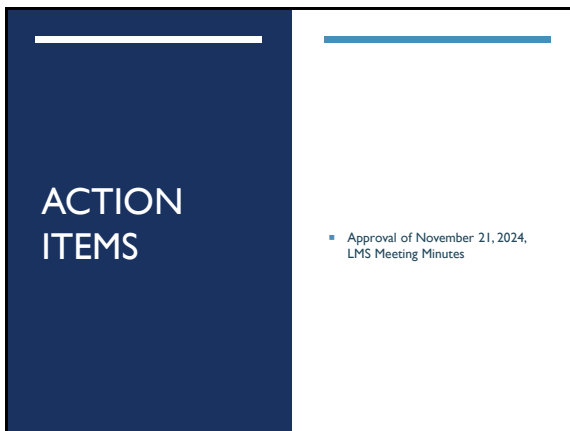
\* Denotes action item



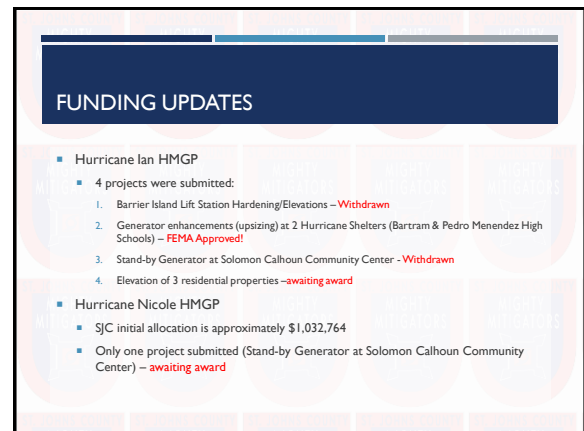
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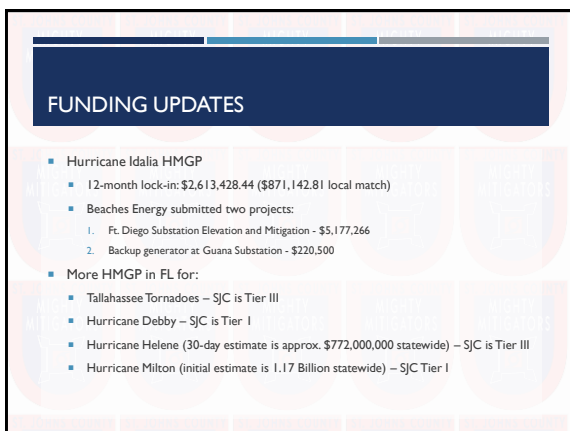
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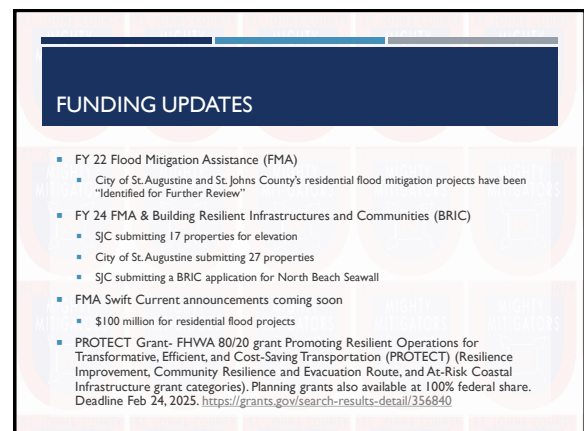
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6

## FUNDING UPDATES

- Hurricane Loss Mitigation Program (HLMP)
  - Currently accepting Notices of Intent
  - Applications are expected to go live 2/28-4/14
  - State grants up to \$250,000; 100% state funded (no local cost share)
  - Common eligible items include:
    - Wind retrofits (residential/non-res)
    - Tree trimming
    - Property acquisition & demolition
    - Localized flood risk reduction
- Elevate Florida
  - New Residential State-run program using federal money

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## MITIGATION

ELEVATE  
FLORIDA

### Elevate Florida Application Portal is Now Live!

- Apply online: <https://fdem-resmit.my.site.com/Elevate/>
- Call Center: 1-877-ELEV8-FL (877-353-8835)
- Email Support: [info@elevatefl.org](mailto:info@elevatefl.org)
- How to Apply:
  - Fill out an application online
  - Contact the Call Center for assistance
- Available Resources on the Portal Landing Page:
  - Homeowner Participant Guide
  - Application Checklist
  - FAQ
- Subscribe to receive future communications by selecting Residential Mitigation Communications at <https://www.FloridaDisaster.org/Subscription-Topics/>

8

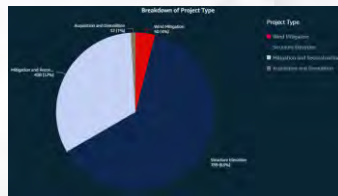
## MITIGATION

ELEVATE  
FLORIDA

- 407 calls into the call center.
- 1,259 unique applications have been submitted and 1,494 were saved in draft.

### Overall

- Applicants representing 30 counties have submitted applications.
- Almost 60% of submitted applications identified NFIP insurance.
- 95% of submitted applications statewide are for mitigation reconstruction and structural elevations.
- Pinellas, Lee, and Pasco counties make up close to 70% of the total applications submitted statewide.



\* As of 2/10/25

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## PROJECT & PROGRAM UPDATES

- Previously funded HMGP & FMA projects
  - FY 2021 – City of St. Augustine (COSA) awarded FMA grant for one mitigation reconstruction. Demolition has been completed.
  - FY 2022 – COSA's FMA Applications were "Identified for Further Review"
    - Applications cover 61 flood-prone properties
  - COVID-HMGP generator project at Freedom Crossing awaiting closeout
- State & local funded projects
  - Northeast Florida Resilient First Coast Initiative
    - Full collaborative meeting February 19<sup>th</sup> from 10-12:00 - Jessie Ball DuPont Center, Room 208, 40 East Adams Street, Jacksonville, FL 32202
- CRS/Floodplain Updates

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## LMS UPDATES

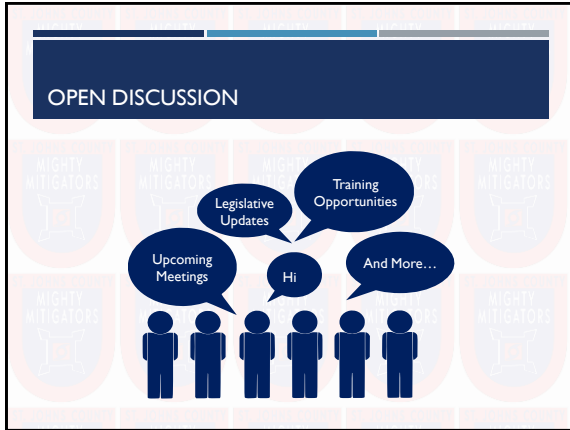
- LMS Plan expires June 1, 2025
- Plan was submitted to FDEM for review; revisions were requested.
- Revisions have been completed and the plan was resubmitted
- A draft copy of the plan is on the website
- Recent changes include:
  - Adding more to capabilities section
  - Adding more about future vulnerability
  - Including a scale for probability
  - Adding more about integrating the LMS into planning mechanisms
  - Small clarifications

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## LMS FUTURE ACTIONS

- Upon receiving notification of Approved Pending Adoption, Laura will post final version of plan to website
- Each "jurisdiction" will need to adopt the plan by resolution by June 1 to avoid potential funding delays
- Jurisdictions include:
  - City of St. Augustine Beach
  - City of St. Augustine
  - St. Johns County School District
  - St. Johns County
  - Beaches Energy/Jacksonville Beach

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13



14



# ELEVATE FLORIDA

Elevate Florida is a first-of-its-kind, groundbreaking statewide residential mitigation program. Led by the Florida Division of Emergency Management (FDEM), this program is designed to protect homes and communities by reducing damage caused by natural disasters like hurricanes and floods.

## Benefits For Property Owners

Elevate Florida expedites the process and completes a resident's mitigation project the following ways:

- May reduce insurance premiums
- Can increase property value
- With only a cost-share up to 25 percent, much of the project cost is covered
- Enjoy end-to-end assistance, from application to construction, including contractor services, temporary housing support, and Americans with Disabilities Act (ADA) accommodations

## Property Owner Eligibility

To become a potential customer of the Elevate Florida program, applicants must:

- Be over 18
- Be a U.S. citizen
- Contribute a portion of the project's total cost
- Be the legal property owner of a residential property in the State of Florida

Multi-family real estate such as duplexes, triplexes, condos, townhomes, semi-detached homes, apartments and manufactured homes may be eligible.

## Eligible Projects



### Structure Elevation

Physically raising an existing structure.



### Mitigation Reconstruction

The construction of an improved, elevated building on the same site where an existing building and/or foundation has been partially or completely demolished or destroyed. These activities result in the construction of code-compliant and hazard-resistant structures. Mitigation Reconstruction is the alternative to Structure Elevation when the structure is not sound enough to elevate, as determined during application review.



### Acquisition/Demolition

A structure is purchased from voluntary sellers and demolished, to be maintained by the local community as open space. The local community must agree to participate in this project type.



### Wind Mitigation

Measures that reduce the risk of future wind damage to structures. This may include alterations to roofs, windows, doors, and other vulnerable components of structures.



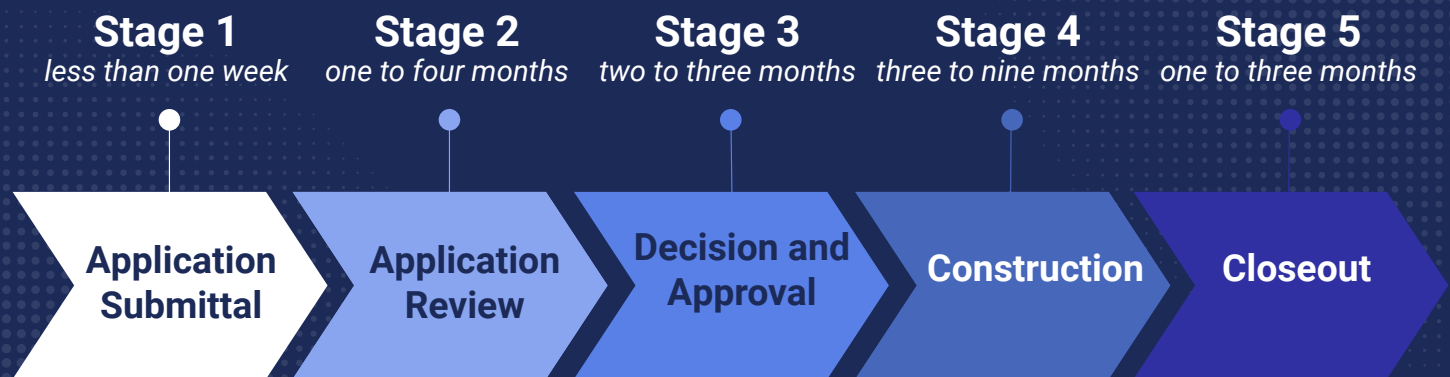
## Application

Create an account and complete the application on the Elevate Florida Portal at [fdem-resmit.my.site.com/Elevate/](https://fdem-resmit.my.site.com/Elevate/).

For questions, technical support, or application assistance, submit a “Contact Us” form at the Elevate Florida Portal or email [info@elevatefl.org](mailto:info@elevatefl.org). You can also call the contact center Mon-Fri, 7 a.m.-7 p.m. EST at **877-ELEV8FL (877-353-8835)**.

## Project Timeline

Timelines vary based on project type, with some projects taking up to two years. There are five stages with estimated time periods of:



The property does not need to have experienced flooding or damage in the past to be considered. However, applications may be prioritized based on history of loss.

## Funding and Cost-share

Federal grant funding will cover at least 75 percent of the project cost, meaning property owners only need to invest up to 25 percent—a significant savings.

- Property owners will be required to provide up to 25 percent of initial inspection costs prior to inspections being completed.
- The total construction cost for each property will be determined during the initial review period based on factors such as project type, square footage of living space, foundation and construction type, and any necessary project activities.
- Approved property owners will receive a detailed breakdown of their construction cost-share and will have time to decide if they would like to move forward with the project's next phase.
- The cost-share will also include relocation expenses during construction, meaning the program will pay at least 75 percent of these expenses.

For more information, visit the **Elevate Florida Portal** and view our frequently asked questions.





# MITIGATION

## HURRICANE LOSS MITIGATION PROGRAM Fiscal Year 2025-2026 Application Cycle

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### **PURPOSE:**

The Florida Division of Emergency Management (FDEM) is soliciting applications for the State Fiscal Year 2025–2026 Hurricane Loss Mitigation Program (HLMP). The Legislature provides the Division with Hurricane Loss Mitigation funds through section 215.555(7)(c), Florida Statutes. HLMP is a specialized, state-funded mitigation program aimed at minimizing damage caused by hurricanes. Provided by the Florida Hurricane Catastrophe Trust Fund, the program funds activities that promote structure resiliency.

The application process for HLMP has changed and is outlined below.

### **COMMON ELIGIBLE ACTIVITIES:**

Eligible project types under the HLMP include:

- Residential/Non-Residential Wind Retrofit
- Tree Trimming
- Property Acquisition and Demolition
- Localized Flood Risk Reduction

### **INELIGIBLE EXPENSES:**

Ineligible expenses under the HLMP include:

- Work on non-site-built homes
- Equipment purchases
- Generators and related wiring
- Work on mobile or manufactured homes
- Work on a portion of a structure connected to a non-mitigated structure

### **ALLOCATION AND COST SHARE:**

Total HLMP Funding for FY 2025-2026: \$3,500,000.00

Each applicant may submit one application totaling no more than \$250,000.00. HLMP is 100 percent state funded with no local cost share. Additionally, HLMP is a cost-reimbursement grant with up to 100 percent of total project costs eligible for reimbursable.

*HLMP FY 25-26*



# MITIGATION

## **ELIGIBLE APPLICANTS:**

Government entities (cities and counties), Nonprofit organizations, and public and private education institutions. For Government entities, only 1 project can be awarded for each city and county.

## **PERIOD OF PERFORMANCE:**

The period of performance will begin upon the issuance of an Award Letter (no earlier than July 1<sup>st</sup>, 2025) and be effective through June 30, 2026. More information about the application and award process is outlined below.

## **APPLICATION PROCESS:**

All HLMP notifications will be announced through FDEM's GovDelivery communications via [Mitigation Grant Announcements](#).

For FY 2025-2026, the application process for submitting applications has changed. A Notice of Interest (NOI) period will precede the official application period in which applications are due for funding consideration. Completion of the NOI Form and applicable supporting documentation is not required but it is highly recommended to receive feedback on the proposed project prior to submitting an official application. The NOI submission period will remain open for 30 days and responses from FDEM shall be provided up to one week after the NOI period closes. Submission of an NOI form does not guarantee an award.

Following the NOI period, a Notice of Funding Availability (NOFA) will be published with the application details and deadline. Application materials and information will also be posted to the [HLMP webpage](#). Only complete applications will be accepted. The application period will remain open for 45 days.

Application review will occur immediately following the deadline outlined on the NOFA. Each application will be reviewed for programmatic eligibility, feasibility, and cost effectiveness. After scoring and ranking approved applications, Notice of Award letters will be issued to awarded applicants and FDEM will begin contracting.

## **RESOURCES AND CONTACT INFORMATION:**

FDEM HLMP details and applicable forms can be found at <https://www.floridadisaster.org/dem/mitigation/hurricane-loss-mitigation-program/>.

Questions may be directed to [HLMP@em.myflorida.com](mailto:HLMP@em.myflorida.com).

*HLMP FY 25-26*



St. Johns County Emergency Management  
Local Mitigation Strategy Working Group Meeting  
February 13, 2024



Name	Organization	Email
Laura Nelson	SJC EM	LNelson@sjcf1.us
Ryan King	UF Health Flagler	ryan.king@ufhealth.org
Don Culebras	Becker's Energy Services	dlecum@beckerenergy.com
Keith Oke	SSSO	koke@ssso.org
Brian Law	COSAB	blaw@cityofsab.org
Jennifer Thompson	COSAB	jthompson@cityofsab.org
Stephen Pauly	SSCSO FACILITIES	stephen.pauly@stjohns.k12.fl.us
Kelly Wilson	SS-EM	Kwilson@sjcf1.us
Kaitlyn Dietz	GTINERK	kaitlyn.dietz@floridadep.gov
Kelly Stoffer	FCFM	kstoffer@flaglercounty.gov
JW Brown	SJC Growth Man.	jwbrown@sjcf1.us
Jenny Harvey	SJC HOUSING	jharvey@sjcf1.us
Jack Mitchell	SJC ECONOMIC DEV	jmitche@sjcf1.us
Jessica Beacon	City of St. Augustine	jbeacon@citystaug.com
Fany Colangelo	SSC Utility	twackel@sjcf1.us
Mark P. Pugh	CITY OF SAB	SPARKS@CITYOFSAB.ORG

## Local Mitigation Strategy Plan (LMS)

### Public Notices

#### LMS Working Group Meeting

A special St. Johns County Local Mitigation Strategy Working Group meeting will take place at 9:00 A.M. on Thursday, February 13, 2024 at the Emergency Operations Center. A draft of the 2025 Local Mitigation Strategy Plan will be presented. All interested persons are invited to attend. For more information please call [\(904\) 824-5550](tel:904-824-5550) or email [LNelson@sjcfl.us](mailto:LNelson@sjcfl.us).

In accordance with the Americans with Disabilities Act, persons needing special accommodations to participate in the proceedings should contact St. Johns County Emergency Management at [\(904\) 824-5550](tel:904-824-5550).

#### Draft Local Mitigation Strategy

A draft of the 2025 St. Johns County Local Mitigation Strategy (LMS) is available for public comment until November 25th, 2024. All comments can be emailed to [LNelson@sjcfl.us](mailto:LNelson@sjcfl.us) or discussed via phone at 904-824-5550. A printed copy of the plan can also be made available at the Emergency Operations Center located at 100 EOC Dr. St. Augustine, FL 32092. Please call ahead.

[2025 Draft LMS](#)

### Hazard Mitigation Assistance

[FEMA Hazard Mitigation Assistance Programs](#)

### Plan

[Local Mitigation Strategy](#)

[St. Johns County Floodplain Management Plan 2023/2024 Annual Progress Report](#)

### Resources

[Alert St. Johns](#)

[FEMA](#)

[National Weather Service](#)



# **APPENDIX C:**

## **LMS Working Group Bylaws**



**St. Johns County  
Local Mitigation Strategy Working Group**

**BYLAWS**

**ARTICLE I: PURPOSES OF THE WORKING GROUP**

The purpose of the St. Johns County Local Mitigation Strategy (LMS) Working Group is to decrease the vulnerability of the citizens, governments, business and institutions of the county to the future human, economic and environmental costs of natural and technological disasters. The Working Group will develop, monitor, implement and maintain a comprehensive plan for hazard mitigation, which will be intended to accomplish this purpose.

**ARTICLE II: MEMBERSHIP**

Participation in the Working Group is voluntary by all entities. Membership in the Working Group is open to the various agencies of county government and all municipalities within the county, state government agencies, private organizations, civic organizations, water management districts, regional planning councils, independent special districts, businesses, non-profit organizations and individuals supporting its purpose.

A member in good standing is one who has attended at least 50% of the meetings during the last 12 months.

**ARTICLE III: ORGANIZATIONAL STRUCTURE**

The organizational structure of the Working Group shall consist of the Executive Committee, county support staff, and other temporary subcommittees as deemed necessary by the Working Group.

The Executive Committee shall consist of representatives of the following:

- Representatives from the government of St. Johns County, each participating incorporated municipality, and participating special taxing districts. St. Johns County and each municipality will have at least one representative on the Executive Committee at all times.
- Representatives from organizations and associations representing key business, industry, and community interest groups of St. Johns County.

The Executive Committee shall be comprised of 9 members, including a Chairperson and Vice-Chairperson, who shall have the authority to approve items concerning the LMS Working Group.



The Executive Committee shall be elected from the members of the LMS Working Group who attend at least 50% of the regular LMS Working Group meetings annually. In the event an Executive Committee member fails to maintain this record that member may be replaced by a vote of the full LMS Working Group.

The members shall be elected for terms of 1 year and be eligible for re-election for an unlimited number of terms. Election of the Executive Committee shall coincide with the election of the LMS Chairperson and Vice Chairperson who shall automatically be on this committee.

Any member in good standing of the LMS Working Group, attendance of at least 50% of the regular Working Group meetings annually, is eligible for election as the Chairperson or Vice-Chairperson. The Chair and Vice-Chair will be elected by a majority vote of the Working Group membership. Each shall serve a term of one year and be eligible for re-election for an unlimited number of terms.

The Chairperson will preside over each meeting of the LMS Working Group, as well as establish temporary subcommittees and assign personnel to them if necessary. The Vice Chairperson will fulfill the duties and responsibilities of the Chairperson in his or her absence. Members of the Executive Committee may designate a proxy to fulfill their duties in the event of their absence.

St. Johns County Emergency Management staff will serve as program staff, provide technical support, and assist in the coordination of the Working Group.

Temporary subcommittees may be established at any time for special purposes by the Chairperson of the Working Group.

#### **ARTICLE IV: RESPONSIBILITIES**

The Executive Committee will be responsible for oversight and coordination of all actions and decisions by the LMS Working Group and is solely responsible for formal actions in the name of the LMS Working Group, including the release of reports, development of resolutions and similar activities.

The LMS Working Group shall have the following responsibilities:

##### **Planning**

- Develop and revise a Local Mitigation Strategy as necessary, to coordinate mitigation activities within the County;
- Set an order of priority for local mitigation projects and to submit annual LMS updates to the Florida Division of Emergency Management as required.

- Identify, analyze and monitor the hazards threatening St. Johns County and the vulnerabilities of the community to those hazards, and assist in the definition of actions to mitigate the impacts of those hazards;
- Define structural and non-structural actions needed to decrease the human, economic and environmental impacts of disasters, and plan a strategy for implementation of those initiatives in both the pre- and post-disaster time frame;
- Define the general financial vulnerability of the community to the impacts of disasters;
- Assist with identification of initiatives to minimize vulnerabilities; and
- Seek funding sources for all priority mitigation initiatives identified in the Local Mitigation Strategy.

### **Public Information**

- Secure public input and comment on the efforts of the Working Group;
- Inform the public about the activities of the Working Group;
- Conduct public information and education programs regarding hazard mitigation;
- Promote public acceptance of the strategy developed by the Working Group; and
- Promote disaster preparedness and mitigation at the community and individual level through partnerships and volunteerism.

## **ARTICLE V: ACTIONS BY THE EXECUTIVE COMMITTEE**

### **A. Authority for Actions**

Only the Executive Committee has the authority to take final actions in the name of the LMS Working Group. Actions by subcommittees or program staff are not considered as final until affirmed by action of the Executive Committee.

### **B. Meetings, Voting and Quorum**

Meetings will be conducted in accord with the most current Robert's Rules of Order. At a minimum, the Working Group will meet annually. Additional meetings may be scheduled quarterly or semi-annually based on the needs or as requested by the any of Executive Committee members. All meetings will be publicly advertised with a minimum of 10 days' notice.

All final actions and decisions made in the name of the LMS Working Group will be by affirmative vote of a quorum of the Executive Committee. A quorum shall consist of at least 7 voting members present. Each member shall have one vote.

### **C. Public Hearings**

When required by statute or the policies of St. Johns County, or when deemed necessary by the Executive Committee, a public hearing regarding actions under

consideration for implementation by the LMS Working Group will be held. Members of the public shall have the opportunity to be heard on all propositions that come before the LMS Working Group, Executive Committee, or any subcommittees.

**D. Documentation of Actions**

All meetings and other forms of action by the Working Group, Executive Committee, and subcommittees will be documented and made available for inspection by the public.

**E. Public Records and Government in the Sunshine Law**

The LMS Working Group, the Executive Committee, and any subcommittees will be subject to the requirements of Florida's Public Records Law and Government in the Sunshine Law. All meetings of the LMS Working Group, the Executive Committee, and any subcommittee shall be advertised, open to the public, and minutes shall be taken.

**ARTICLE VI: ADOPTION AND AMENDMENTS TO THE BYLAWS**

The Bylaws of the LMS Working Group may be adopted and/or amended by a two-thirds majority vote of the members in good standing of the Executive Committee. All proposed changes to the bylaws will be provided to each member of the Executive Committee not less than ten working days prior to such a vote.

**ARTICLE VII: DISSOLUTION OF THE WORKING GROUP**

The LMS Working Group may be dissolved by affirmative vote of two-thirds majority of the members of the Executive Committee, by order of a court of competent jurisdiction, and/or by instruction of the St. Johns County Board of County Commission. At the time of dissolution, all remaining documents, records, equipment and supplies belonging to the LMS Working Group will be transferred to St. Johns County for retention or disposition in accordance with the requirements of Florida's Public Records Law.

# **APPENDIX D:**

## Mitigation Project Lists

St. Johns County Local Mitigation Strategy Ranked Project List								
Project	New or Existing Structure/ Infrastructure	Jurisdiction*	Responsible for Project Implementation**	Hazard****	Project Time-Frame	Potential Funding Source	Estimated Project Cost	Project Status
<b>Education and Training</b>								
Educate Prospective Home Buyers & Real Estate Professionals About Floodplains & Base Floor Elevations	New and Existing	ALL	SJC Emergency Management	SS, F	on-going	Local	\$10,000/annual	On-going
Educate Residents of Financial/Insurance Benefits of Preparing their Homes for Natural Disasters	New and Existing	ALL	SJC Emergency Management	ALL	on-going	Local	\$10,000/annual	On-going
<b>Expand/Enhance/Improve Utilities</b>								
City of St. Augustine Pump Station 20 Basin Improvements (Fullerwood)	Existing	City of St. Augustine	COSA Public Works	H, SS, SLR	3 years	HMGP	\$ 2,000,000	Not started
Conversion of power lines from overhead to underground to increase infrastructure resiliency - Bulter substation to Guana Substation	Existing	Beaches Energy	Beaches Energy	H, HW, T, W, FR	3 years	BRIC	\$ 14,000,000	Not started
Cured-In-Place-Pipe lining of Santiary Sewer Laterals	Existing	City of St. Augustine	COSA Public Works	F, SS, SLR	1-2 years	Local	\$ 8,825,000	Started under CIP, I&I program
Cured-In-Place-Pipe lining of Santiary Sewer Gravity Mains	Existing	City of St. Augustine	COSA Public Works	F, SS, SLR	1-2 years	Local	\$ 9,300,000	Started under CIP, I&I program
Expansion of City of St. Augustine Water Treatment Facility	Existing	City of St. Augustine	COSA Public Works	H, SS, F, D	2 years	Local	\$ 1,000,000	Not started
Manhole Lid Inserts - Reduction of Infiltration & Inflow to the City's Sanitary Sewer System	Existing	City of St. Augustine	COSA Public Works	F, SS, SLR	1 year	Local	\$ 760,000	in-progress under CIP
Rehabilitation of existing sewer system in Oyster Creek	Existing	City of St. Augustine	COSA Public Works	SS, F	3-4 years	Local, CDBG		Not started
Hastings Sewer Improvements	Existing	St. Johns County	SJC Utilities	F, D	3-4 years	CDBG-DR	\$ 1,000,000	In Progress - estimate finish Dec 2022
Seal and Coat Sanitary Sewer Manholes to prevent groundwater infiltration	Existing	City of St. Augustine	COSA Public Works	F, SS, SLR	In-progress	Local	\$ 3,260,000	Started under CIP, I&I program
Barrier Island Lift Station Mitigation	Existing	St. Johns County	SJC Utilities	F, SLR, SS	3 years	non federal	\$ 1,285,000	withdrawn from HMGP. Looking for other funding
Barrier Island Force Main Improvements	Existing	St. Johns County	SJC Utilities	SS, F, SLR	5 years	HMGP, local, utilities	\$ 750,000	
Ft. Diego Substation Elevation and Mitigation	Existing	St. Johns County	Beaches Energy	SS, F, SLR	5 years	HMGP	\$ 5,177,266	New - Submitted under HMGP Idalia
<b>Flood/Repetitive Loss Mitigation</b>								
Acquisition of property from willing sellers along Old A1A Summerhaven	Existing	St. Johns County	St. Johns County Environmental	H, SS, F, SLR	1-2 years	HMGP, Local	\$ 10,000,000	On-going
Acquisition at Petty Branch Ravine Park (FCT Project)	Existing	St. Johns County	SJC Parks and Recreation	F	1 year	Local	\$ 2,000,000	Not started
Flood Mitigation at Avenida Menendez Seawall, Connectivity Project	Existing	City of St. Augustine	COSA Public Works	F, SS, SLR	1-3 years	HMGP; FIND	\$ 1,475,000	waiting phase II approval
Flood Mitigation on Repetitive Loss Properties	Existing	St. Johns County	SJC EM & Quality Engineering	F, SS	4 years	Private, FMA	\$ 2,484,401	Submitted 11 properties under 2023 FMA
COSA Davis Shores Residential Elevations 2022	Existing	City of St. Augustine	COSA Public Works	FF, SS, H, SLR	3 years	Private, FMA	\$ 10,102,914	61 properties Approved under FMA 2022 cycle
COSA Davis Shores Residential Elevations 2023 Application	Existing	City of St. Augustine	COSA Public Works	FF, SS, H, SLR	4 years	Private, FMA	\$ 2,271,087	Additional 10 properties submitted
Flood Mitigation on South Whitney and W. King St.	Existing	City of St. Augustine/SJCO	COSA Public Works	H, SS, F, SLR	3 years	HMGP	\$ 1,800,000	Approved, preparing for construction
Purchase of Portable Pump to Reduce Flooding Impacts within the City of St. Augustine Beach	New	City of St. Augustine Beach	COSAB Public Works	H, SS, F, SLR	1 year	CDBG-MIT	\$ 35,000	Not started
Alcazar Hotel Floodproofing (flood wrap & flood gates) and landscaping (cisterns)	Existing	City of St. Augustine	COSA Public Works	SS, F, SLR	3 years	HMGP, Local, CDBG-MIT	\$ 2,040,000	
Llambias House Flood Mitigation and Resiliency	Existing	City of St. Augustine	COSA Public Works	SS, F, SLR	3 years	HMGP, Local, CDBG-MIT	\$ 135,000	
Elevation of a Repetitive Flood Loss Property at 4** Arricola Avenue	Existing	City of St. Augustine	COSA Public Works	SS, F, SLR	4 years	FMA	\$ 428,813	Didn't meet BCA for FMA 2020
Demolition and Reconstruction of a Repetitive Flood Loss Property at 5** Arricola Avenue	Existing	City of St. Augustine	COSA Public Works	SS, F, SLR	5 years	FMA	\$ 397,000	Funded - in progress
Stormwater Resiliency Improvements Ocean Walk Subdivision	Existing	City of St. Augustine Beach	COSAB Public Works	SS, F, SLR	3 years	HMGP	\$ 694,000	Funded by State of FL legislative allocation
CR A1A Storm Surge Progection	Existing	City of St. Augustine Beach	COSAB Public Works	SS, F, SLR	4 years	HMGP	\$ 270,000	in Phase II review
Stormwater Pump Station for Coquina Ditch in S. Davis Shores	Existing	City of St. Augustine	COSA Public Works	F, SS, SLR	3 years	HMGP, BRIC, Local	\$ 2,000,000	newly identified
Smart Valve System for S. Davis Shores	Existing	City of St. Augustine	COSA Public Works	F, SS, SLR	3 years	HMGP, BRIC, Local	\$ 600,000	newly identified

Project	New or Existing Structure/ Infrastructure	Jurisdiction*	Responsible for Project Implementation**	Hazard****	Project Time-Frame	Potential Funding Source	Estimated Project Cost	Project Status
Phase 1 Flood Barrier for S. Davis Shores	Existing	City of St. Augustine	COSA Public Works	F, SS, SLR	3 years	HMGP, BRIC, Local	\$ 6,936,000	newly identified
Drainage Improvements for S. Davis Shores	Existing	City of St. Augustine	COSA Public Works	F, SS, SLR	3 years	HMGP, BRIC, Local	\$ 1,608,800	11/6/23 under contract negotiations
Elevation of 409 Fourtheeth Street	Existing	St. Johns County	St. Johns County EM	F, SS, SLR	3 years	HMGP, FMA	\$ 1,145,489	Submitted under lan as one project
Elevation of 413 16th Street	Existing	St. Johns County	St. Johns County EM	F, SS, SLR	4 years	HMGP, FMA		
Elevation of 506 14th Street	Existing	St. Johns County	St. Johns County EM	F, SS, SLR	5 years	HMGP, FMA		
<b>Hazardous Materials Mitigation</b>								
Education and Training for Hazardous Materials Incident Response Capability	Existing	St. Johns County	St. Johns County Fire Rescue	HM	on-going	Local, State, LEPC	\$ 10,000	On-going
<b>Infrastructure and Structure Improvements</b>								
Electrical Connections for Emergency Standby Generators - FR Stations 9/10/6/7	Existing	St. Johns County	SJC Fire Rescue	ALL	1 year	HMGP, Local	\$ 60,000	Not started
Emergency Standby Generator at SJC Council on Aging Senior Center	Existing	City of St. Augustine	SJC Council on Aging	H, SS, HW, T, F	1 year	HMGP	\$ 100,000	As of 1/9/25 still interested
Emergency Standby Generators for Fire Stations 4 and 12	Existing	St. Johns County	SJC Fire Rescue	ALL	1 year	HMGP, Local	\$ 180,000	Not started
Emergency Standby Generator for UF Health St. Johns	Existing	St. Johns County	UF Health St. Johns	H, SS, HW, F	3 years	HMGP	\$ 1,500,000	Not started
Flood Mitigation and Resiliency Improvements at Inlet Dr.	New	City of St. Augustine	COSA Public Works	H, SS, F, SLR	2 years	Resilient FL (FDEP)	\$ 772,000	12/20/23 under contract negotiations
Flood Proofing and Wind Mitigation at Fire Station 6 – Crescent Beach	Existing	St. Johns County	SJC Facilities Maintenance	F, HW, SS	1 year	HMGP	\$ 31,000	Not started
Install Shutters on St. Johns County Fire Station #7	Existing	St. Johns County	St. Johns County FR	H, HW	6 months	Local	\$ 50,000	Not started
Install Hurricane Shutters at SJC Council on Aging Senior Center	Existing	City of St. Augustine	SJC Council on Aging	H, HW, T	1 year	HMGP	\$ 50,000	Not started
Sea Level Rise Adaptation and Planning: NOAA National Water Level Observation Network	New	ALL	COSA Public Works	H, SS, F, SLR	1	HMGP, CDBG-MIT, FMA	\$ 210,000	Not started
South Dixie Highway Improvements	Existing	City of St. Augustine	COSA Public Works	F	3 years	Local, Federal	\$ 8,000,000	Phase 1 completed for box culvert replacement & elevation out of floodplain, Phase 2 would be remaining road- not started
Upgrade Signalization at A1A and L'Atrium Drive	New	St. Johns County	St. Johns County Public Works	H, HW, FR	6 months	HMGP	\$ 500,000	Not started
Upgrade Signalization at A1A and Marlin Avenue	New	St. Johns County	St. Johns County Public Works	H, HW, FR	6 months	HMGP	\$ 500,000	Not started
Upgrade Signalization at A1A and PGA Tour Boulevard	New	St. Johns County	St. Johns County Public Works	H, HW, FR	6 months	HMGP	\$ 500,000	Not started
Upgrade Signalization at A1A and Ponte Vedra Lakes	New	St. Johns County	St. Johns County Public Works	H, HW, FR	6 months	HMGP	\$ 500,000	Not started
Permanent Emergency Standby Generator for Special Needs Shelter at Freedom Crossing Academy	Existing	St. Johns County	SJC EM	H, SS, HW, T, F	1 year	HMGP - COVID	\$ 315,157	Generator delivered 4/19/24
City of St. Augustine Beach Drainage Improvements on 7th, 8th and 9th Streets	Existing	City of St. Augustine Beach	COSAB Public Works	F, SLR, SS	3 years	Legislative funds	\$ 150,000	withdrawn from HMGP; moving forward w/ legislative allocation
Standby Generator for Post-disaster sheltering at Solomon Calhoun Community Center	Existing	St. Johns County	SJC Emergency Mgmt	ALL	3 years	HMGP	\$ 716,255	Submitted under lan and as Nicole's #1 project
Generator upgrades at Pedro Menendez and Barttram Trail high schools	Existing	St. Johns County	School District	H, HW, T	3 years	HMGP	\$ 4,500,460	Submitted under lan
Generator at Guana Substation	Existing	St. Johns County	Beaches Energy	ALL	5 years	HMGP	\$ 220,500	Submitted as Tier II under Idalia
<b>Master Drainage Improvement</b>								
16 Mile Creek Surface Water Improvements	Existing	St. Johns County	SJC Public Works & FERWD	F	5 years	State, Local	\$ 1,000,000	Started
Deep Creek Conveyance Improvements	Existing	St. Johns County	SJC Public Works	F	3 years	HMGP	\$ 1,500,000	withdrawn from Irma HMGP
Drainage Improvement and Flood Mitigation of Ct Theophelia Neighborhood	Existing	City of St. Augustine	COSA Public Works	F, SLR	1-2 years	Resilient FL (FDEP)	\$ 1,000,000	Design underway approaching 30% as of 11/7/23
Drainage Improvements around Anastasia Baptist Church	Existing	St. Johns County	SJC Public Works	H, SS, F, SLR	3 years	HMGP	\$ 1,500,000	Started per update on 4/19/24
Drainage Improvements on CR 13 N	Existing	St. Johns County	SJC Public Works	F, SS	1 year	HMGP	\$ 1,500,000	withdrawn from Irma HMGP
Drainage Improvements at Frances Rd.	Existing	St. Johns County	SJC Public Works	F	1 year	HMGP	\$ 400,000	In progress 4/19/24
Drainage Improvements at Lightsey Rd.	Existing	St. Johns County	SJC Public Works	F	1 year	HMGP	\$ 140,000	Not started as of 4/19/24
Drainage Improvements at Main Street	Existing	St. Johns County	SJC Public Works	F	1 year	HMGP	\$ 640,000	Not started as of 4/19/24
Drainage Improvements at Old Moultrie Road	Existing	St. Johns County	SJC Public Works	F	1 year	HMGP	\$ 750,000	In progress 4/19/24
Drainage Improvements at West Augustine Service Areas 2 & 4	Existing	COSA and SJC	COSA and SJC Public Works	F	3 years	Local	\$ 920,000	withdrawn from Irma HMGP, proceeded with local funds. In progress as of 4/19/24

Project	New or Existing Structure/ Infrastructure	Jurisdiction*	Responsible for Project Implementation**	Hazard****	Project Time-Frame	Potential Funding Source	Estimated Project Cost	Project Status
Drainage Improvements at S. Collins Ave. and Varella Ave.	Existing	St. Johns County	SJC Public Works	F, SLR	3 years	HMGP, local	\$ 600,000	Started as of 4/19/2024
Drainage Improvements at St. Augustine Shores	Existing	St. Johns County	SJC Public Works	H, SS, F, SLR	5 years	HMGP	\$ 2,500,000	Started as of 4/19/2024
Drainage Improvements at Tillman Ridge Landfill	Existing	St. Johns County	SJC Public Works	F, HM	1 year	Local	\$ 100,000	Started
Drainage Improvements by Retrofitting Stormwater Outfalls Citywide	Existing	City of St. Augustine	COSA Public Works	F, SS, SLR	1-2 years	Local/CIP	\$ 1,600,000	43 of 103 in completed. Additional 20 are in process, est completion of 2026. Remaining to be prioritiezed and funding options evaluated.
Drainage Improvements in the area of W. King St. and N. Rodriquez St. near the St. James Missionary Church	Existing	St. Johns County	SJC Public Works	F, SLR	3 years	CDBG-DR	\$ 500,000	
Increase Primary Stormwater Outfall Capacity/ Master Stormwater pump Station improvements	Existing	City of St. Augustine Beach	City of St. Augustine Beach	H, SS, F, SLR	1-2 years	HMGP	\$ 800,000	Waiting on Phase 2 execution
Lake Maria Sanchez Flood Mitigation	Existing	City of St. Augustine	COSA Public Works	H, SS, F	5 years	Resilient FL (FDEP)	\$ 16,000,000	Phase 1 design underway; will be funded with Resillient FL grants and state legislative appropriations
Roscoe Blvd. Outfall Improvements	Existing	St. Johns County	SJC Public Works	F	2 years	Local	\$ 500,000	
West King Street Corridor Improvement Plan	Existing	City of St. Augustine	COSA and SJC Public Works	F	2 years	Local, State	\$ 100,000	Started as of 4/19/24 update
Flood mitigation and Drainage of the Plaza de la Constitución	Existing	City of St. Augustine	COSA Public Works	F, SS, SLR	3 years	HMGP, Local, CDBG-MIT	\$ 4,645,000	In-progress
Santa Rosa Drainage Improvements	Existing	St. Johns County	SJC Public Works	F	1 year	CDBG-DR	\$ 4,600,000	
Planning								
Adapting to Sea Level Rise: Planning Process Development	New	ALL	ALL	SLR	On-going	Federal, State, Local	\$ 100,000	Not started
Develop Post-Disaster Redevelopment Standards For Infrastructure And Structures	New	ALL	ALL	ALL	2 years	State, Local	\$ 50,000	Not started
Development of a St. Johns County Floodplain Management Plan	New	ALL	ALL	F, SS, SLR	2 years	BRIC, FMA	\$ 75,000	Not started
Develop a comprehensive Vulnerability Assessment	New	St. Johns County	SJC External Affairs	F, SS, SLR	2 years	FDEP Resilient FL	\$ 500,000	expected to be done by mid/late 2024
Develop a comprehensive Vulnerability Assessment	New	City of St. Augustine	COSA Public Works	F, SS, SLR	2 years	FDEP Resilient FL	\$ 200,000	
Develop a comprehensive Vulnerability Assessment	New	City of St. Augustine Beach	COSAB Public Works	F, SS, SLR	2 years	FDEP Resilient FL	\$ 250,000	expected to be done by mid/late 2024 in progress as of 11/7/23 - 1 year completed, completion date in 2028
Back Bay Study	Existing	City of St. Augustine	COSA PW & USACE	F, SS, SLR	2 years	USACE/Local	\$ 7,000,000	
Adaptation Plan	New	St. Johns County	SJC Intergovernmental Affairs	F, SS, SLR	2 years	FDEP Resilient FL	\$ 200,000	draft complete
Adaptation Plan	New	City of St. Augustine	COSA Public Works	F, SS, SLR	2 years	FDEP Resilient FL	\$ 100,000	in contract development
Adaptation Plan	New	City of St. Augustine Beach	COSAB Public Works	F, SS, SLR	2 years	FDEP Resilient FL	\$ 151,549	in contract development
Wildfire Mitigation								
Creating defensible space around structures	New and Existing	ALL	ALL, FPL, JEA	H, HW, W, FR	on-going	State	\$ 100,000	On-Going
Install System of Dry Fire Hydrants Including Priming Pumps in Flagler Estates Area	New	St. Johns County	SJC Fire Rescue	W, HM, TR	1 year	Local, State	\$ 1,000,000	Not started
Green Highlight - Funded (other)	Hurricane Ian HMGP Funding							
Blue Highlight - Hurricane Irma HMGP Funding								
Yellow Highlight - Hurricane Matthew HMGP Funding								
Purple Highlight - Hurricane Dorian HMGP Funding								
St. Johns County - SJC; City of St. Augustine - COSA; City of St. Augustine Beach - COSAB; Flagler Estates Road and Water District - FERWD; Florida Power and Light - FPL; Jacksonville Electric Authority - JEA								



Project	New or Existing Structure/ Infrastructure	Jurisdiction*	Responsible for Project Implementation**	Hazard****	Project Time-Frame	Potential Funding Source	Estimated Project Cost	Project Status
*Jurisdictions - This category identifies which jurisdiction the Mitigation Project is actually located in. When ALL is used in the Jurisdiction Column it is meant to include St. Johns County, City of St. Augustine. City of St. Augustine Beach								
**Responsible for Project Implementation - When ALL is used in the Responsible for Project Implementation Category is meant to include St. Johns County, City of St. Augustine. City of St. Augustine Beach, and the Town of Hastings.								
***Timeframe is considered time the project will take to complete once it is actually started and are only estimates. On-going is for projects that have no end time as they are things that are continually mitigated, such as education								
****Hazard - the following abbreviations will be used to signify which Hazards will be mitigated by a particular Mitigation Project - H - Hurricanes; SS - Storm Surge; HW - High Winds; T - Tornado; F - Flooding; W - Wildfires; HM - Hazardous Materials; TR - Terrorism; D - Drought/Heat Wave; FR - Freeze/Winter Storm; SLR - Sea Level Rise; ALL - Indicates that a Mitigation Project will mitigate against all hazards								
Updated - February 2025								

## St. Johns County Local Mitigation Strategy Completed Mitigation Projects

Project	Project Status	Jurisdiction*	Responsible for Project Implementation**	Hazard****	Completion Date	Funding Source	Total Cost
Rehabilitation of existing sewer system in the Abbott Tract	Completed	City of St. Augustine	COSA Public Works	SS, F	2019	Local	
Relocation of Fire Station 5 and 11 out of Evacuation Zone	Complete	St. Johns County	SJC Fire Rescue	F, SS	2019	Local	
Flood Mitigation at S. Avenida Menendez Seawall Project	Complete	City of St. Augustine	COSA Public Works	F, SS	2016	FMA/HMGP	
Upgrade Signalization at A1A and Coastal Highway	Complete	St. Johns County	St. Johns County Public Works	H, HW, FR	2016	HMGP	
Upgrade Signalization at A1A and Solano	Complete	St. Johns County	St. Johns County Public Works	H, HW, FR	2016	HMGP	
Upgrade Signalization at U.S. 1 and Health Park Boulevard	Complete	St. Johns County	St. Johns County Public Works	H, HW, FR	2016	HMGP	
Install Shutters and a generator for the St. Johns County Pet Center	Completed	St. Johns County	SJC EM and SJC Animal Control	H, HW	2019	HMGP	
Emergency Standby Generators at Primary Hurricane Shelters: Osceola Elem. School, Otis A. Mason Elem. School, Mill Creek Elem. School	Completed	St. Johns County	SJC School District	ALL	2020	HMGP	
May Street @ Douglas (flooding) and at San Marco (constriction) - improve evacuation	Completed	City of St. Augustine	COSA Public Works	H, SS, HW, F, W, HM	2020	CDBG, State	\$ 1,000,000
Wastewater Treatment Plant Shoreline Hardening and Flood Proofing	Completed	City of St. Augustine	COSA Public Works	F, SS, SLR	2020	Local	\$ 140,000
Macaris Stormwater Outfall Resiliency Retrofit with Tide Check Valve	Completed	City of St. Augustine	COSA Public Works	F, SS, SLR	2021	Local	\$ 300,000
North and South Davis Shores Outfall Improvements	Completed	City of St. Augustine	COSA Public Works	F, SS	2020	Local, HMGP	\$ 1,500,000
Enhance construction of a new Emergency Communications Center outside storm surge zones	Completed	St. Johns County	SJC Public Safety	H, SS, HW, F	2021	Local	\$ 14,000,000
Upgrade Signalization at US1 @ County Road 210	Completed	St. Johns County	SJC Public Works	H, HW		HMGP	\$ 500,000
Drainage Improvements at Kings Estate Road	Completed	St. Johns County	SJC Public Works	F		HMGP	\$ 400,000
Drainage Improvements at Remington Forest	Completed	St. Johns County	SJC Public Works	F	2019	HMGP	\$ 250,000
Drainage Improvements at Rio del Mar Street & Fountain of Youth Boulevard	Completed	St. Johns County	SJC Public Works	F, SS	2020	Local	\$ 1,000,000
Emergency Standby Generator for Fuel Pumps at SJC Public Works Facility	Completed	St. Johns County	St. Johns County Public Works	F, HW, SS, F		Local	\$ 150,000
Shores Unit 2 Ground Storage Tank & Pumping Facility Standby Generator	Completed	St. Johns County	SJC Utilities	H, HW, T, TR, D, FR	1 year	HMGP	\$ 212,160.00
South Ground Storage Tank & Pumping Facility Standby Generator	Completed	St. Johns County	SJC Utilities	H, HW, T, TR, D, FR	1 year	HMGP	\$ 253,260.00
Drainage Improvements at Porpoise Point	Completed	St. Johns County	SJC Public Works		May 2022	HMGP-Irma	\$ 321,741.00
Flood Mitigation Improvements to St. Augustine Sanitary Sewer Pumping Stations	Completed	City of St. Augustine	COSA Public Works	H, SS, F	3 years	406/Public Assistance	\$ 14,000,000
Improve Structural Resiliency - 28XX S. Ponte Vedra Blvd.	Completed	St. Johns County	Private Owners	H, SS, SLR	2020	homeowner	\$ 500,000
Drainage Improvements at Avenue D	Complete	St. Johns County	SJC Public Works	F	1 year	CDBG-DR	\$ 400,000
Upgrade Signalization at US1 @ Shore Drive (Ponce Mall Entrance)	Complete	St. Johns County	SJC Public Works	H, HW	3 years	HMGP	\$ 500,000
Upgrade Signalization at US 1 @ Lewis Point Rd.	Complete	St. Johns County	SJC Public Works	H. HW	3 years	HMGP	\$ 500,000
Upgrade Signalization at Wildwood Drive and U.S. 1	Complete	St. Johns County	SJC Public Works	H, HW, FR	6 months		\$ 500,000
Deep Creek Master Drainage Study	Complete	St. Johns County	SJC Public Works	F	1 year	State	\$ 500,000
Drainage Improvements at Kings Road	Complete	St. Johns County	SJC Public Works	F	1 year	HMGP	\$ 400,000
Drainage Improvements at Masters Drive	Complete	St. Johns County	SJC Public Works	F	1 year	Fed Grants/Appropriations	\$ 150,000
Drainage Improvement Fox Creek – Holmes Blvd	Complete	St. Johns County	SJC Public Works	F	1 year	CDBG-DR	\$ 873,000
Drainage Improvements at S. Orange St.	Complete	St. Johns County	SJC Public Works	F	1 year	CDBG-DR	\$ 300,000
Drainage Improvements at St. Augustine/Cypress Boulevard	Complete	St. Johns County	SJC Public Works	F	1 year	CDBG-DR	\$ 1,300,000
Drainage Improvements at St. Johns Avenue (Hastings)	Complete	St. Johns County	SJC Public Works	F	1 year	CDBG-DR	\$ 600,000

St. Johns County Local Mitigation Strategy Deleted Mitigation Projects						
Project	New or Existing Structure/ Infrastructure	Jurisdiction*	Responsible for Project Implementation**	Hazard****	Reason	Deleted Date
GIS Enhancements for Mitigation Activities Countywide		All	SJC Geographic Information Systems	ALL	Not mitigation	2/27/2020
Electrical Utilities Underground - Ponte Vedra Beach	New and Existing	St. Johns County	Beaches Energy	H, HW,T,W, FR	Project submitted under different, more specific name	2/27/2020
Potable Water System Improvements in the Town of Hastings	Existing	St. Johns County	SJC Utilities	H, SS, F, D	Hastings dissolved (former sponsor of project), system taken over by SJC Utilities, upgraded and maintained	2/27/2020
Sawgrass Water Treatment Plant Standby Generator	Existing	St. Johns County	SJC Utilities	H, HW, T, TR, D, FR	Project scope changed	2/27/2020
Upgrade faulty septic systems	New and Existing	St. Johns County & COSA	COSA Public Works	SS, F	Not mitigation	2/27/2020
Drainage Ditch maintenance for flood control	New and Existing	ALL	ALL, FPL, JEA	H, HW, W	Not mitigation	2/27/2020
Purchase Excavation Equipment (backhoes, etc.) for Flood Mitigation	Existing	ALL	ALL	F	not mitigation	2/27/2020
Emergency Standby Generators at Lift Stations	Existing and New	ALL	Utilities	ALL	specific sites identified and listed for generators and/or emergency pumps	2/27/2020
Enhance Additional Facilities to expand Evacuation Shelter Spaces	New	St. Johns County	SJC EM and School Board	ALL	Specific projects identified, State shelter retrofit grants pursued	2/27/2020
Improve Evacuation Route Signage	New and Existing	St. Johns County	SJC Public Works	H, SS, HW, F,	Not mitigation	2/27/2020
Install generator panel at critical facilities to accept temporary generators	Existing	ALL	Utilities	ALL	Specific facilities identified and mitigation projects sponsored	2/27/2020
Mickler Road (from 210 to A1A) Improvements for evacuation	Existing	St. Johns County	SJC Public Works	H, SS, HW, F, W, HM	Project scope changed	2/27/2020
Preform a safety study on A1A from Owens Avenue to SR 206 to improve evacuation	Existing	St. Johns County	SJC Public Works	H, SS, HW, F, W, HM	Project scope changed	2/27/2020
SR 206 evacuation improvements study from A1A to end of 206	Existing	St. Johns County	SJC Public Works	H, SS, HW, F, W, HM	Project scope changed	2/27/2020
Dam at Lake Belouthahatchee	Existing	St. Johns County	SJC Public Works	F	No identified sponsor/support for project	2/27/2020
Drainage Improvements at International Golf Parkway	Existing	St. Johns County	SJC Public Works	F	No longer a viable project	2/27/2020
Set up pre-contracts for temporary flood pumps	Existing and New	ALL	ALL	SS, F	Not mitigation	2/27/2020
Intersection Improvements within Flagler Estates Road and Water District	Existing	St. Johns County	FERWD/SJC Public Works	H, SS, F	Specific projects identified for improvements	2/27/2020
Marineland - Area from north end of revetment to northern Town limits (Underground sand barrier)	Existing	St. Johns County	St. Johns County Public Works	H, SS	Not mitigation	2/27/2020

St. Johns County Local Mitigation Strategy Deleted Mitigation Projects						
Project	New or Existing Structure/ Infrastructure	Jurisdiction*	Responsible for Project Implementation**	Hazard****	Reason	Deleted Date
Restoration of Emergency Berms in Summer Haven	Existing	St. Johns County	Summer Have Homeowner Ass.	H, SS	Not mitigation	2/27/2020
St. Augustine Beach (State Park to F St.)	Existing	City of St. Augustine Beach	COSAB and SJC	H, SS	Not mitigation	2/27/2020
Summer Haven	Existing	St. Johns County	St. Johns County Public Works	H, SS	Not mitigation	2/27/2020
Surfside Area	Existing	St. Johns County	St. Johns County Public Works	H, SS	Not mitigation	2/27/2020
Walk-over @ Mariners Watch	Existing	St. Johns County	St. Johns County Public Works	H, SS	Not mitigation	2/27/2020
Bartram Oaks Wastewater Treatment Plant Standby Generator	Existing	St. Johns County	SJC Utilities	H, HW, T, TR, D, FR	No room for a generator on the property	11/17/2020
Fruit Cove Wastewater Treatment Plant Standby Generator	Existing	St. Johns County	SJC Utilities	H, HW, T, TR, D, FR	cancelled	12/20/2019
Manhole Lid Inserts - Infiltration & Inflow Prevention - Ponte Vedra System - Sewer Collection System	Existing	St. Johns County	SJC Utilities	H, SS, F	did not meet BCA	12/28/2020
Manhole Lid Inserts - Infiltration & Inflow Prevention - St. Johns County Main System - Sewer Collection System	Existing	St. Johns County	SJC Utilities	H, SS, F	did not meet BCA	12/28/2020
Avenida Menendez Outfall Improvements	Existing	City of St. Augustine	COSA Public Works	F, SS	This project is being handled through 2 other HMGPs we have under way - Lake Maria Sanchez and the Avenida Menendez Flood Barrier Phase 1	4/20/2021
COSAB Public Works Critical Facility Generator	Existing	City of St. Augustine Beach	COSAB Public Works	All	did not meet BCA	9/8/2022
Drainage Improvements at North Beach	Existing	St. Johns County	SJC Public Works	F	phase 1 awarded - highly unlikely to meet BCA. Might need to be withdrawn	12/28/2020
Windstorm Mitigation of St. Augustine Beach City Hall, Police Station and Bldg. C	Existing	City of St. Augustine Beach	COSAB Public Works	H, HW, T	Building unable to be certified to high wind load. Project withdrawn from HMGP	2022

Drainage Improvements at Winton Circle	Complete	St. Johns County	SJC Public Works	F	1-2 years	Local	\$ 1,500,000
Jack Wright Island Road Drainage Basin Improvements	Complete	St. Johns County	SJC Public Works	F	1-2 years	Local	
Sunset Park Subdivision ( Matanzas River/East Creek) Drainage study	Started	St. Johns County	SJC Public Works	F	1 year	CDBG, Local	\$ 5,000

# **APPENDIX E:**

## **Resolutions & Approval Letters**

# **APPENDIX F:**

## Historical Flood Analysis



## 1.1 HISTORICAL CLAIMS AND REPETITIVE LOSS AREAS

St. Johns County participates in the Community Rating System (CRS), which is part of **Federal Emergency Management Agency's (FEMA) National Flood Insurance Program (NFIP)**. The CRS is a voluntary incentive program that recognizes and encourages community floodplain management practices that exceed minimum requirements of the NFIP. Communities are rated based on CRS criteria and NFIP policy discounts are provided to residents based on the communities CRS rating. **The County's Local Mitigation Strategy (LMS)** addresses many floodplain management strategies that the County uses and are included in the CRS scoring system. This Appendix was added to specifically address CRS manual Activity 510 Step 5(c) Assessment of Vulnerability: Historical Damage.

The **Federal Emergency Management Agency's (FEMA) National Flood Insurance Program (NFIP)** has paid over \$212 million in claims in St. Johns County. Table 1-1 describes the policy and claim statistics for the County. Claims have been paid to cover structure and contents damage and, in some cases, mold damage related to flooding. FEMA provides public assistance for large projects that deal with mold resulting from flooding, but a review **of FEMA's public assistance data for** the County does not indicate any applications for large mold-remediation projects.

**Table 1-1 Policy and Claim Statistics for St. Johns County Structures**

Zone	Policies in Force	Number of Closed Paid Losses	Closed Paid Losses
A01-30, AE	10,703	4,903	\$186,635,953
A	416	35	\$648,842
AO	5	2	\$0
AH	78	17	\$21,188
AR	0	0	\$0
A99	0	0	\$0
V01-30 & VE	272	199	\$7,781,725
V	0	0	\$0
D	2	1	\$0
B, C, X	19,902	1,003	\$17,498,787
Total	31,378	6,160	\$212,586,495

Note: Data is reflective of FEMA statistics as of 11/2/2021

The County maintains insurance for facilities that it owns, including flood insurance for facilities that are shown to be at risk for flooding.

Table 1-1 shows that approximately 11,500 policies are in force in special flood hazard areas (SFHAs) compared to approximately 9,200 structures within an SFHA. This high coverage rate is attributed to lender flood insurance policy requirements for structures within SFHAs. Figure 1-1 shows that the flood insurance policies cover many buildings in inland areas as well as on the coast. St. Johns County is proactive in identifying areas with flooding issues through its regional modeling program, which has developed hydrologic and hydraulic (H&H) models that cover most of unincorporated St. Johns County. The County also uses results from the regional models and FEMA flood hazard zones for building department reviews to ensure that new developments are not at risk of flooding and will not worsen off-site flooding. Policy coverage outside of SFHAs may be attributed to outreach and information made available to the public by St. Johns County.

Table 1-2 Policy and Claim Statistics by Occupancy Type

Occupancy Type	Policies	Closed Paid Losses
Single-Family	22,299	\$166,055,865
2- to 4-Family	1,127	\$9,926,190
All Other Residential	7,616	\$12,146,978
Non-Residential	1,127	\$26,354,323
Total	32,169	\$214,483,356

Note: Data is reflective of FEMA statistics as of 11/2/2021

Structures in the community are at risk for flooding even if they are not within a designated SFHA. Table 1-1 illustrates that nearly 16 percent of the paid loss claims for St. Johns County are for structures outside the SFHA. Overall, most of the policies in force are for single-family homes (22,299 policies). Most of the claims come from this group representing approximately \$166 million in paid losses from 5,260 claims.

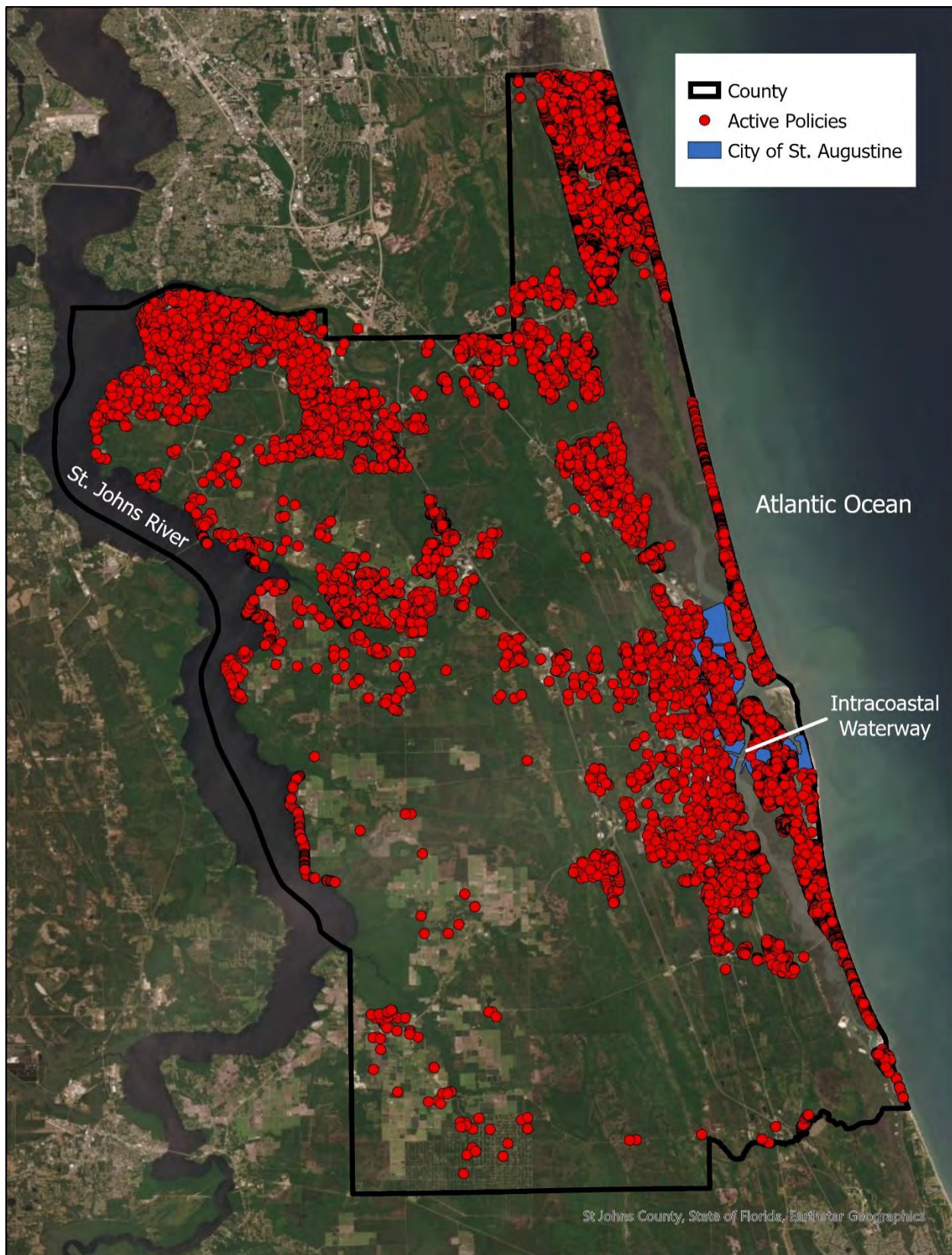
Figure 1-2 shows the historical claims data geocoded by St. Johns County. These data were overlaid with other data, such as topographic information, FEMA flood zones, and other information, to identify areas within the County that are at risk for flooding. The combined policies and claims information that the County geocoded helps the County determine where flood risk exists and where residents in high-risk flood areas do not currently have flood insurance.

St. Johns County performed a Repetitive Loss Area determination/delineation in 2019 using 2018 repetitive loss property (RLPs) data from FEMA, with the goal of reducing the number of RLPs within the County. A Repetitive Loss Structure is an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978. The County currently has 969 RLPs. A Severe Repetitive Loss (SRL) Structure is defined as a residential structure that is covered under an NFIP flood insurance policy and (a) had at least four NFIP claim payments (including building and contents) over \$5,000 each, and the cumulative amount of such claims exceeds \$20,000; or (b) had at least two separate claim payments (building payments only) with the cumulative amount of the building portion of such claims exceeding the market value of the building. For items (a) and (b), at least two of the referenced claims must have occurred within any 10-year period and must be more than 10 days apart. The County has 134 SRL properties.

St. Johns County is deemed a Class C repetitive loss community and is required to have a floodplain management plan or area analyses for its repetitive loss areas. The County mapped the RLPs and evaluated nearby properties with the same potential for flooding using the Insurance Services Office (ISO) standard procedure for mapping repetitive loss areas. The repetitive loss areas include the properties on the repetitive loss list and all nearby properties that may experience similar flooding conditions.

Figure 1-3 illustrates the repetitive loss areas identified by the analysis. Flooding occurrences in these areas were due to significant rainfall and/or storm-surge events combined with structures in or around water bodies. The terrain characteristics related to these structures can be described as low-lying areas with a high water table (close to land surface). Table 1-3 describes the causes of flooding for these repetitive loss areas related to significant storms.

Figure 1-1 Flood Insurance Policies in St. Johns County

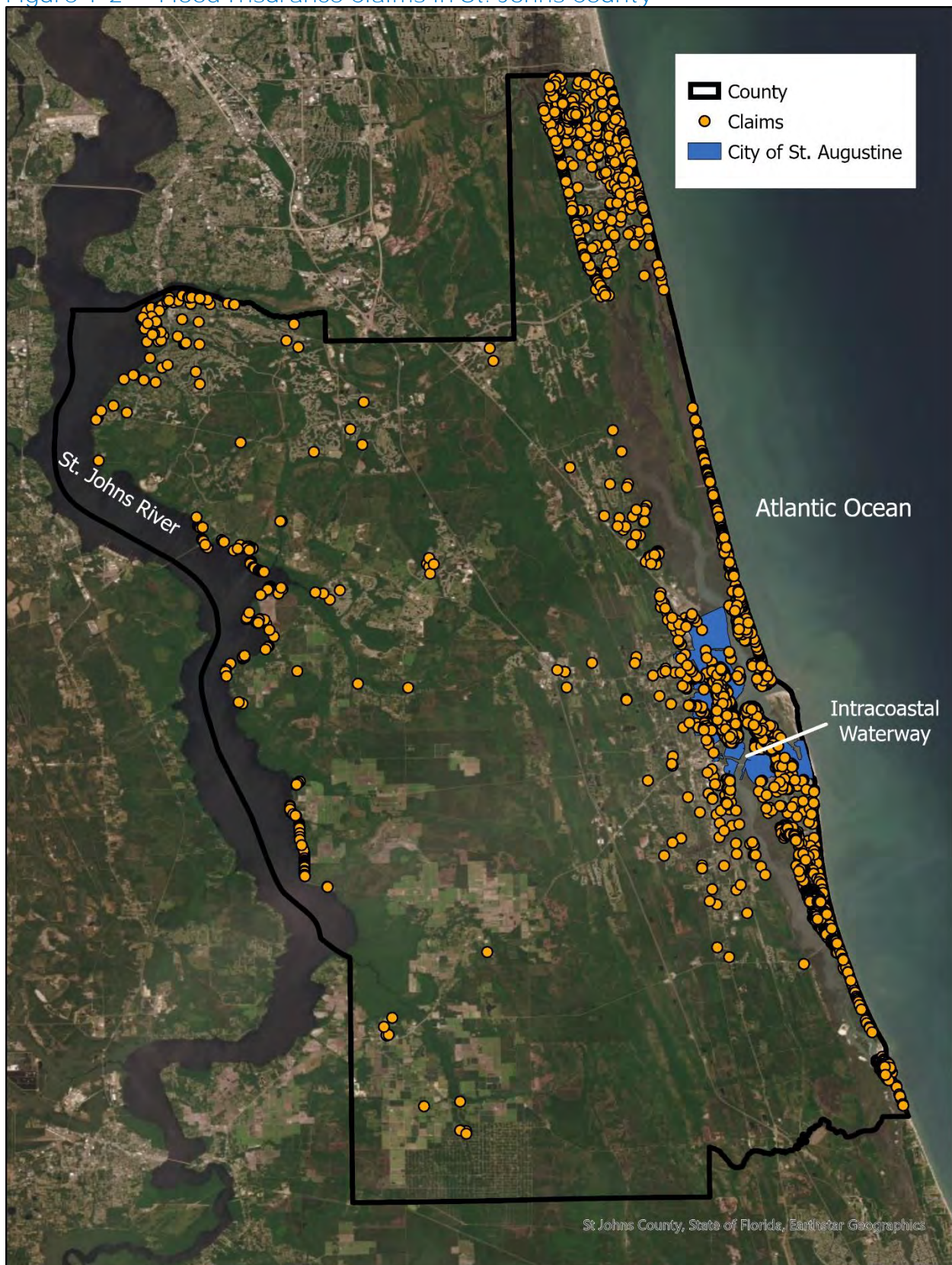


Note: Data is reflective of FEMA policy data from 2018.

Note: The **County's** Community Rating System Coordinator adheres to the data pertaining to SRLs and RLPs as protected under the Federal Privacy Act of 1974.



Figure 1-2 Flood Insurance Claims in St. Johns County



Note: Data is reflective of FEMA claims data from 2018.

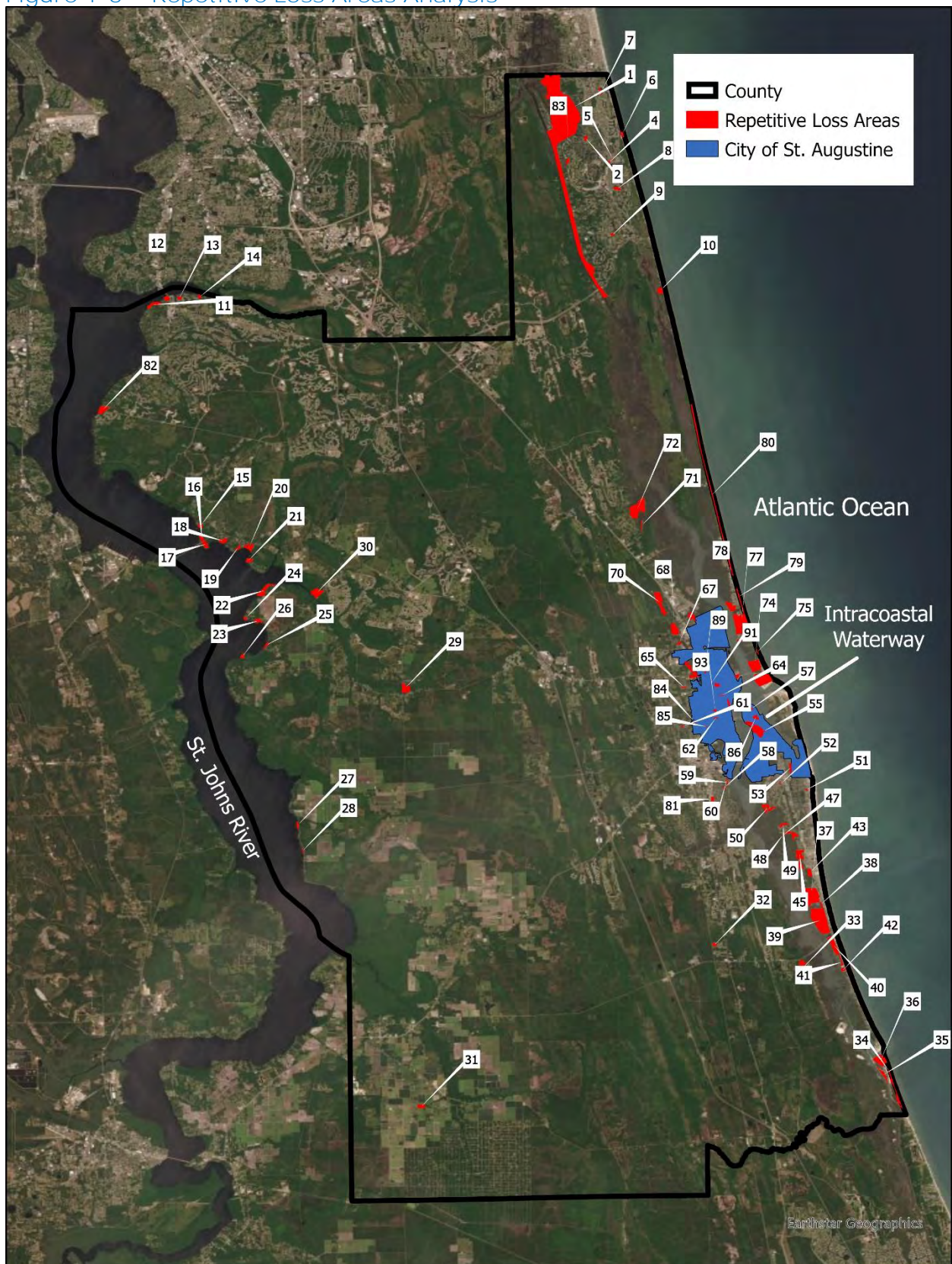
Note: The **County**'s Community Rating System Coordinator adheres to the data pertaining to SRLs and RLPs as protected under the Federal Privacy Act of 1974.

Through St. Johns **County's regional** stormwater modeling program, H&H models were created to cover most of unincorporated St. Johns County. **The County's regional models** were developed at a higher level of detail than the models used to develop the current FEMA flood hazard zones, and they better represent the rainfall-driven flood risk across the County. The County mapped inundation areas based on results from the regional models and LiDAR data. The inundation mapping was used to complete a flood protection level-of-service (FPLOS) analysis in 2018, which identified instances of roadway and structure flooding and estimated the economic impacts of rainfall-driven flooding Countywide. Results **from the County's regional model were calibrated and verified to observed water levels**, and the flooding predicted at many locations across the County was field-verified during actual storm events.

The FPLOS analysis identified 277 structures within the rainfall-driven 100-year/24-hour inundation areas with finished floor elevations (FEEs) below the flood elevation and 6,014 structures within the rainfall-driven 100-year/24-hour inundation areas with FEEs above the flood elevation. Figure 1-4 shows the locations of structure flooding identified in the FPLOS. Average annual damages from structure flooding were estimated using Hazards US (HAZUS) depth-damage curves at each location where flooding above the FFE was expected. Based on this analysis, the estimated average annual rainfall-driven structure flooding damage cost Countywide was approximately \$200,000 in 2018 dollars. The estimated damage for a 100-year/24-hour rainfall-driven event was approximately \$5.6 million in 2018 dollars. These values do not include damage caused by storm surge-driven flooding and do not include incorporated areas within the County. Results from the **County's regional models** and the FPLOS analysis allow the County to identify structures that are vulnerable to rainfall-driven flooding and not covered by an existing insurance policy. These results can also be used to identify and prioritize areas for capital improvement projects to reduce flood impacts.



Figure 1-3 Repetitive Loss Areas Analysis



Note: RLA's were developed based on 2018 FEMA data.

Note: The County's Community Rating System Coordinator adheres to the data pertaining to SRLs and RLPs as protected under the Federal Privacy Act of 1974.

Table 1-3 Causes of Repetitive Flooding

Repetitive Loss Area Map ID	Structure Count	Causes of Repetitive Flooding
1	1,194	Hurricane Irma (2017): 11.3 inches rainfall, storm surge Hurricane Matthew (2016): 10.1 inches rainfall Tropical Storm Debby (2012): 13 inches rainfall Hurricane Jeanne (2004): 3 inches rainfall, storm surge Hurricane Gabrielle (2001): 5 to 10 inches rainfall Hurricane Floyd (1999): 4 inches rainfall
2	65	Hurricane Matthew: 10 inches rainfall Tropical Storm Fay (2008): 9.8 inches rainfall Tropical Depression Ten (2007): 7.5 inches rainfall
3	68	Hurricane Irma: 10 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.5 inches rainfall
4	21	Tropical Storm Emily (2011): 3 inches rainfall Tropical Depression Ten: 7 inches rainfall
5	13	Tropical Storm Emily: 3 inches rainfall Tropical Depression Ten: 7 inches rainfall
6	13	Hurricane Irma: 10 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action
7	17	Tropical Storm Fay: 9.8 inches rainfall Tropical Depression Ten: 7 inches rainfall Unnamed Storm (1997): 5 inches rainfall
8	46	Hurricane Ernesto (2012): 5 inches rainfall Tropical Depression Ten: 7 inches rainfall
9	15	Hurricane Irma: 11.3 inches rainfall Tropical Storm Debby: 7.5 inches rainfall
10	9	Tropical Storm Josephine (1996): 10 inches rainfall Hurricane Opal (1995): 3 inches rainfall
11	15	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall
12	9	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Unnamed Storm (2013): 5.5 inches rainfall
13	34	Unnamed Storm (2013): 5.5 inches rainfall
14	6	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall
15	16	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall
16	14	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall
17	15	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Gabrielle: 5 to 10 inches rainfall Tropical Storm Josephine: 10 inches rainfall
18	16	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall
19	18	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall
20	60	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall Tropical Storm Fay: 9.8 inches rainfall, storm surge Hurricane Jeanne: 3 inches rainfall
21	11	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall
22	35	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall
23	27	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall
24	8	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall
25	13	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall Unnamed Storm (2009): 11.3 inches rainfall Hurricane Jeanne: 3 inches rainfall
26	31	Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action along St. Johns River
27	12	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall



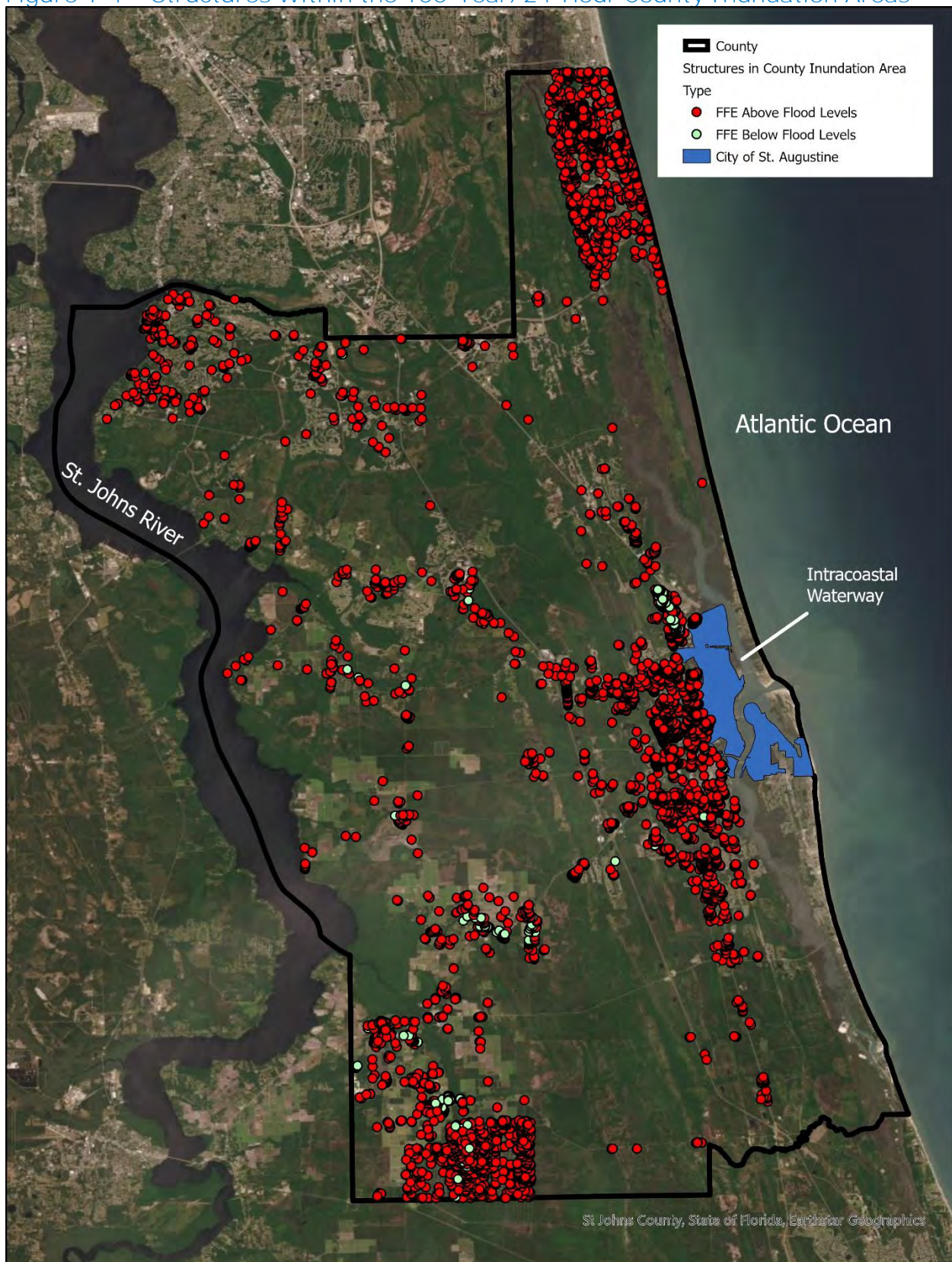
Repetitive Loss Area Map ID	Structure Count	Causes of Repetitive Flooding
28	5	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall
29	8	Hurricane Irma: 11.3 inches rainfall Unnamed Storm (2013): 5.5 inches rainfall Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action along St. Johns River
30	4	Tropical Storm Fay: 9.8 inches rainfall Hurricane Jeanne: 3 inches rainfall Hurricane Gabrielle: 5 to 10 inches rainfall
31	9	Tropical Storm Fay: 9.8 inches rainfall
32	22	Hurricane Irma: 11.3 inches rainfall Hurricane Matthew: 10.1 inches rainfall
33	6	Hurricane Irma: 11.3 inches rainfall, storm surge Hurricane Matthew: 10.1 inches rainfall
34	31	Hurricane Irma: 11.3 inches rainfall Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action from the Atlantic
35	89	Hurricane Irene: 3 inches rainfall, storm surge, and wave action along St. Johns River Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action from the Atlantic
36	85	Hurricane Irma: 11.3 inches rainfall, storm surge Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action from the Atlantic Hurricane Irene: 3 inches rainfall
37	384	Hurricane Irma: 10 inches rainfall, storm surge Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action from the Atlantic Hurricane Irene: 3 inches rainfall
38	7	Hurricane Gabrielle: 5 to 10 inches rainfall Hurricane Irene: 3 inches rainfall
39	650	Hurricane Irma: 11.3 inches rainfall, storm surge Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action from the Atlantic Hurricane Irene: 3 inches rainfall
40	154	Hurricane Irma: 11.3 inches rainfall, storm surge Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action from the Atlantic Hurricane Irene: 3 inches rainfall
41	17	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action from the Atlantic
42	16	Hurricane Irma: 11.3 inches rainfall Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action from the Atlantic
43	32	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action
44	105	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action from the Atlantic Unnamed Storm (2013): 5.5 inches rainfall Tropical Storm Fay: 9.8 inches rainfall Hurricane Gabrielle: 5 to 10 inches rainfall Hurricane Floyd: 23 inches rainfall
45	111	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action
46	61	Hurricane Matthew: 10.1 inches rainfall Hurricane Gabrielle: 5 to 10 inches rainfall Hurricane Floyd: 3 inches rainfall
47	23	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
48	36	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
49	58	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
50	21	Hurricane Irma: 11.3 inches rainfall Hurricane Matthew: 10.1 inches rainfall
51	9	Hurricane Irma: 11.3 inches rainfall Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action from the Atlantic
52	36	Hurricane Irma: 11.3 inches rainfall Hurricane Matthew: 10.1 inches rainfall Unnamed Storm (2013): 5.5 inches rainfall
53	26	Hurricane Gordon (1994): 3 inches rainfall

Repetitive Loss Area Map ID	Structure Count	Causes of Repetitive Flooding
54	16	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
55	89	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
56	24	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
57	10	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
58	18	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall Tropical Storm Erika (2015): 5.5 inches rainfall Unnamed Storm (2013): 5.5 inches rainfall Hurricane Erika (2009): 5.5 inches rainfall Tropical Storm Fay: 9.8 inches rainfall Tropical Depression Ten: 7 inches rainfall
59	7	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall Hurricane Gabrielle: 5 to 10 inches rainfall
60	18	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
61	23	Hurricane Frances (2004): 7.9 inches rainfall
62	15	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
63	23	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
64	23	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
65	10	Hurricane Erika: 2.5 inches rainfall Hurricane Opal: 3 inches rainfall
66	39	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
67	52	Hurricane Irma: 11.3 inches rainfall Hurricane Matthew: 10.1 inches rainfall
68	62	Hurricane Irma: 11.3 inches rainfall Hurricane Matthew: 10.1 inches rainfall
69	15	Hurricane Irma: 11.3 inches rainfall Hurricane Matthew: 10.1 inches rainfall
70	41	Hurricane Irma: 11.3 inches rainfall Hurricane Matthew: 10.1 inches rainfall Unnamed Storm (2013): 5.5 inches rainfall Tropical Storm Fay: 9.8 inches rainfall
71	276	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
72	176	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall
73	12	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action Tropical Depression Ten: 7 inches rainfall Tropical Storm Josephine: 10 inches rainfall
74	13	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action from the Atlantic Tropical Storm Josephine: 10 inches rainfall
75	73	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action
76	51	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action
77	341	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action from the Atlantic Tropical Storm Debby: 7.5 inches rainfall Tropical Storm Gabrielle: 2.5 inches rainfall Hurricane Gabrielle: 5 to 10 inches rainfall Hurricane Floyd: 2 inches rainfall Hurricane Opal: 3 inches rainfall

Repetitive Loss Area Map ID	Structure Count	Causes of Repetitive Flooding
78	30	Hurricane Irma: 11.3 inches rainfall, storm surge Hurricane Matthew: 10.1 inches rainfall Unnamed Storm (2013): 5.5 inches rainfall Tropical Storm Debby: 7.5 inches rainfall Hurricane Opal: 3 inches rainfall
79	32	Hurricane Irma: 11.3 inches rainfall Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action
80	20	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action
81	18	Tropical Storm Gabrielle: 2.5 inches rainfall Hurricane Erika (2003): 2.5 inches rainfall
82	458	Tropical Storm Josephine: 10 inches rainfall
83	1	Tropical Storm Debby: 7.5 inches rainfall Hurricane Igor (2011): 3.5 inches rainfall Tropical Storm Fay: 9.8 inches rainfall Tropical Depression Ten: 7 inches rainfall
84	6	Tropical Storm Earl (1992): 9.5 inches rainfall
85	1	Hurricane Matthew: 10.1 inches rainfall
86	12	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action Tropical Storm Debby: 13 inches rainfall Unnamed Storm (2009): 11.3 inches rainfall
87	37	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall, storm surge, and wave action Hurricane Hugo (1989): No rainfall data available, storm surge, wave action
88	155	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall Unnamed Storm (1997): 5 inches rainfall Tropical Storm Josephine: 10 inches rainfall Hurricane Floyd: 3 inches rainfall
89	2	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall Hurricane Hugo: No rainfall data available, storm surge, wave action Unnamed Storm (1997): 8 inches rainfall Hurricane Opal: 3 inches rainfall
90	18	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall Tropical Depression Ten: 7.5 inches rainfall Hurricane Gabrielle: 5 to 10 inches rainfall Hurricane Hugo: No rainfall data available, storm surge, wave action
91	2	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall Hurricane Hugo: No rainfall data available, storm surge, wave action Hurricane Opal: 3 inches rainfall
92	20	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall Hurricane Jeanne: 3 inches rainfall, storm surge Hurricane Floyd: 4 inches rainfall Hurricane Opal: 3 inches rainfall Hurricane Hugo: No rainfall data available, storm surge, wave action
93	9	Hurricane Irma: 11.3 inches rainfall, storm surge, and wave action Hurricane Matthew: 10.1 inches rainfall Tropical Storm Fay: 9.8 inches rainfall



Figure 1-4 Structures Within the 100-Year/24-Hour County Inundation Areas



# **APPENDIX G:**

## **St. Johns County Adaptation Plan**

EXHIBIT F-1

FDEP AGREEMENT NO. 22PLN21

ST. JOHNS COUNTY VULNERABILITY ASSESSMENT:  
SLR ASSET IMPACT AND REPETITIVE LOSS

St. Johns County

Task 8.1: Preliminary Adaptation Report

Final Project Report



This report is funded in part through a grant agreement from the Florida Department of Environmental Protection's Office of Resilience and Coastal Protection Resilient Florida Program. The views, statements, findings, conclusions, and recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the State of Florida or any of its subagencies.

June 2024

**ST. JOHNS COUNTY VULNERABILITY ASSESSMENT:  
SLR ASSET IMPACT AND REPETITIVE LOSS**

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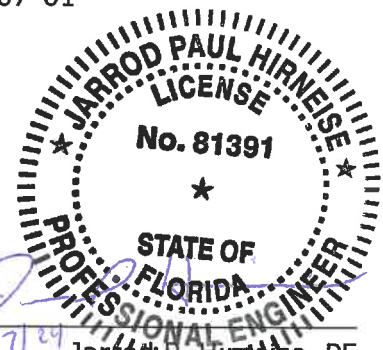
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June 2024



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## ATTACHMENTS

Attachment 5	Adaptation Project Cost Estimates
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## PART IV: FURTHER RECOMMENDATIONS

### 1 PRELIMINARY ADAPTATION PLAN

The County's VA grant included funding to complete a preliminary Adaptation Plan. The County was also awarded a fiscal year 2024 RFGP planning grant to complete a standalone Countywide Adaptation Plan. The County's standalone Adaptation Plan will generally follow the guidance in FDEP's *Florida Adaptation Planning Guidebook* and will include the following items:

- Assessment of Adaptive Capacities
- Prioritization of Adaptation Needs
- Identification of Adaptation Strategies
- Integration into Existing Plans
- Prioritization of Projects for Each Asset Class

This preliminary Adaptation Plan is an early-out prioritization of needs and adaptation strategies. It focuses on identifying solutions to the County's highest priority critical assets identified in the sensitivity analysis so that the County can begin applying for RFGP implementation grants while the standalone Adaptation Plan is in progress. A preliminary assessment of adaptive capacity, prioritization of adaptation needs, and identification of adaptation strategies are included, but the budget provided in the VA did not support a complete/robust Adaptation Plan for the entire County. The preliminary Adaptation Plan will serve as a framework and starting place for the County's standalone Adaptation Plan, which will begin following the completion of the VA.

#### 1.1 ASSESSMENT OF ADAPTIVE CAPACITY

According to the *Florida Adaptation Planning Guidebook*, adaptive capacity is defined by the Intergovernmental Panel on Climate Change as "the ability of a system to adjust to climate change (including climate variability and extremes), to moderate potential damages, to take advantage of opportunities, or to cope with the consequences." According to the Guidebook, communities should assess their capacity to address the impacts of SLR, which may include an assessment of:

- Regulatory and Planning Capabilities – What are the current development and redevelopment restrictions, coastal management regulations, hazard mitigation plans, sustainability initiatives, shoreline managements, and post-disaster recovery/emergency plans.
- Administrative and Technical Capabilities – How many SLR experts, planners, engineers, GIS and mapping resources, and modeling capabilities exist in the local government? Will consultants need to be hired?
- Fiscal Capacity – What taxes, bonds, grants, impact fees, withholding spending in hazard zones, insurance, or other measures can be taken to pay for adaptation strategies? Will grants and loans be necessary?
- Infrastructure – What existing flood and erosion control structures, evacuation routes and redundant water, wastewater, and power systems are either liabilities or assets?

### 1.1.1 REGULATORY AND PLANNING CAPABILITIES

This section summarizes the County's current regulatory and planning capabilities that aid the County's ability to manage SLR and flood vulnerability.

The following are specific sections from the County's *Comprehensive Plan* that include objectives and policies related to SLR and flood vulnerability minimization:

- The County's *Comprehensive Plan Element E.1.2, Dune Preservation*, states that the County shall ensure the protection, conservation, and enhancement of the County's coastal areas, dunes, and beaches. This section includes four policies to achieve this objective.
- The County's *Comprehensive Plan Element E.1.3, Post Disaster Planning, Coastal Area Redevelopment, Sea Level Rise, Peril of Flood, and Hurricane Preparedness*, states that the County shall prepare post-disaster redevelopment plans, which will reduce or eliminate the exposure of human life and public and private property to natural hazards by implementing the policies of the Comprehensive Plan. The County shall restrict or limit certain activities in the Coastal High Hazard Areas (CHHA), which is defined in Section 163.3178(2)(h), Florida Statutes, to reduce the flood risk in coastal areas and related impacts of SLR. This section of the Comprehensive Plan includes 27 policies to achieve this objective.
- The County's *Comprehensive Plan Element E.1.5, Coastal Protection*, states that the County shall cooperate with and provide technical support and assistance to the appropriate state and federal agencies and it shall implement Policies in this Plan to protect, enhance, and restore the environmental quality of the County's Coastal Area waterways and wildlife. Waters that flow into either the ocean or the estuary shall be protected through established conservation techniques identified in the County Land Development Regulations. This section of the Comprehensive Plan includes 10 policies to achieve this objective.
- The County's *Comprehensive Plan Element E.1.6, Dredge and Fill*, states that dredging and filling in coastal areas shall be discouraged. This section of the Comprehensive Plan includes four policies to achieve this objective.
- The County's *Comprehensive Plan Element E.1.7, Infrastructure*, states that routing of new infrastructure and public services within the Coastal Area shall be designed to direct growth away from Environmentally Sensitive Lands (ESL) and the CHHA as defined in Section 163.3178(2)(h), Florida Statutes, and to limit public expenditures within the CHHA. This section of the Comprehensive Plan includes six policies to achieve this objective.
- The County's *Comprehensive Plan Element E.1.8, Protection of Coastal Historical/ Archaeological Resources*, states that the County shall provide for the protection, preservation, and sensitive reuse of Coastal Area historic and archaeological resources. This section of the Comprehensive Plan includes three policies to achieve this objective.
- The County's *Comprehensive Plan Element E.1.9, Hurricane Evacuation Time*, states that the County shall maintain hurricane evacuation times. This section of the Comprehensive Plan includes five policies to achieve this objective.
- The County's *Comprehensive Plan Element E.2.2, Native Forests, Floodplains, Wetlands, Upland Communities, and Surface Water*, states that the County shall protect native forests, floodplains, wetlands, upland communities, and surface waters within the

County from development impacts to provide for maintenance of environmental quality and wildlife habitats. This section of the Comprehensive Plan includes 23 policies to achieve this objective.

- The County's *Comprehensive Plan Element E.2.3, Surface Water Quality*, states that the surface waters of St. Johns County shall be protected to ensure that their quality is maintained. Waters that enter the estuaries and the ocean shall be improved, at a minimum, to the standards established by Chapter 62-302, FAC, and the Clean Water Act, Section 33 of the US Code (33 USC) 1251. This section of the Comprehensive Plan includes nine policies to achieve this objective.
- The County's *Comprehensive Plan Element E.2.6, Stormwater*, states that the County shall protect and appropriately use estuarine and freshwater systems. This section of the Comprehensive Plan includes eight policies to achieve this objective.

Section 3.03 of the County's Land Development Code details the County's flood regulations specific to flood-damage control. This section includes the following subsections, which are relevant to the County's ability to manage/limit flood exposure:

- Section 3.03.03, Duties and Power of the Floodplain Administrator
- Section 3.03.04, Permits
- Section 3.03.05, Site Plans and Construction Documents
- Section 3.03.06, Inspections
- Section 3.03.10, Flood Resistant Development

The County's Regional Stormwater Model, which was discussed in Section 5.3.1 and used for the exposure analysis, is also used by the County's Growth Management Department to assess stormwater impacts from new developments. Growth Management Staff review proposed new developments against peak stage, flow, and inundation mapping results from the model to assess the potential for unintended off-site drainage impacts. The model provides the County with a holistic view of the drainage system, which is much more robust than the site-specific analysis that is typically provided through the application process. This allows the County to make better informed decisions throughout the development review process and protects residents from future flooding caused by new development.

The County has a Local Mitigation Strategy (LMS), which is administered through the County's Emergency Management Department and is led by a committee that consists of representatives from multiple agencies. The purpose of the LMS is to provide guidance to the County in building a safer and more resilient community. The LMS is a living document that is updated periodically and includes the following main components:

- Goals and Guiding Principles
- Hazard Identification and Vulnerability Assessments
- Vulnerability and Loss Estimates
- Initiative Development and Selection
- Mitigation Initiatives
- Funding

The County has a Comprehensive Emergency Management Plan (CEMP). The CEMP is an operation-orientated document authorized by Chapter 252, Florida Statutes. The CEMP establishes the framework to ensure that St. Johns County and its municipalities will be adequately prepared to deal with all hazards threatening the lives and property of St. Johns County citizens. The CEMP outlines the roles, responsibilities, and coordination mechanisms of local county and municipal governments, state, and federal agencies and volunteer organizations in a disaster.

### 1.1.2 ADMINISTRATIVE AND TECHNICAL CAPABILITIES

This section summarizes the County's current administrative and technical capabilities that aid the County in managing SLR and flood vulnerability. The following summarizes the current administrative and technical positions within the County that allow the County to better manage flooding and the impacts from SLR:

- The County employs a Principal Resiliency Planning Analyst that oversees resiliency from a County-wide perspective.
- In addition to the Principal Resiliency Planning Analyst, the County has a dedicated Office of Intergovernmental Affairs that assist in the procurement of grant funding related to resiliency.
- Public Works Engineering employs two professional engineers and 12 Capital Improvement/Project managers who plan for and oversee the design and construction of public works improvement projects. This includes projects related to improving the County's stormwater management.
- Grow Management employs five professional engineers that evaluate developments for impacts to floodplains and stormwater management consistent with the Land Development Code.
- Growth Management employs 10 planners and two floodplain management staff.
- The County's Land Management Department employs nine GIS professionals who are responsible for managing and administering the County's GIS data to the public. This includes data and maps related to flooding, emergency management, etc.
- The County routinely hires outside experts/consultants for project-specific plans.
- St. Johns County's Emergency Management Team includes several emergency management professionals who manage and coordinate the County's Emergency Operations Center (EOC). The EOC serves as the central hub for partners to gather, coordinate, and make informed decisions to protect lives, property, and the environment. The County's Emergency Management Team is responsible for carrying out the County's CEMP.

### 1.1.3 FISCAL CAPACITY

This section briefly summarizes the County's current fiscal capacity to manage SLR and flood vulnerability. The County has a Capital Improvement Plan that is updated and funded annually to include projects in a 5-year period for planning, design, and construction. This Plan includes current and future projects related to stormwater management, resilient designs, and asset hardening. The County has received and continues to pursue state and federal appropriations and grant funding opportunities. Previous grant funding opportunities

that the County has successfully pursued for flood mitigation projects include but are not limited to, FEMA's Hazard Mitigation Grant Program (HMGP), Community Development Block Grants (CDBG), and RFGP planning and implementation grants.

#### 1.1.4 INFRASTRUCTURE

The County's critical infrastructure was identified and assessed relative to its vulnerability to tidal, storm surge, and rainfall flooding as part of the data collection, exposure analysis, and sensitivity analysis tasks of the VA. Sections 5, 6, 7, and 8 of this report summarize the analysis and findings from these tasks. The County used the results from the VA to identify adaptation needs and potential adaptation strategies for critical infrastructure. Sections 10.2 and 10.3 summarize the adaptation needs and strategies that were identified.

### 1.2 PRIORITIZATION OF ADAPTATION NEEDS

To identify adaptation needs for the preliminary Adaptation Plan, Jones Edmunds:

- Reviewed existing County drainage studies, previous RFGP implementation grant submissions, and the County's LMS for existing needs that had already been identified.
- Received feedback from County staff and the Steering Committee members on their highest priority areas of concern.
- Reviewed the highest-ranked critical assets from the sensitivity analysis and identified areas of potential adaptation need.

Based on this review, 72 areas of potential adaptation need were identified. Jones Edmunds reviewed the areas that were identified with County staff to determine the relative priority of the adaptation needs. Figure 1 shows the locations that were identified with a unique identifier assigned to each location. Table 1 summarizes the adaptation need and relative priority that was assigned to each location based on the unique identifier in Figure 90.

### 1.3 IDENTIFICATION OF ADAPTATION STRATEGIES

For the high-priority adaptation needs identified in Section 10.2, Jones Edmunds identified adaptation strategies for inclusion in the preliminary Adaptation Plan. Where available, projects/strategies were taken from legacy drainage studies or previous County RFGP implementation grant submissions and cost estimates were updated if needed. For new areas of need, Jones Edmunds developed adaptation strategies, which included H&H modeling if necessary and development of conceptual-level cost estimates. This Section summarizes the adaptation projects/strategies that were identified.

Additionally, multiple sections of SR A1A, which is owned and maintained by FDOT, were identified as critical high-priority adaptation needs. This Section summarizes the locations of need in more detail and recommends additional coordination efforts with FDOT.



Figure 1 Potential Adaptation Needs

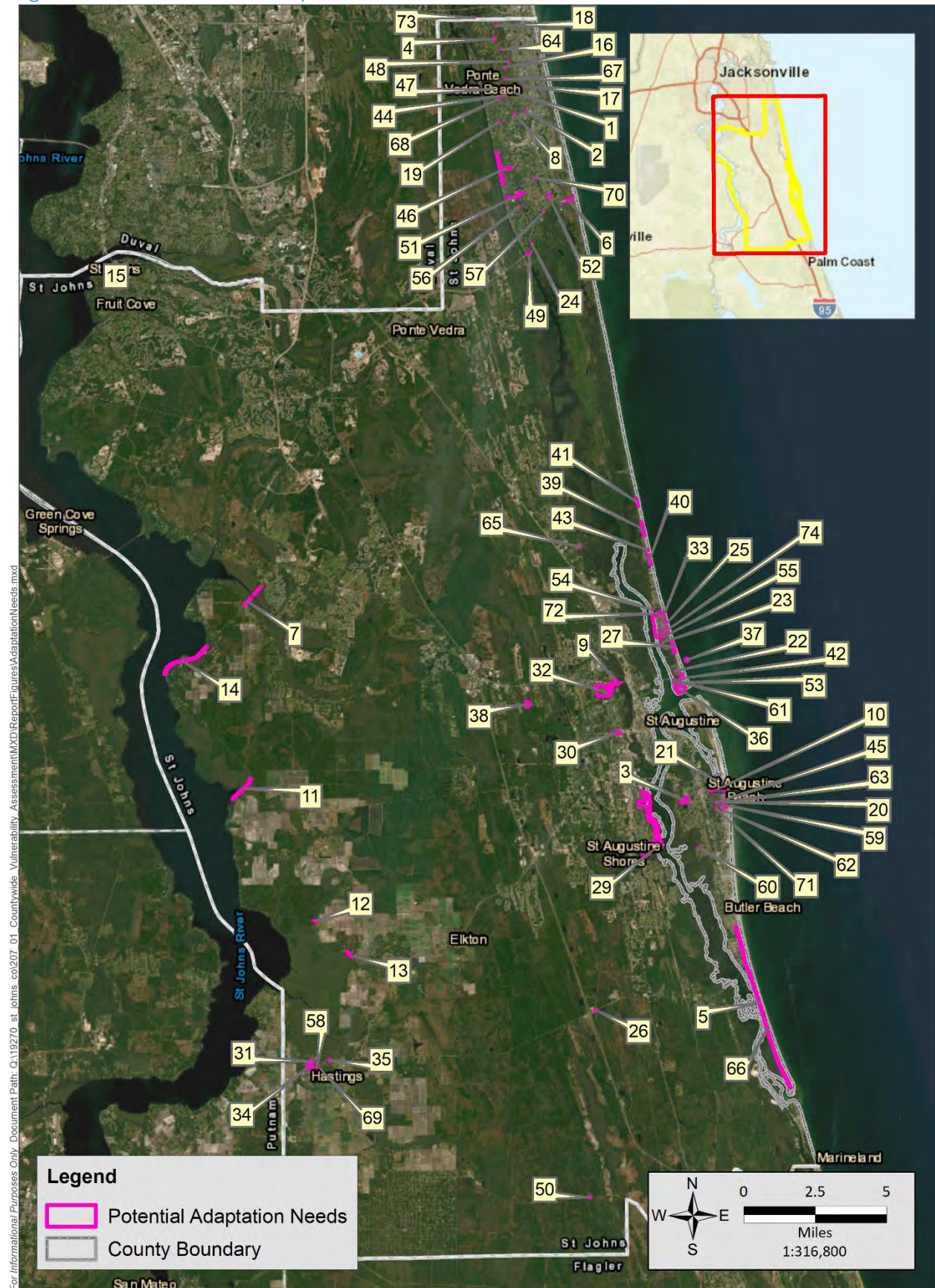


Table 1 Summary of Potential Adaptation Needs

Unique ID	Summary of Adaptation Need	Relative Priority
1	Lift station 224 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
2	Lift station 231 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
3	Anastasia Island WWTP is low-lying and vulnerable to flooding. Need to determine flood-hardening measures that are needed.	High
4	Marsh Landing WTP is low-lying and vulnerable to flooding. Need to determine flood-hardening measures that are needed.	High
5	SR A1A north/south of SR 206 is low-lying and vulnerable to flooding. Coordinate with FDOT on improvements.	High
6	Sections of Mickler Road and Ponte Vedra Boulevard are low-lying and vulnerable to flooding. Roadways need to be raised.	High
7	The Six Mile Creek bridge approaches on CR 13N are low-lying and vulnerable to flooding. Bridge approaches need to be raised.	High
8	Lift station 230 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
9	Sections of Masters Drive, SR 16, and Lewis Speedway are low-lying and vulnerable to flooding. Roadways need to be raised.	High
10	Tidal waters backflow through the culverts under SR A1A Beach Boulevard and cause flooding in COSAB. Backflow prevention on culverts under SR A1A Beach Boulevard are needed.	High
11	Section of County Road 13N is low-lying and vulnerable to flooding. Roadway needs to be raised.	High
12	Cross-culvert under County Road 13 is undersized and causes overtopping of CR 13 in the 25-year storm event. Additional culvert capacity is needed.	High
13	Cross-culvert under CR 13 is undersized and causes overtopping of CR 13 in the 25-year storm event. Additional culvert capacity is needed.	High
14	Section of CR 13N is low-lying and vulnerable to flooding. Roadway needs to be raised.	High
15	Modeling shows isolated flooding at the intersection of SR 13 and Race Track Road. Improve stormwater drainage at the intersection.	Low
16	Lift station 210 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
17	Lift station 225 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
18	Lift station 202 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
19	Lift station 228 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
20	Modeling shows rainfall-induced flooding on SR A1A Beach Boulevard. Drainage improvements are needed to reduce flooding.	Medium
21	Modeling shows significant head-loss across culverts in Anastasia State Park. Culvert improvements may be needed to improve capacity.	Low
22	Sherwood Avenue lift station is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
23	Herron Point lift station is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
24	Lift station 298 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
25	North Beach WTP is low-lying and vulnerable to flooding. Need to determine flood-hardening measures that are needed.	High
26	Modeling shows isolated flooding on SR 206. Side drain culvert capacity needs to be improved to reduce roadway flooding	Low

Unique ID	Summary of Adaptation Need	Relative Priority
27	Section of SR A1A washed out during previous tropical events. Coordinate with FDOT on hardening/erosion protection along vulnerable stretch of SR A1A.	High
29	Shore Drive is low-lying and vulnerable to flooding and erosion. Shore Drive should be raised or hardened.	Medium
30	King Street is low-lying and vulnerable to flooding. Roadway needs to be raised.	High
31	Hastings is low-lying and vulnerable to flooding. The Big Sooeey stormwater pond/pump station could be constructed to reduce flooding in this area.	High
32	The Santa Rosa neighborhood south of SR 16 is vulnerable to flooding. Stormwater drainage improvements are needed.	High
33	North Beach is low-lying and vulnerable to flooding. Improvements are needed to protect critical assets.	High
34	Holtz and Chase Streets and the surrounding properties are vulnerable to floodings. Stormwater drainage improvements are needed.	Medium
35	Hastings is vulnerable to flooding. Culvert improvements at the Palatka Trail Crossing are needed to reduce flooding.	Medium
36	Porpoise Point is vulnerable to flooding. Additional outfall capacity is needed to reduce flooding.	Medium
37	The County could develop a flood-forecasting system to better inform emergency service personnel and residents about the frequency, location, and timing of expected flooding.	Medium
38	Modeling shows that the SR 16 WWTP is vulnerable to rainfall flooding. Stormwater improvements are needed to reduce flooding in the 100-year event.	Medium
39	Modeling shows rainfall-induced flooding along SR A1A. Coordinate with FDOT on potential drainage improvements.	Medium
40	Modeling shows rainfall-induced flooding along SR A1A. Coordinate with FDOT on potential drainage improvements.	Medium
41	Modeling shows rainfall-induced flooding along SR A1A. Coordinate with FDOT on potential drainage improvements.	Medium
42	The Vilano Road bridge approach is low-lying and vulnerable to flooding. Coordinate with FDOT on potential improvements.	High
43	Turtle Shores beach access area is low-lying and vulnerable as pointed out by residents in the area.	Low
44	Lift station 223 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
45	Lift station 62 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
46	Sections of Roscoe Boulevard and Canal Boulevard are low-lying and vulnerable to flooding. Roadways need to be raised.	High
47	Lift station 219 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
48	Lift station 209 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
49	Section of Roscoe Boulevard is low-lying and vulnerable to flooding. Roadway needs to be raised.	Medium
50	Modeling shows isolated flooding on CR 204. Side drain culvert capacity needs to be improved to reduce roadway flooding	Low
51	Landrum Lane is low-lying and vulnerable to flooding. Roadway needs to be raised.	High
52	The Plantation WTP is low-lying and vulnerable to flooding. Need to determine flood-hardening measures that are needed.	High
53	The Porpoise Point WTP is low-lying and vulnerable to flooding. Need to determine flood-hardening measures that are needed.	High



Unique ID	Summary of Adaptation Need	Relative Priority
54	The Myrtle and Fifth lift station is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
55	The Villages of Vilano lift station is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
56	Lift station 300 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
57	Lift station 287 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
58	Lift station 369 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
59	Lift station 324 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
60	Lift station 74 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
61	The Beaches Rest 1 and 2 lift stations are low-lying and vulnerable to flooding. Need to raise the stations out of the floodplain or flood-proof them.	High
62	Lift station 323 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
63	Lift station 61 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
64	Lift station 208 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
65	Lift station 152 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
66	Lift station 6 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
67	Lift station 222 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
68	Lift station 221 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
69	Lift station 267 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
70	Lift station 284 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
71	Lift station 365 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
72	The Back Camp Resort lift station is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
73	Lift station 204 is low-lying and vulnerable to flooding. Need to raise the station out of the floodplain or flood-proof it.	High
74	Raise the North Beach production well out of the floodplain.	High

### 1.3.1 LEGACY ADAPTATION PROJECTS/STRATEGIES

Jones Edmunds reviewed existing drainage studies and previous County RFGP implementation grant submissions and identified the following legacy adaptation projects for inclusion in the preliminary Adaptation Plan:

- North Beach Drainage Improvements
- Big Sooeey Stormwater Pond/Pump Station
- Holtz and Chase Street Drainage Improvements
- Palatka Trail Crossing Improvements

- Santa Rosa Drainage Improvements South of SR 16
- Porpoise Point Drainage Improvements
- South Whitney and West King Street Drainage Improvements
- SR A1A and Pope Road Drainage Improvements

#### 1.3.1.1 North Beach Drainage Improvements

The North Beach Drainage Improvements project was identified in the North Beach Drainage Study, which was completed for the County by Osiris9 Consulting in January 2024. The study identified three improvement alternatives to reduce tidal and storm surge flooding within the North Beach neighborhood between 23<sup>rd</sup> Street South and Euclid Avenue. Based on the sensitivity analysis results, this area has a high density of vulnerable critical assets, including 11 assets with a highest priority rating, 82 assets with a high priority rating, and 49 assets with a medium priority rating. This includes the North Beach WTP, 11 sanitary sewer lift stations, and 125 sanitary sewer grinder pump stations, all of which are owned and operated by St. Johns County. The alternatives in the Study provided varying levels of flood protection, and the construction cost estimates were between \$2.6 million and \$7.3 million. The North Beach Drainage Study provides detail on the proposed improvements and their flood-reduction benefits.

#### 1.3.1.2 Big Sooeey Stormwater Pond/Pump Station

The Big Sooeey Stormwater Pond/Pump Station project was identified in the Hastings Drainage Study, which was completed for the County by Jones Edmunds in June 2019. This project includes constructing a stormwater pond and pump station on the Big Sooeey ditch downstream of North Main Street. These improvements would help protect the Town of Hastings from flooding when water levels in the St. Johns River are elevated in conjunction with large rainfall events. Based on the sensitivity analysis results, this area has two assets with a high priority rating and one asset with a medium priority rating, this includes North Main Street, which provides access to the Hastings WWTP and the W.E. Harris Community Center. The original cost estimate for design and construction of this project was \$2.4 million to \$3.9 million. The County applied for grant funding for this project through the RFGP in 2023, but the project was not selected for funding during that cycle. The project is currently ranked 178 out of 196 projects on the Statewide Resilience Plan for fiscal year 2024–2025. Jones Edmunds provided an updated cost estimate of \$4 million to \$6.5 million for the grant application, which is more reflective of construction prices today. The Hastings Drainage Study provides detail on the proposed improvements and their flood-reduction benefits.

#### 1.3.1.3 Holtz and Chase Street Drainage Improvements

The Holtz and Chase Street Drainage Improvements project was identified in the Hastings Drainage Study, which was completed for the County by Jones Edmunds in June 2019. This project includes conveyance improvements to roadside swales and cross-culverts along Holtz and Chase Streets to more efficiently convey water to the Big Sooeey outfall ditch. Based on the sensitivity analysis results, this area has one asset with a high priority rating and two assets with a medium priority rating, this includes North Main Street, which provides access to the Hastings WWTP and the W.E. Harris Community Center. The original cost estimate for design and construction of this project was \$340,000 to \$560,000. Construction prices have increased significantly since the Hastings Drainage Study was

completed. Jones Edmunds reviewed and updated the cost estimate based on current cost data. The updated cost estimate for this project is \$900,000 to \$1,200,000. The Hastings Drainage Study provides detail on the proposed improvements and their flood-reduction benefits.

#### 1.3.1.4 Palatka Trail Crossing Improvements

The Palatka Trail Crossing Improvements project was identified in the Hastings Drainage Study, which was completed for the County by Jones Edmunds in June 2019. This project includes cross-culvert capacity improvements under the Palatka Trail and demolition of two 60-inch culverts downstream of the trail where the trail crosses an unnamed wetland slough east of the Town of Hastings. Based on the sensitivity analysis results, the project impact area has nine assets with a high priority rating and two assets with a medium priority rating. This project includes three sanitary sewer lift stations owned and maintained by St. Johns County and eight sections of the roadway along East St. Johns Avenue. The original cost estimate for design and construction of this project was \$320,000 to \$520,000. Construction prices have increased significantly since the Hastings Drainage Study was completed. Jones Edmunds reviewed and updated the cost estimate based on current cost data. The updated cost estimate for this project is \$800,000 to \$1,100,000. The Hastings Drainage Study provides detail on the proposed improvements and their flood-reduction benefits.

#### 1.3.1.5 Santa Rosa Drainage Improvements South of SR 16

The Santa Rosa Drainage Improvements South of SR 16 project was identified in the County's Santa Rosa Drainage Improvements Project, which included evaluating drainage improvement alternatives in the Santa Rosa neighborhood south of SR 16. This evaluation was completed by Jones Edmunds and Osiris9 in August 2020. This project includes side-drain culvert improvements along the Cervantes Avenue outfall ditch, culvert improvements under Barcelona and Abbey Avenues, and construction of drainage collection systems along Menecal, El Rey, and Ucita Avenues. The project was designed and permitted in 2021, but the grant funding available at the time was not adequate to construct the improvements. Based on results from the sensitivity analysis, the project impacts area contains minimal vulnerable critical assets, but the project provides significant drainage improvements for County residents. The County applied for RFGP implementation funding for this project in 2023, but the project was not selected for funding. The project is currently ranked 149 out of 196 projects on the Statewide Resilience Plan for fiscal year 2024–2025. The estimated project cost submitted to FDEP in 2023 was \$6,600,000.

#### 1.3.1.6 Porpoise Point Drainage Improvements

The Porpoise Point Drainage Improvements project was previously identified by the County, and the County applied for RFGP implementation funding for this project in 2023 but it was not selected for funding. The project is currently ranked 121 out of 196 projects on the Statewide Resilience Plan for fiscal year 2024–2025. This project includes constructing a positive-gravity outfall that will enhance the effectiveness of the current drainage system with the goal of significantly reducing the duration of roadway inundation. The outfall will have a back-flow preventer designed to prevent beach sand from clogging or blocking stormwater release. The vehicle access ramp exiting Porpoise Point Drive to the south onto the beach will be raised and hardened to match the height of the existing, privately owned

bulkheads adjacent to the ramp location. Based on results from the sensitivity analysis, the project impact area contains minimal vulnerable critical assets, but the project provides significant drainage improvements for County residents. The estimated project cost submitted to FDEP in 2023 was \$575,000.

#### 1.3.1.7 South Whitney and West King Streets Drainage Improvements

The South Whitney and West King Streets Drainage Improvements project is a joint project with St. Johns County and the City of St. Augustine. It includes raising the section of West King Street between the Florida East Coast Railroad and Travis Lane, raising South Whitney Street between West King Street and Scott Street, constructing a new box culvert under South Whitney Street, and improving the stormwater collection system on West King Street and South Whitney Street. The project will reduce rainfall, tidal, and storm surge related flooding on King Street, which is a County collector road and was assigned the highest priority rating based on the sensitivity analysis. The project was designed and permitted in 2020, put out for bid for construction in 2024, and received a low bid of \$1.8 million.

#### 1.3.1.8 CR A1A and Pope Road Drainage Improvements

The CR A1A and Pope Road Drainage Improvements project has been designed and permitted by COSAB. The project includes installing backflow prevention on the existing cross-culverts under CR A1A Beach Boulevard and Pope Road east of Santander Street. The project design and permitting was funded through a grant that the City received, but included improvements under County roadways so the project has not yet been constructed. Implementation of this project would protect many of the County's critical assets in the COSAB and the City's residents from storm surge and tidally driven flooding. In 2023, the construction cost estimate for this project was approximately \$600,000.

### 1.3.2 NEW ADAPTATION PROJECTS/STRATEGIES

Jones Edmunds reviewed the highest ranked critical assets from the sensitivity analysis and developed nine new adaptation projects/strategies for which the County could pursue RFGP implementation grant funding. For each of the concepts, Jones Edmunds developed descriptions and/or figures summarizing the concepts, completed H&H modeling if needed, and developed conceptual-level cost estimates.

#### 1.3.2.1 Detailed Evaluations of Vulnerable WTPs and WWTPs

WTPs and WWTPs are critical assets that are vital to the health and well-being of the County's residents. The sensitivity analysis identified highly ranked vulnerable critical assets at five County-owned and operated WTPs/WWTPs where additional evaluation of adaptation needs relative to projected flooding conditions is needed:

- Anastasia Island WWTP
- Marsh Landing WTP
- Plantation WTP
- Porpoise Point WTP
- North Beach WTP and Associated Water Supply Wells



Water/wastewater treatment facilities are complex and contain many different localized components that have varying sensitivities to flooding. An in-depth analysis of the localized system components for each of these treatment facilities is not feasible under the project scope/budget for the preliminary Adaptation Plan. Jones Edmunds recommends that the County pursue additional RFGP planning funding to complete an in-depth adaptation needs assessment for these critical vulnerable treatment facilities. We expect that an adaptation needs assessment for these five facilities should cost \$50,000 to \$100,000 to complete.

### 1.3.2.2 Elevate Six Mile Creek Bridge Approaches on CR 13N

CR 13N is owned and maintained by the County and is a major collector road and evacuation route for County residents. The Six Mile Creek bridge crossing of County Road 13N is at the mouth of Six Mile Creek where the Creek discharges into the St. Johns River. The bridge and bridge approaches are between Joe Ashton Road and Heritage Landing Parkway. Figure 2 shows the location of the bridge and its approaches.

Based on the 2018 LiDAR data, the lowest centerline elevation for the roadway on the south bridge approach is 2.6 feet-NAVD88 and the lowest elevation on the north approach is 3.9 feet-NAVD88. Surveyed high water mark data from Hurricanes Irma and Matthew showed that peak stages at the bridge were at approximately 5.0 feet-NAVD88 during both events, which caused significant flooding of the bridge approaches and roadway closures. Based on the sensitivity analysis, the south bridge approach was assigned a priority rating of "highest" and the north bridge approach was assigned a rating of "High." CR 13N is considered a regionally significant asset because it is an evacuation route. Results from the flood modeling and mapping show that the bridge approaches flood under existing conditions in the tidal, 100-year storm surge, and 500-year rainfall flood scenarios.

The proposed adaptation strategy to reduce the vulnerability of CR 13N at this location is to raise the bridge approaches to a minimum elevation of 6.0 feet-NAVD88. This would include raising approximately 1,800 linear feet of roadway on the south approach and approximately 2,100 linear feet of roadway on the north approach. Figure 3 shows the approximate limits of the roadway that would need to be raised and the existing and proposed profile of the bridge approaches.

Jones Edmunds developed an engineer's opinion of probable cost to estimate engineering and construction costs for the proposed improvement. The cost estimate is considered a conceptual-level Class 4 estimate (ASTM E2516), which typically has an accuracy range of -20 to +30 percent. Unit prices were taken from the FDOT 12-month moving average construction cost data when available. If FDOT cost data were not available for an item, unit costs were estimated based on other recently bid projects in the area. The estimated cost for this project is \$5.1 million to \$6.6 million. Table 1 in Attachment 5 provides the detailed cost estimate.



Figure 2 CR 13N Six Mile Creek Bridge Location

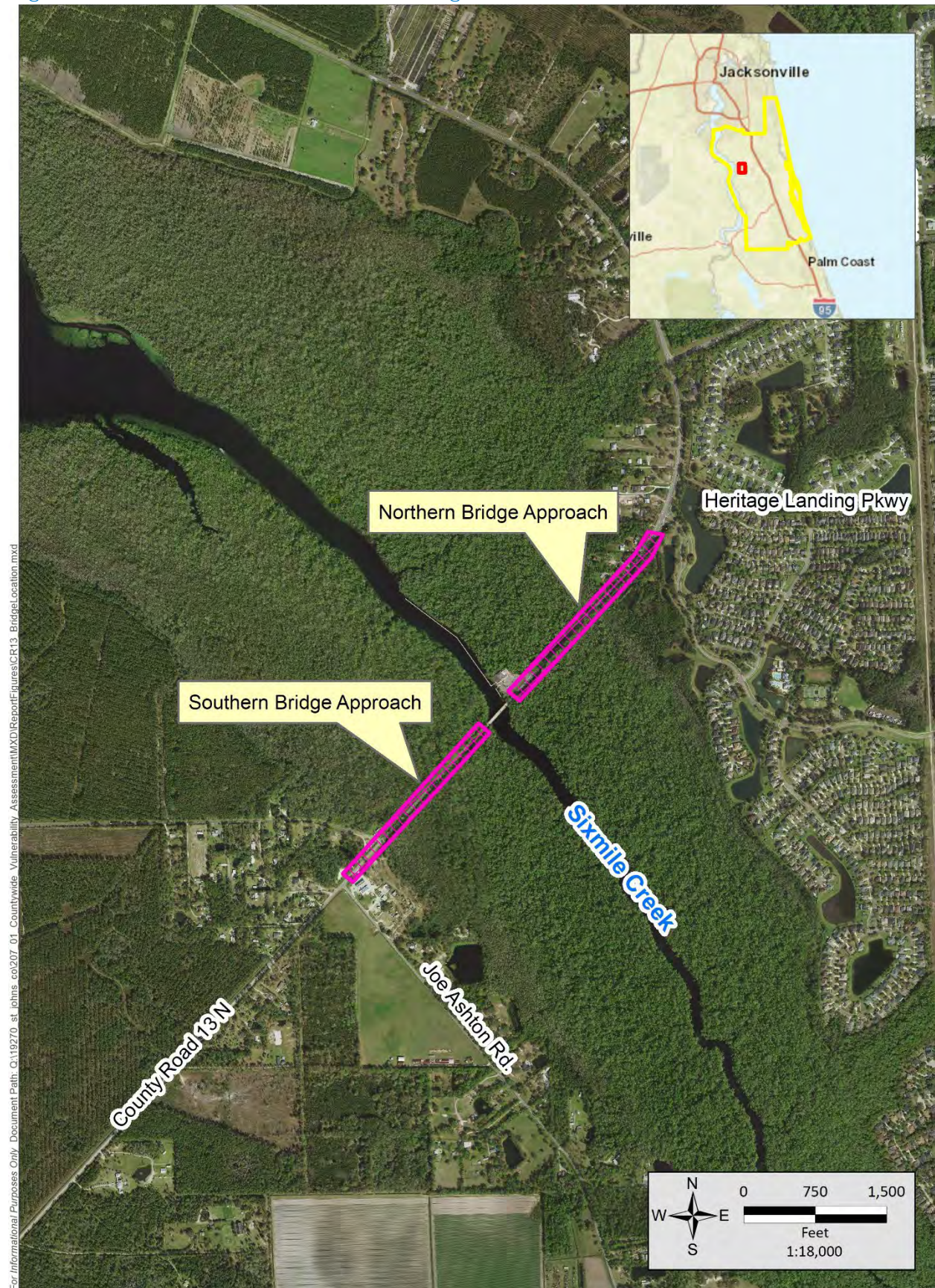
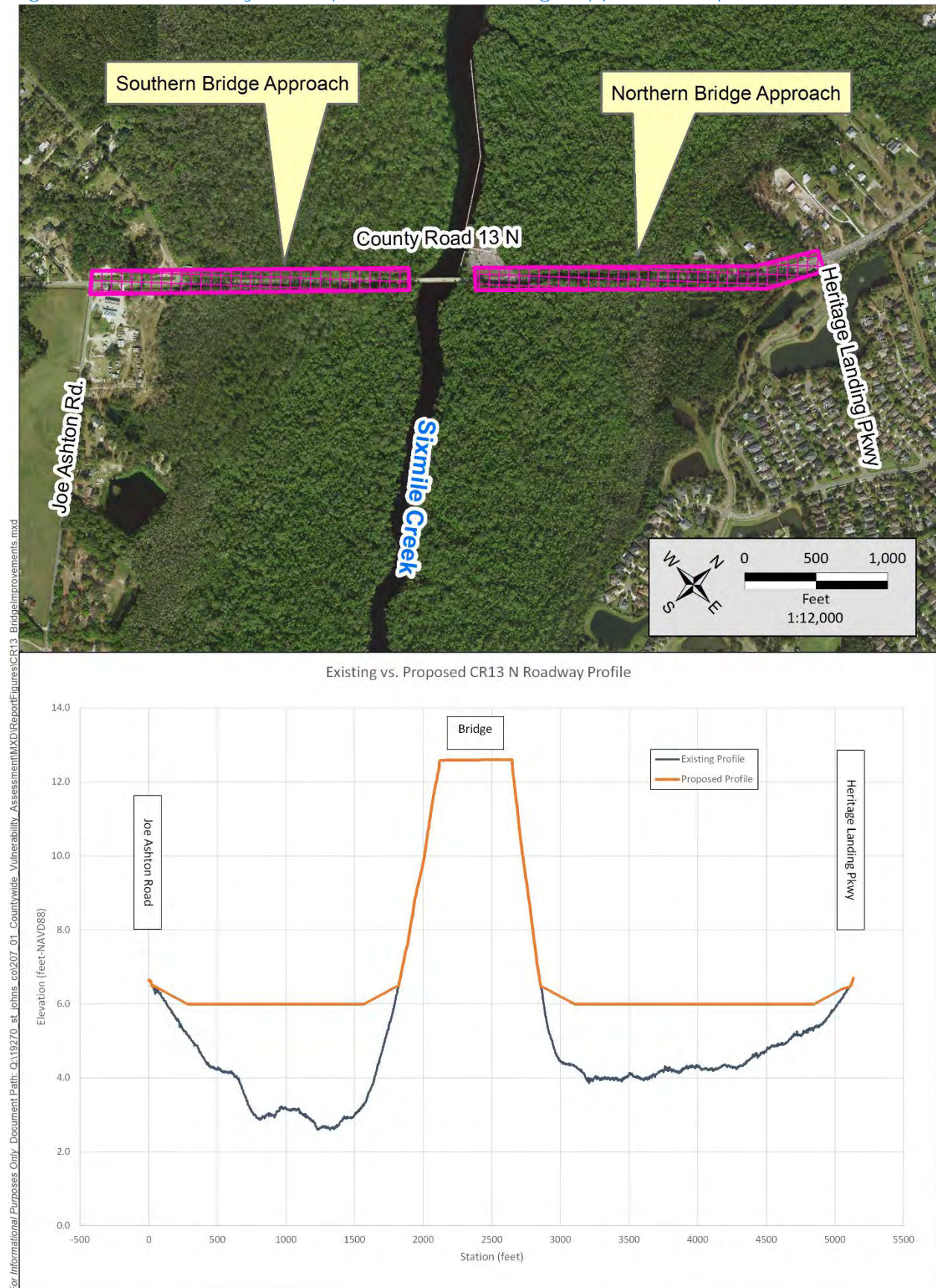




Figure 3 Summary of Proposed CR 13N Bridge Approach Improvements



### 1.3.2.3 CR 13 Cross-Culvert Capacity Improvements

CR 13N is owned and maintained by the County and is a major collector road and evacuation route for County residents. Results from the exposure and sensitivity analysis identified two cross-culvert locations along CR 13N between Don Manuel Road and McCullough Creek where CR 13N overtops from rainfall flooding during the 25-year/24-hour event because the cross-culverts are undersized. Figure 4 shows the crossing locations.

The first undersized cross-culvert is at Colson Branch approximately 0.5 mile east of CR 305 and has four existing 5-foot by 10-foot concrete box culverts. Based on the 2018 LiDAR DEM, the minimum centerline elevation of CR 13N at this location is 9.7 feet-NAVD88. Results from the exposure analysis at this location show that the roadway overtops from rainfall flooding during the 25-year/24-hour event, but no tidal or surge related flooding is predicted. As shown in Figure 5, rainfall-induced flooding was documented at this location during a storm event that occurred on May 3, 2013, which resulted in approximately 8 to 9 inches of rainfall in a 24-hour period.

The second undersized cross-culvert is at West Moccasin Branch, which is just north of the intersection of CR 13A and CR 13N and consists of four 48-inch corrugated metal pipes. Based on the 2018 LiDAR DEM, the minimum centerline elevation of CR 13N at this location is 9.0 feet-NAVD88. Additionally, a 3-foot-by-4-foot box culvert is under CR 13N approximately 850 linear feet southeast of CR 13A. Results from the exposure analysis at this location show that the roadway overtops from rainfall flooding during the 25-year/24-hour event, but no tidal or surge related flooding is predicted.

The proposed adaptation strategy to reduce the flood vulnerability of CR 13N at the Colson Branch crossing is to increase the culvert capacity from four to eight 5-foot-by-10-foot box culverts. Based on modeling completed for this alternative, this will eliminate rainfall-driven overtopping of CR 13N in the 100-year/24-hour event by reducing the peak stage on the upstream (north) side of the culverts from 10.5 to 9.6 feet-NAVD88. Figure 6 summarizes the proposed improvement at this location.

The proposed adaptation strategy to reduce the flood vulnerability of CR 13N at the West Moccasin Branch crossing is to increase the culvert capacity at the cross-culvert north of CR 13A to four 6-foot-tall by 7-foot-wide concrete box culverts and increase the culvert capacity at the cross-culvert south of CR 13A to two 4-foot-tall by 10-foot-wide concrete box culverts. This will eliminate rainfall-driven overtopping of CR 13N in the 100-year/24-hour event by reducing the peak stages on the upstream (east) side of the culverts from 9.5 to 8.1 feet-NAVD88. Figure 7 summarizes the proposed improvement at this location.

Jones Edmunds developed an engineer's opinion of probable cost to estimate engineering and construction costs for the proposed improvement. The cost estimate is considered a conceptual-level Class 4 estimate (ASTM E2516), which typically has an accuracy range of -20 to +30 percent. Unit prices were taken from the FDOT 12-month moving average construction cost data when available. If FDOT cost data were not available for an item, unit costs were estimated based on other recently bid projects in the area. The estimated cost for this project is \$6.6 million to \$8.6 million. Table 2 in Attachment 5 provides the detailed cost estimate.



Figure 4 CR 13N Undersized Culvert Crossing Locations

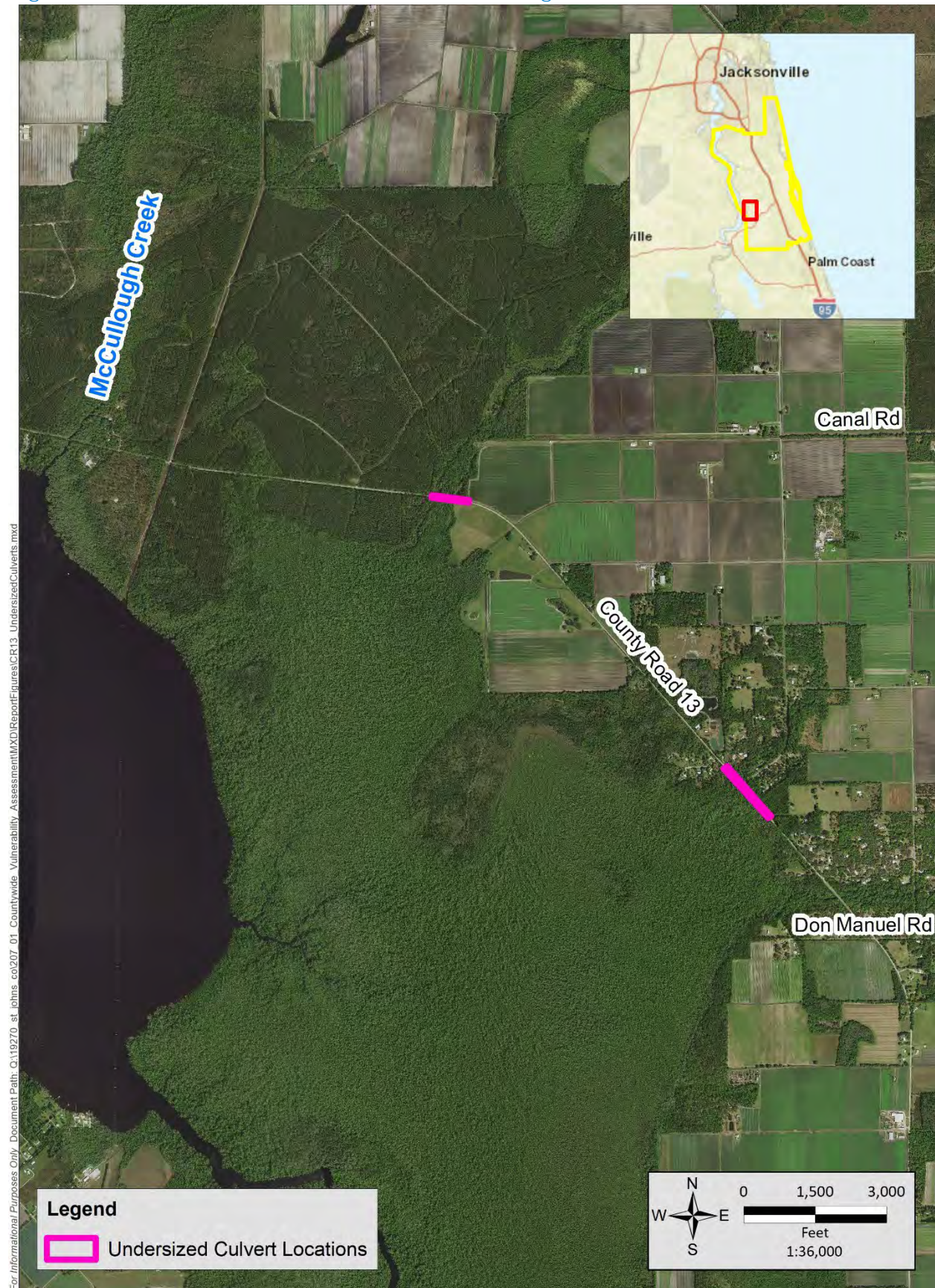




Figure 5 CR 13N Flooding During May 3, 2013 Rainfall Event



Figure 6 Proposed Improvements at Colson Branch

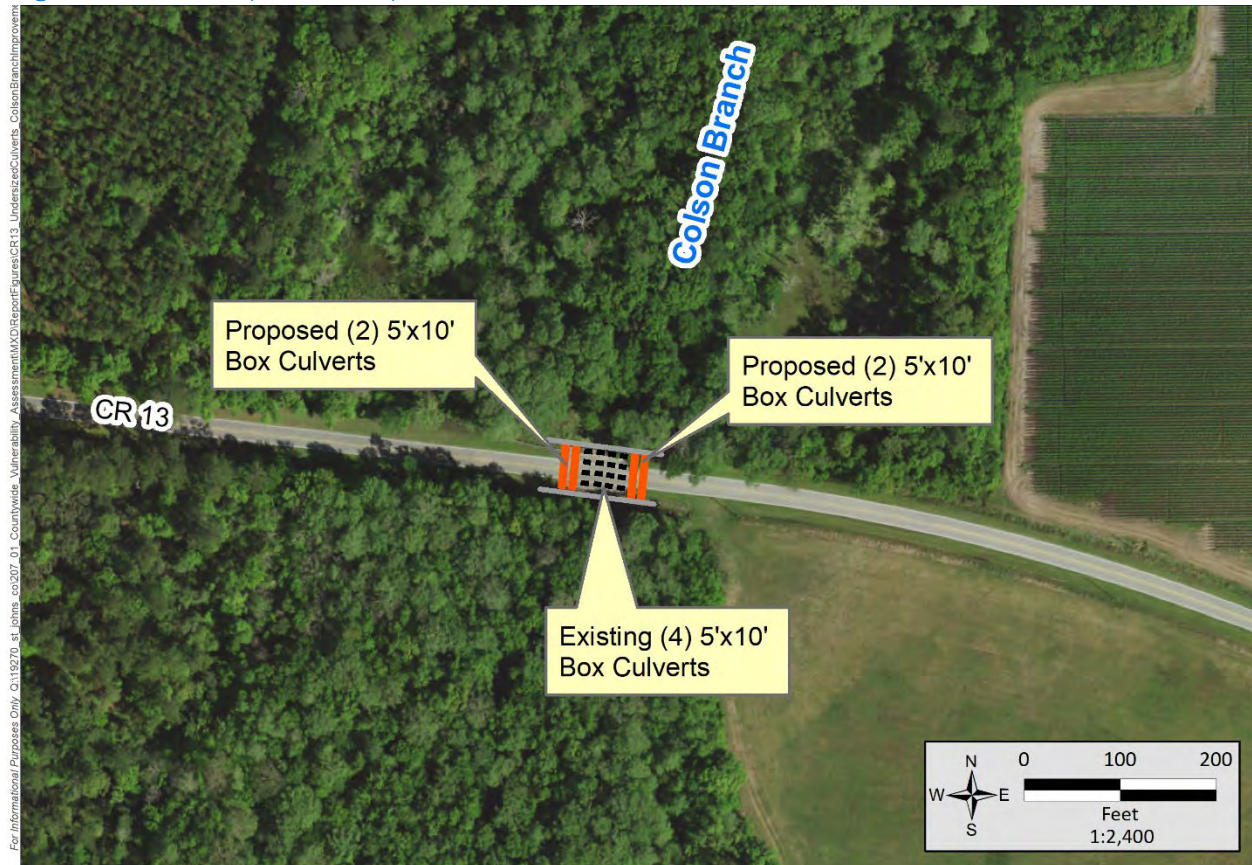
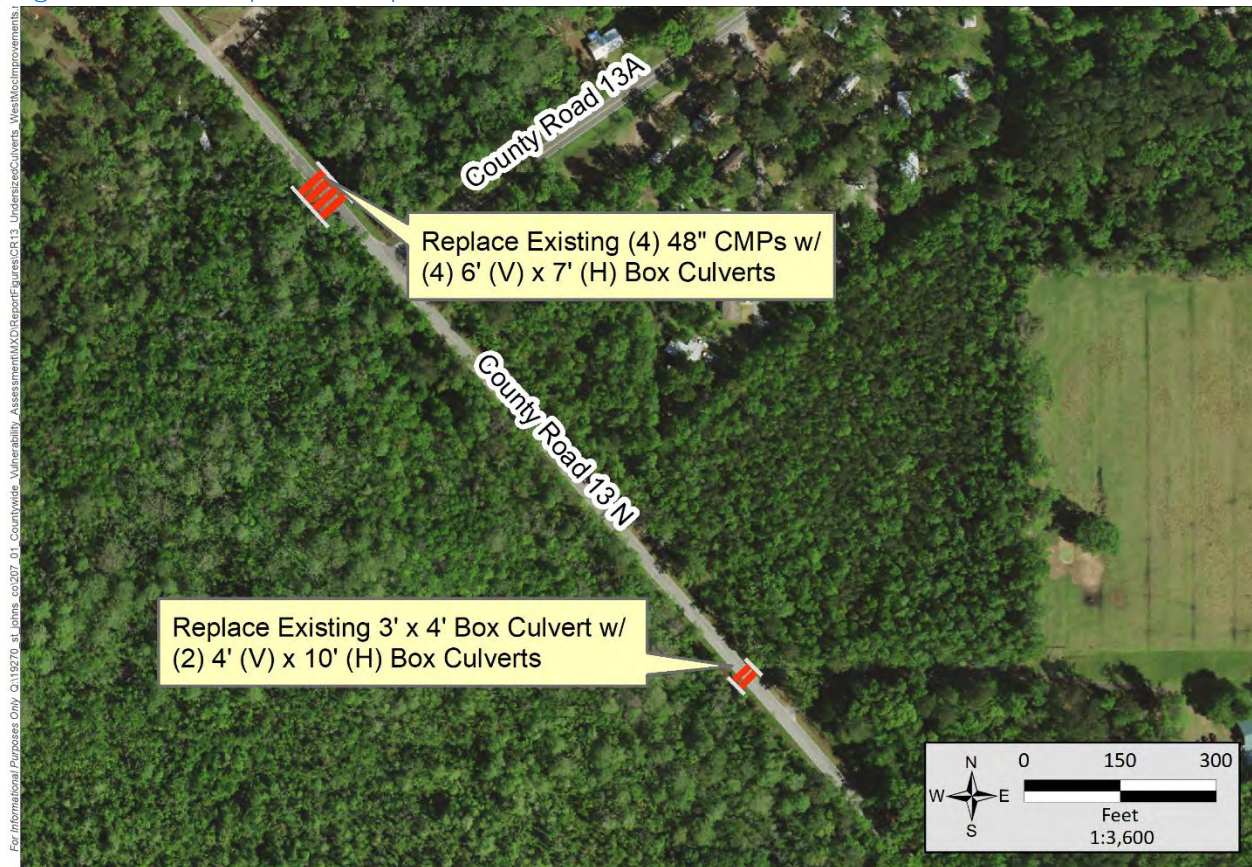




Figure 7 Proposed Improvements at West Moccasin Branch



#### 1.3.2.4 Elevate Low Spots Along CR 13N

CR 13N is owned and maintained by the County and is a major collector road and evacuation route for County residents. Results from the exposure and sensitivity analysis identified two sections between CR 214 and Kemperland Parkway where CR 13N is low-lying and vulnerable to rainfall, tidal, and surge flooding under the existing conditions. Figure 8 shows the locations of the vulnerable sections. Both sections include segments of roadway that were identified as “highest” and “high” priority critical assets in the sensitivity analysis, and CR 13N was identified as a regionally significant asset.



Figure 8 Low-Lying Vulnerable Sections of CR13N





The first section of low-lying roadway begins just south of Kemperland Parkway and includes approximately 1.7 miles of two-lane roadway. Based on the 2018 LiDAR DEM, the minimum centerline elevation in this section is 3.2 feet-NAVD88, but most of the road is between 4.0 and 4.5 feet-NAVD88. The second section of low-lying roadway begins approximately 1 mile north of CR 214 and includes approximately 1.0 mile of two-lane roadway. Based on the 2018 LiDAR DEM, the minimum centerline elevation in this section is 3.6 feet-NAVD88. Surveyed high water mark data from Hurricanes Irma and Matthew showed that peak stages in the St. Johns River in this area were at approximately 5 feet-NAVD88 during both events, which caused significant flooding of CR 13N in these sections.

The proposed adaptation strategy to reduce the flood vulnerability of CR 13N in these sections is to raise the roads to a minimum elevation of 5.5 to 6.0 feet-NAVD88 and increase the cross-culvert capacity as needed to offset increases in peak stage from rainfall-induced flooding on the east side of CR 13N. Figure 9 summarizes the proposed improvements for the section south of Kemperland Parkway, and Figure 10 summarizes the proposed improvements for the section north of CR 214.

**Figure 9** Proposed Improvements South of Kemperland Parkway

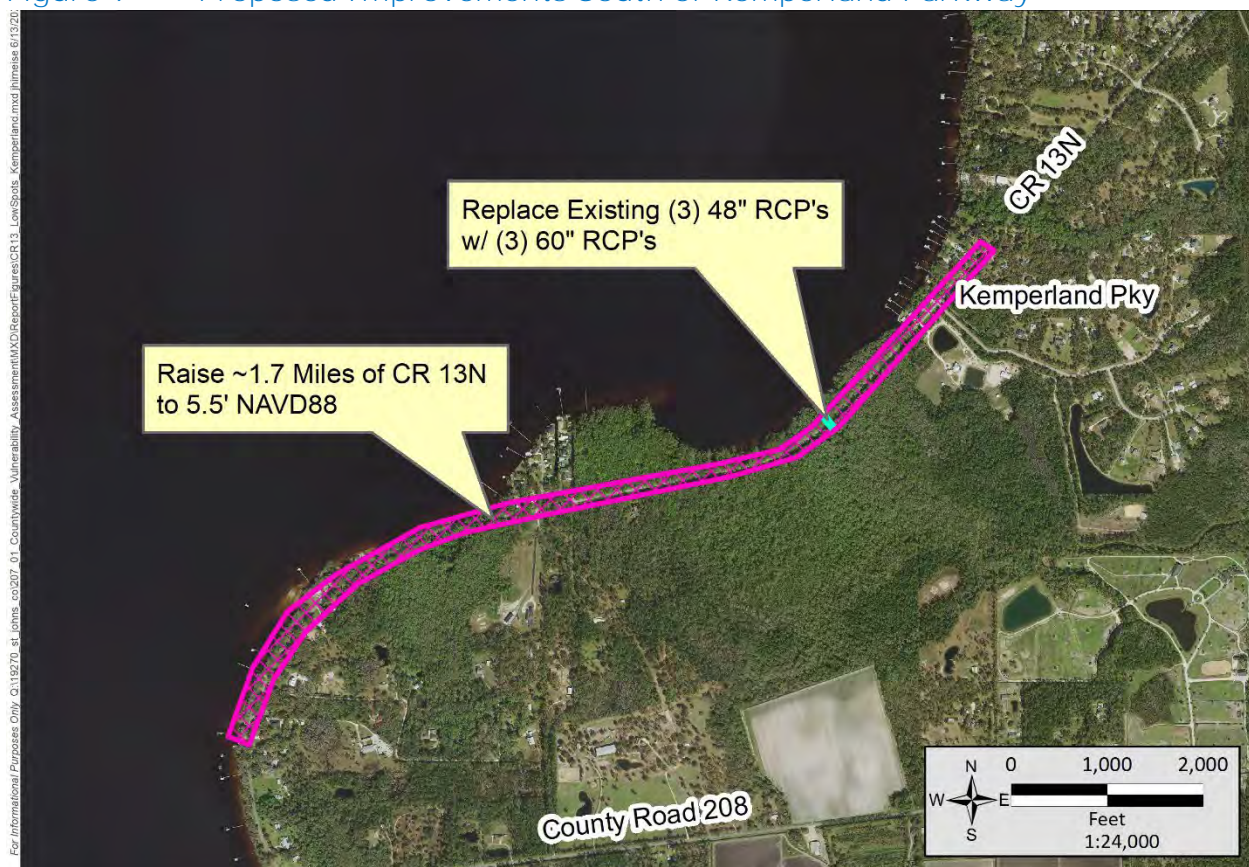
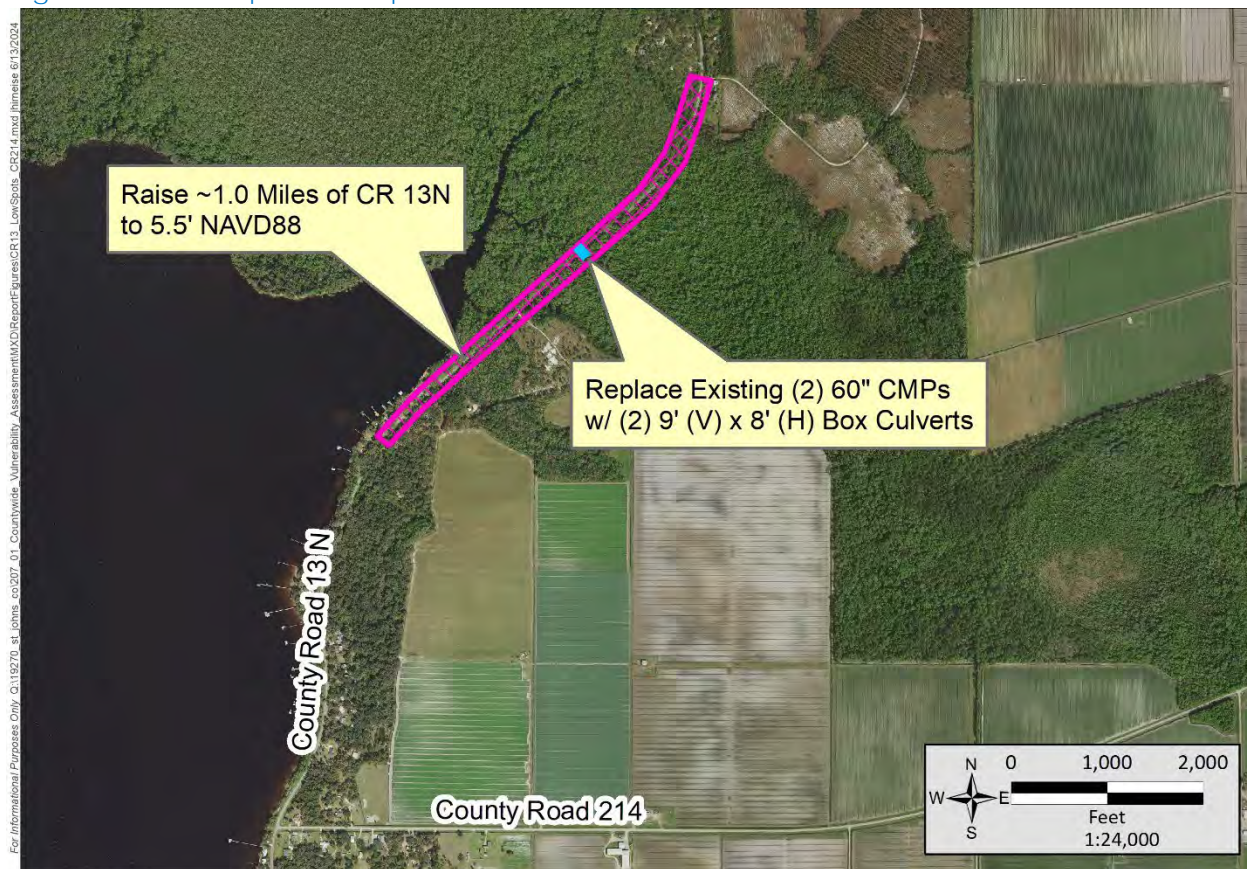


Figure 10 Proposed Improvements North of CR 214



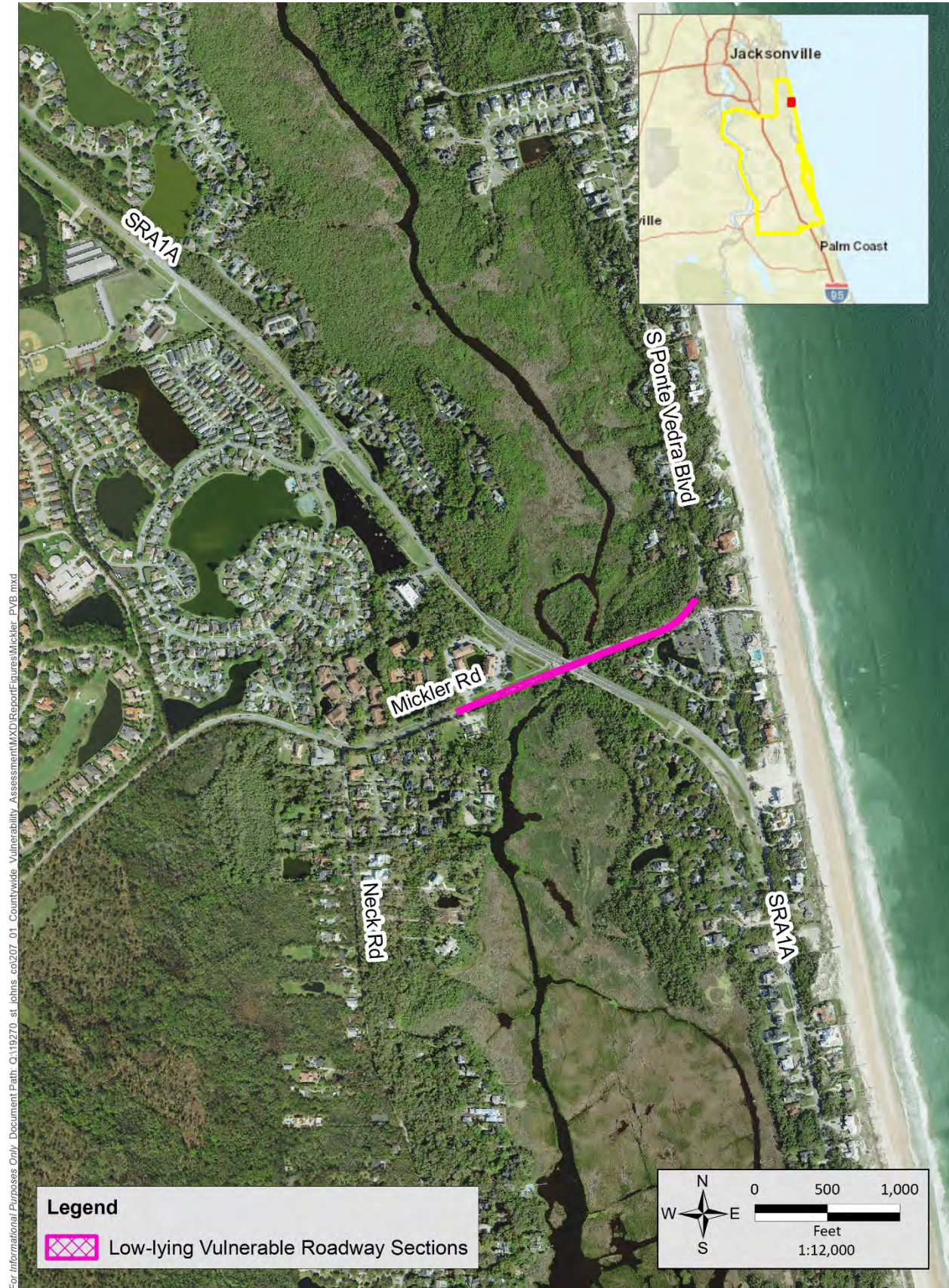
Jones Edmunds developed an engineer's opinion of probable cost to estimate engineering and construction costs for the proposed improvements. The cost estimate is considered a conceptual-level Class 4 estimate (ASTM E2516), which typically has an accuracy range of -20 to +30 percent. Unit prices were taken from the FDOT 12-month moving average construction cost data when available. If FDOT cost data were not available for an item, unit costs were estimated based on other recently bid projects in the area. The estimated cost for this project is \$19 million to \$24.8 million. Table 3 in Attachment 5 provides the detailed cost estimate.

#### 1.3.2.5 Elevate Mickler Road and Ponte Vedra Boulevard Adjacent to SR A1A

Mickler Road and Ponte Vedra Boulevard are owned and maintained by the County and are major collector roads and evacuation routes for County residents. Results from the exposure and sensitivity analyses identified the low-lying section of Mickler Road west of SR A1A and the low-lying section of Ponte Vedra Boulevard east of SR A1A as vulnerable to rainfall, tidal, and surge flooding under existing conditions. Figure 11 shows the locations of the vulnerable sections. Both sections include segments of roadway that were identified as "highest" priority critical assets in the sensitivity analysis, and both roads were identified as regionally significant assets.



Figure 11 Low-Lying Vulnerable Sections of Mickler Road and Ponte Vedra Boulevard



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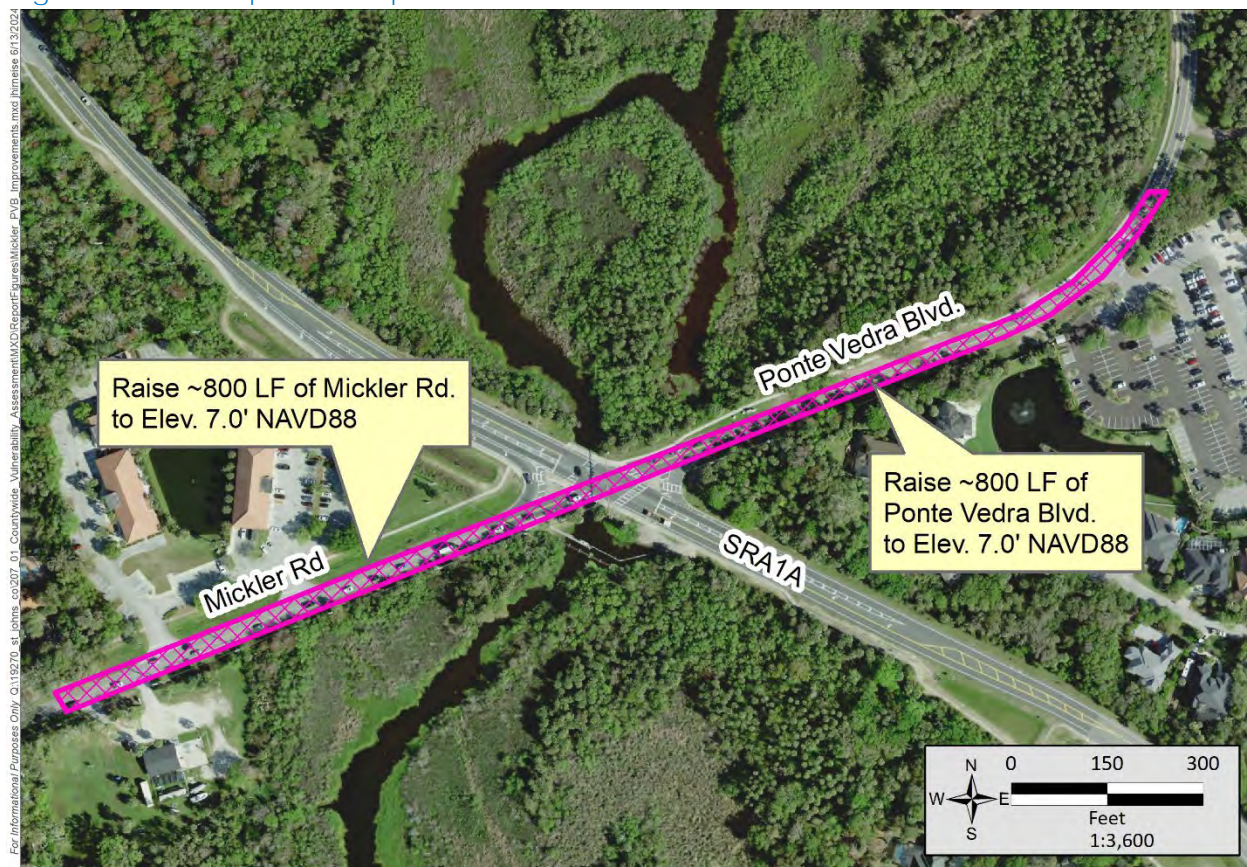


The vulnerable section of Mickler Road includes approximately 650 linear feet of low-lying two-lane roadway that begins just west of the intersection with SR A1A. Based on the 2018 LiDAR DEM, the minimum centerline elevation in this section is 4.3 feet-NAVD88. The vulnerable section of Ponte Vedra Boulevard includes approximately 650 linear feet of low-lying two-lane roadway that begins just east of the intersection with SR A1A. Based on the 2018 LiDAR DEM, the minimum centerline elevation in this section is 4.3 feet-NAVD88.

The proposed adaptation strategy to reduce the flood vulnerability of these low-lying sections of roadway is to raise them to a minimum elevation of 7.0 feet-NAVD88.

Figure 12 summarizes the proposed improvements.

**Figure 12 Proposed Improvements for Mickler Road and Ponte Vedra Boulevard**



Jones Edmunds developed an engineer's opinion of probable cost to estimate engineering and construction costs for the proposed improvements. The cost estimate is considered a conceptual-level Class 4 estimate (ASTM E2516), which typically has an accuracy range of -20 to +30 percent. Unit prices were taken from the FDOT 12-month moving average construction cost data when available. If FDOT cost data were not available for an item, unit costs were estimated based on other recently bid projects in the area. The estimated cost for this project is \$3 to \$3.8 million. Table 4 in Attachment 5 provides the detailed cost estimate.

#### 1.3.2.6 Elevate Landrum Lane

Landrum Lane is in Ponte Vedra east of the Intracoastal Waterway and connects Roscoe Boulevard to Palm Valley Road. It is owned and maintained by the County and is considered a collector road. Results from the exposure and sensitivity analyses identified Landrum Lane as low-lying and vulnerable to rainfall and surge flooding under the existing conditions.

Figure 13 shows the location of Landrum Lane, which was identified as a “high” priority critical asset in the sensitivity analysis. Landrum Lane also provides the only access to Landrum Middle School and Ocean Palms Elementary School.

The vulnerable section of Landrum Lane includes approximately 3,600 linear feet of two-lane roadway. Based on the 2018 LiDAR DEM, the minimum centerline elevation in this section is 4.7 feet-NAVD88, but most of the roadway has a centerline elevation of 5.0 feet-NAVD88. Surveyed high water mark data from Hurricanes Irma and Matthew showed that peak stages in this area were at approximately 5.0 feet-NAVD88 during Hurricane Matthew and 5.5 to 6.0 feet-NAVD88 during Hurricane Irma, which would cause significant flooding of Landrum Lane.

The proposed adaptation strategy to reduce the flood vulnerability of Landrum Lane is to raise this road to a minimum elevation of 6.5 feet-NAVD88. Figure 14 summarizes the proposed improvements.

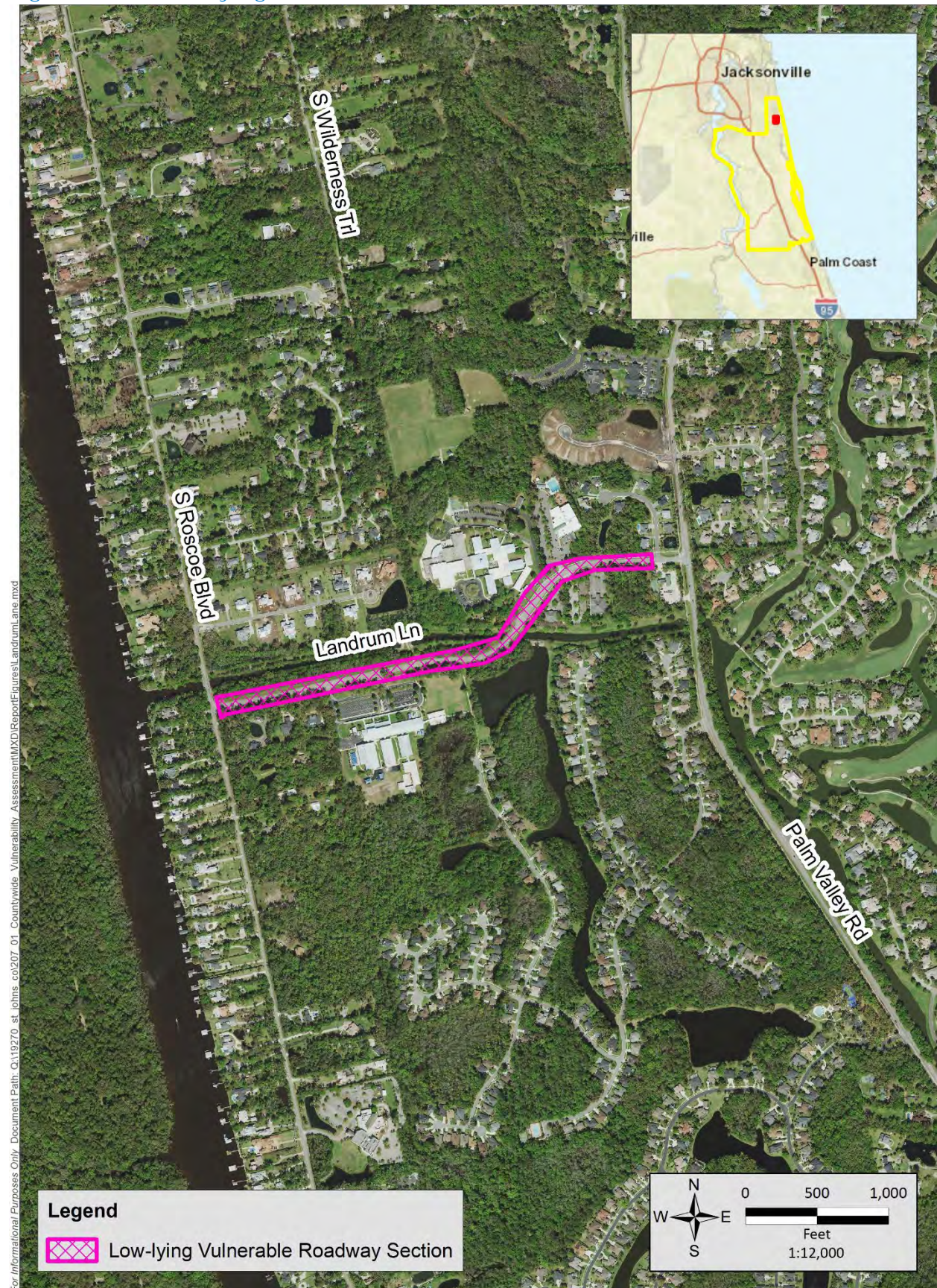
Jones Edmunds developed an engineer’s opinion of probable cost to estimate engineering and construction costs for the proposed improvements. The cost estimate is considered a conceptual-level Class 4 estimate (ASTM E2516), which typically has an accuracy range of -20 to +30 percent. Unit prices were taken from the FDOT 12-month moving average construction cost data when available. If FDOT cost data were not available for an item, unit costs were estimated based on other recently bid projects in the area. The estimated cost for this project is \$4.9 to \$6.4 million. Table 5 in Attachment 5 provides the detailed cost estimate.

#### 1.3.2.7 Elevate Low Sections of Roscoe Boulevard and Canal Boulevard

Roscoe Boulevard and Canal Boulevard are in Ponte Vedra east of the Intracoastal Waterway. Roscoe Boulevard runs north-south along the Intracoastal Waterway and Canal Boulevard runs east-west from Roscoe Boulevard to Palm Valley Road. Both roads are owned and maintained by the County and are considered collector roads. Results from the exposure and sensitivity analyses identified low-lying sections of Roscoe Boulevard and Canal Boulevard as vulnerable to rainfall and surge related flooding under the existing conditions. Figure 15 shows the sections of Roscoe Boulevard and Canal Boulevard that were identified as “highest” and “high” priority critical assets in the sensitivity analysis.



Figure 13 Low-Lying Vulnerable Section of Landrum Lane



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Figure 14 Proposed Improvements for Mickler Road and Ponte Vedra Boulevard



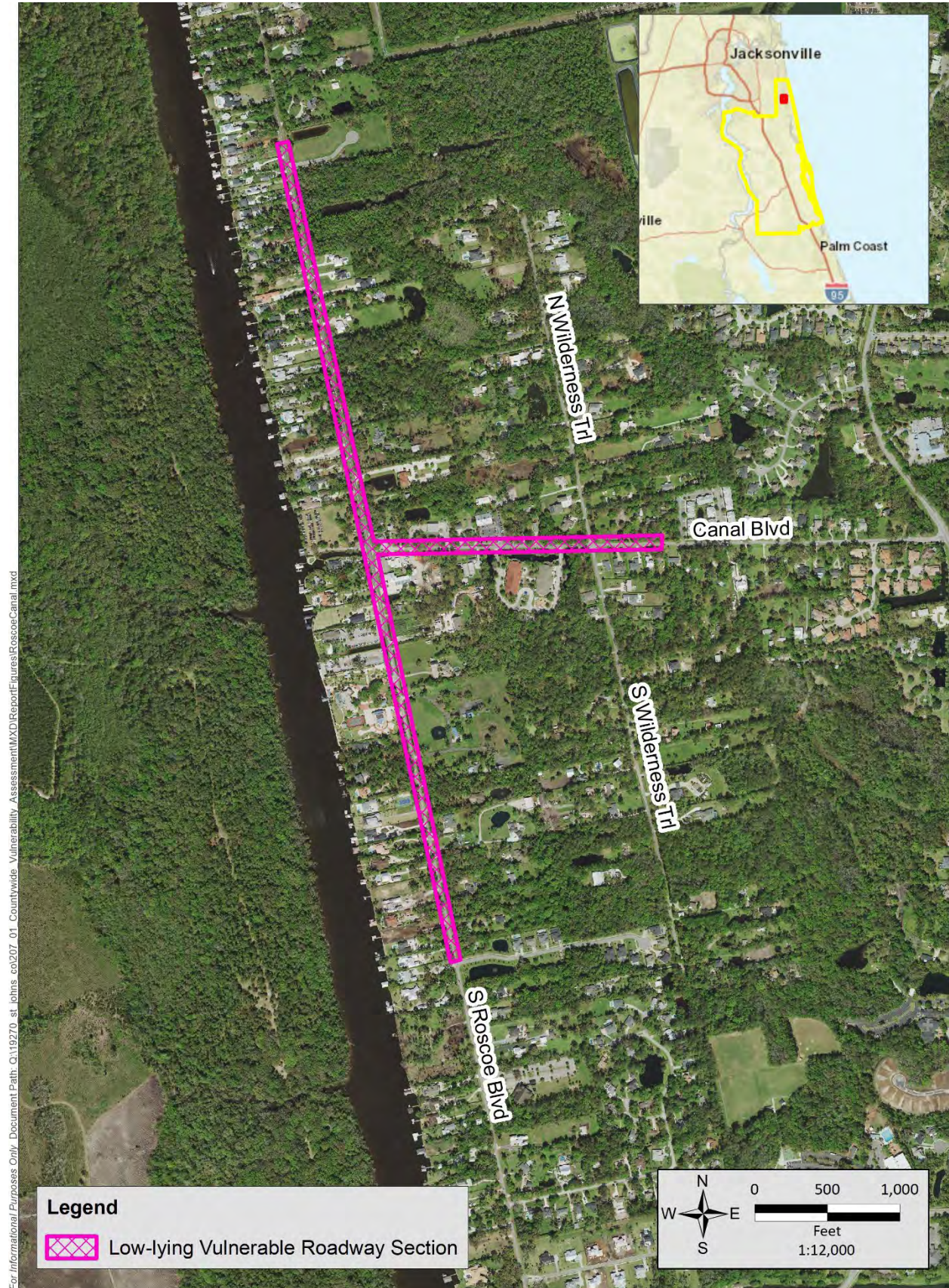
The vulnerable section of Roscoe Boulevard includes 1.1 miles of low-lying two-lane roadway between Sanctuary Estates Lane and Valley Gardens Road. Based on the 2018 LiDAR DEM, the minimum centerline elevation in this section is 4.2 feet-NAVD88. The vulnerable section of Canal Boulevard includes approximately 1,700 linear feet of low-lying two-lane roadway between Roscoe Boulevard and Wilderness Trail. Based on the 2018 LiDAR DEM, the minimum centerline elevation in this section is 5.0 feet-NAVD88. Both sections of roadway are vulnerable to rainfall- and surge-driven flooding under the existing conditions. Results from the rainfall-driven flood modeling show overtopping of the roadways beginning in the 25-year/24-hour storm event. Surveyed high water mark data from Hurricanes Irma and Matthew showed that peak stages in this area were at approximately 5.0 feet-NAVD88 during Hurricane Matthew and 5.5 to 6.0 feet-NAVD88 during Hurricane Irma, which would cause significant flooding of these roadways.

The proposed adaptation strategy to reduce the flood vulnerability of these low-lying sections of roadway is to raise them to a minimum elevation of 6.0 feet-NAVD88 and construct stormwater conveyance improvements to offset increases in rainfall-driven flood stages adjacent to the roadways. Figure 16 summarizes the proposed improvements.

Jones Edmunds developed an engineer's opinion of probable cost to estimate engineering and construction costs for the proposed improvements. The cost estimate is considered a conceptual-level Class 4 estimate (ASTM E2516), which typically has an accuracy range of



Figure 15 Low-Lying Vulnerable Sections of Roscoe Boulevard and Canal Boulevard





This aerial map illustrates the project area along Roscoe Boulevard, which runs parallel to the Roscoe Canal. The map highlights two primary project sections with pink lines: a segment of Roscoe Boulevard and a section of Canal Boulevard. Key features and callouts include:

- Legend:** A pink line indicates the "Low-lying Vulnerable Roadway Section".
- Callout 1:** "Construct Drainage System Along Roscoe Boulevard" points to the northern section of the pink line.
- Callout 2:** "Raise Approximately 2,000 LF of Canal Boulevard to Elev. 6.0' NAVD88" points to a horizontal pink line connecting Roscoe Blvd to Canal Blvd.
- Callout 3:** "Raise Approximately 5,800 LF of Roscoe Boulevard to Elev. 6.0' NAVD88" points to the southern section of the pink line.
- Inset Map:** Located in the top right, it shows the project area's location within the larger context of Jacksonville, Florida, near the intersection of I-95 and I-10.
- Scale and Orientation:** A north arrow and a scale bar (0 to 1,000 feet) are provided in the bottom right corner, with a scale of 1:12,000.
- Labels:** The map is labeled with "N Wilderness Trl", "S Wilderness Trl", "Canal Blvd", "S Roscoe Blvd", and "Palm Valley Rd".



-20 to +30 percent. Unit prices were taken from the FDOT 12-month moving average construction cost data when available. If FDOT cost data were not available for an item, unit costs were estimated based on other recently bid projects in the area. The estimated cost for this project is \$14.3 million to \$18.7 million. Table 6 in Attachment 5 provides the detailed cost estimate.

### 1.3.2.8 Elevate Masters Drive, SR 16, and Lewis Speedway

Masters Drive, SR 16, and Lewis Speedway are west of the San Sebastian River near downtown City of St. Augustine. SR 16 is an FDOT-owned and maintained roadway that runs east-west and is an evacuation route. Lewis Speedway and Masters Drive are owned and maintained by the County, run north-south, and are considered collector roads. Masters Drive dead ends into SR 16 from the south and Lewis Speedway dead ends into SR 16 from the north. Results from the exposure and sensitivity analyses identified low-lying sections of these roadways as vulnerable to rainfall and surge related flooding under the existing conditions. These vulnerable roadway sections include:

- The vulnerable section of Lewis Speedway includes approximately 1,400 linear feet of low-lying three- and four-lane roadway north of SR 16. Based on the 2018 LiDAR DEM, the minimum centerline elevation in this section is 4.2 feet-NAVD88.
- The vulnerable section of SR 16 includes approximately 1,500 linear feet of low-lying five-lane roadway between Lewis Speedway and Jardine Avenue. Based on the 2018 LiDAR DEM, the minimum centerline elevation in this section is 6.0 feet-NAVD88.
- The vulnerable section of Masters Drive includes approximately 1,000 linear feet of low-lying two-lane roadway south of SR 16. Based on the 2018 LiDAR DEM, the minimum centerline elevation in this section is 4.7 feet-NAVD88.

These sections of roadway are vulnerable to rainfall and surge driven flooding under the existing conditions. Results from the rainfall driven flood modeling show overtopping of the roadways beginning in the 25-year/24-hour storm event. Surveyed high water mark data from Hurricanes Matthew, Ian, and Nicole showed that peak stages in this area were at approximately 6.5 to 7.0 feet-NAVD88 during the events, which would cause significant flooding of these roadways. Figure 17 shows the sections that were identified as “highest” and “high” priority critical assets in the sensitivity analysis.

The proposed adaptation strategy to reduce the flood vulnerability of these low-lying sections of roadway is to raise them to a minimum elevation of 6.5 to 7.0 feet-NAVD88 and construct required stormwater conveyance improvements to offset flood-stage impacts from raising the roadways. Figure 18 summarizes the proposed improvements.

Jones Edmunds developed an engineer’s opinion of probable cost to estimate engineering and construction costs for the proposed improvements. The cost estimate is considered a conceptual-level Class 4 estimate (ASTM E2516), which typically has an accuracy range of -20 to +30 percent. Unit prices were taken from the FDOT 12-month moving average construction cost data when available. If FDOT cost data were not available for an item, unit costs were estimated based on other recently bid projects in the area. The estimated cost for this project is \$11.8 million to \$15.4 million. Table 7 in Attachment 5 provides the detailed cost estimate.

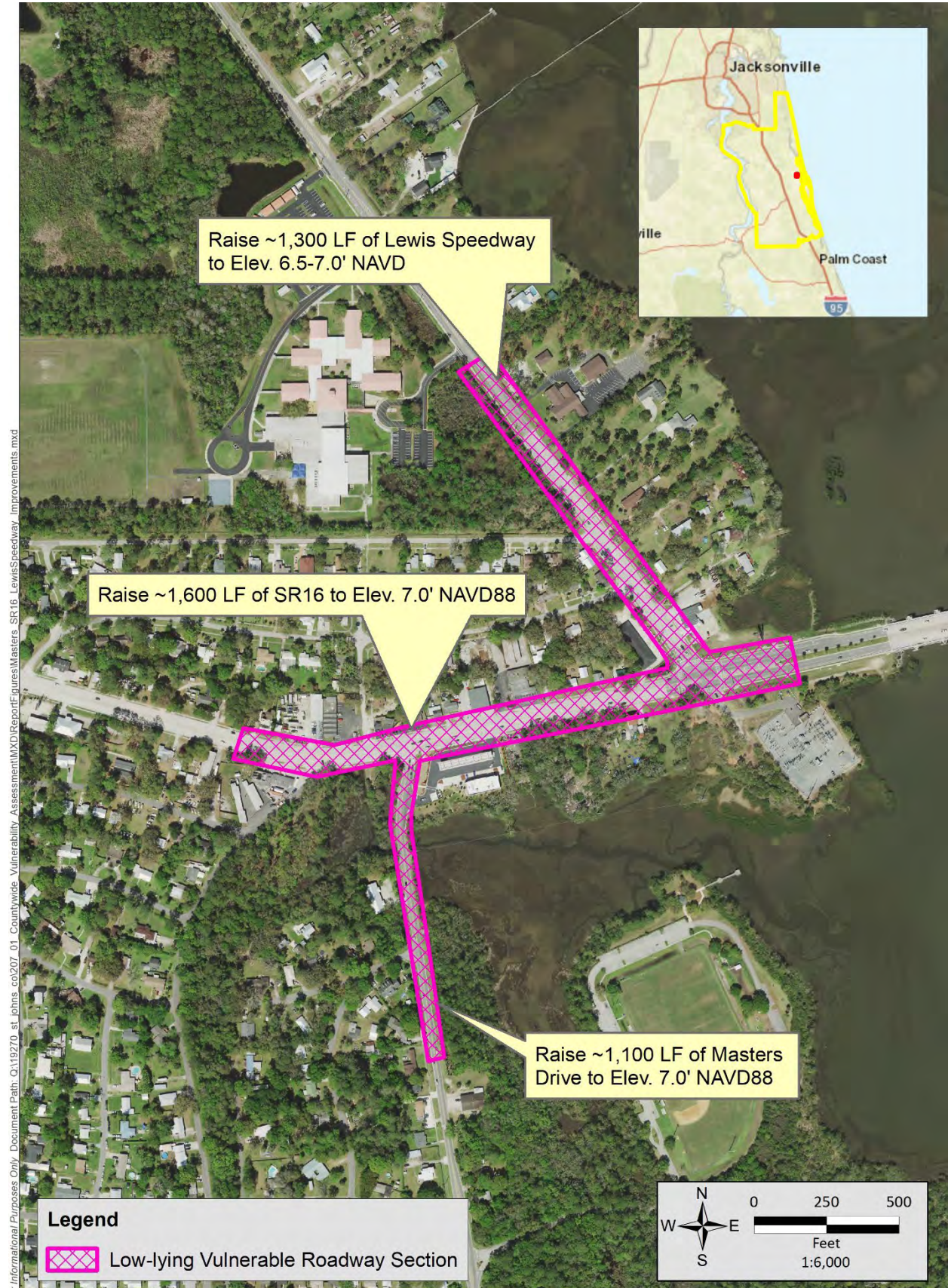


Figure 17 Low-Lying Vulnerable Sections of Masters Drive, SR 16, and Lewis Speedway





Figure 18 Proposed Improvements for Masters Drive, SR 16, and Lewis Speedway



### 1.3.2.9 Raise/Modify Vulnerable Sanitary Sewer Lift Stations

Jones Edmunds reviewed the sanitary sewer lift stations that were assigned the “highest” or “high” critical asset priority ratings to identify stations that may need to be raised out of the floodplain or modified to operate under the projected flooding conditions. The County has already received funding to raise/modify 31 vulnerable lift stations as part of an on-going project. Jones Edmunds reviewed the list of 31 lift stations to ensure that they were filtered out of the identification process. Jones Edmunds identified an additional 34 low-lying vulnerable lift stations that the County should consider elevating out of the floodplain or modifying to flood-proof them.

Figure 19 shows the lift stations that were identified and assigned a unique identifier. For each lift station shown in Table 2 provides the lift station FacilityID, name, general location, elevation, priority rating assigned to it, and elevations of adjacent high water marks from recent storm events where available.

A detailed cost estimate was not developed for this improvement alternative. The adaptation strategies will vary by lift station. A detailed assessment will be required to analyze each lift station’s components relative to the projected flood elevations and determine the best strategy for modifying each station to handle the projected flooding conditions. For reference, the on-going County project to adapt/modify 27 lift station has a data collection, engineering, and construction budget of \$300,000 per station. If this average cost per station is applied to the 34 stations identified in this alternative, the County could expect the construction cost to be in the \$10 million to \$11 million range.

### 1.3.3 FDOT COORDINATION FOR SR A1A

SR A1A is owned and maintained by FDOT and is a critical evacuation route for the County’s beach communities. Several sections of SR A1A were identified as vulnerable to rainfall, tidal, and storm surge flooding based on the Exposure and Sensitivity Analyses and feedback received from County residents through the public survey. Flooding and severe erosion along SR A1A during recent tropical storm events has been well documented. Figure 20 shows the sections of SR A1A that were assigned the “highest” and “high” critical asset priority rankings. Particular sections of note include:

- The section between SR 206 and Old A1A, which includes a continuous section of approximately 2 miles of roadway that is below 6.0 feet NAVD88 and has flooded several times during recent tropical events.
- The east approach to the Vilano Bridge.
- The section adjacent to Ocean Sand Beach Inn (3465 Coastal Highway), which has washed out during multiple recent tropical events.

Improvement alternatives to reduce the vulnerabilities along SR A1A were not developed for the preliminary adaptation plan because it is not owned or maintained by the County. Improvements to SR A1A would have to be initiated by FDOT. Based on previous communications with County staff, FDOT is aware of the vulnerabilities along SR A1A and is considering options for improvements. The County should continue coordinating with FDOT to share results from this study and provide support for potential SR A1A improvements.



Figure 19 Vulnerable Lift Station to Consider Raising/Modifying

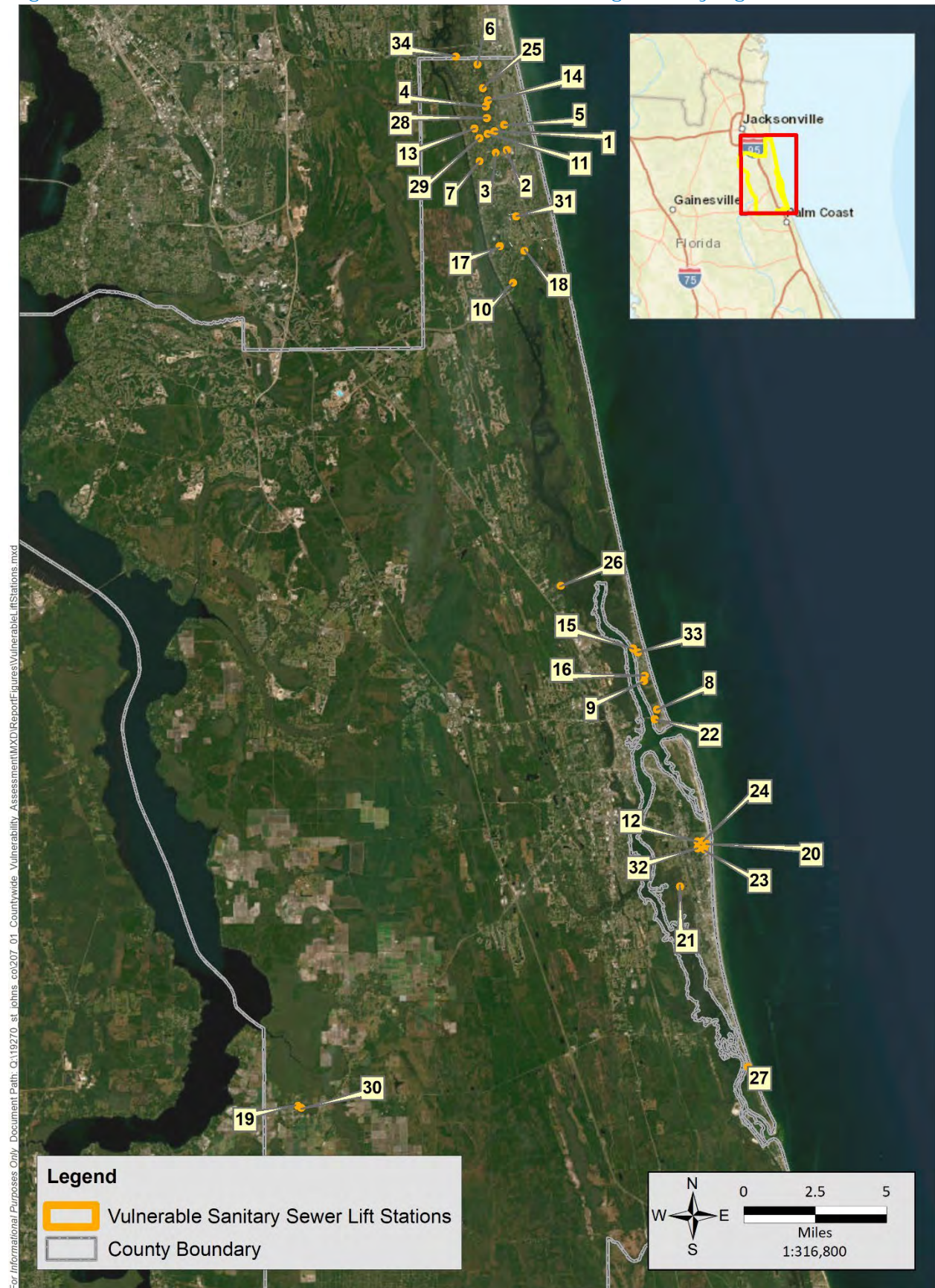


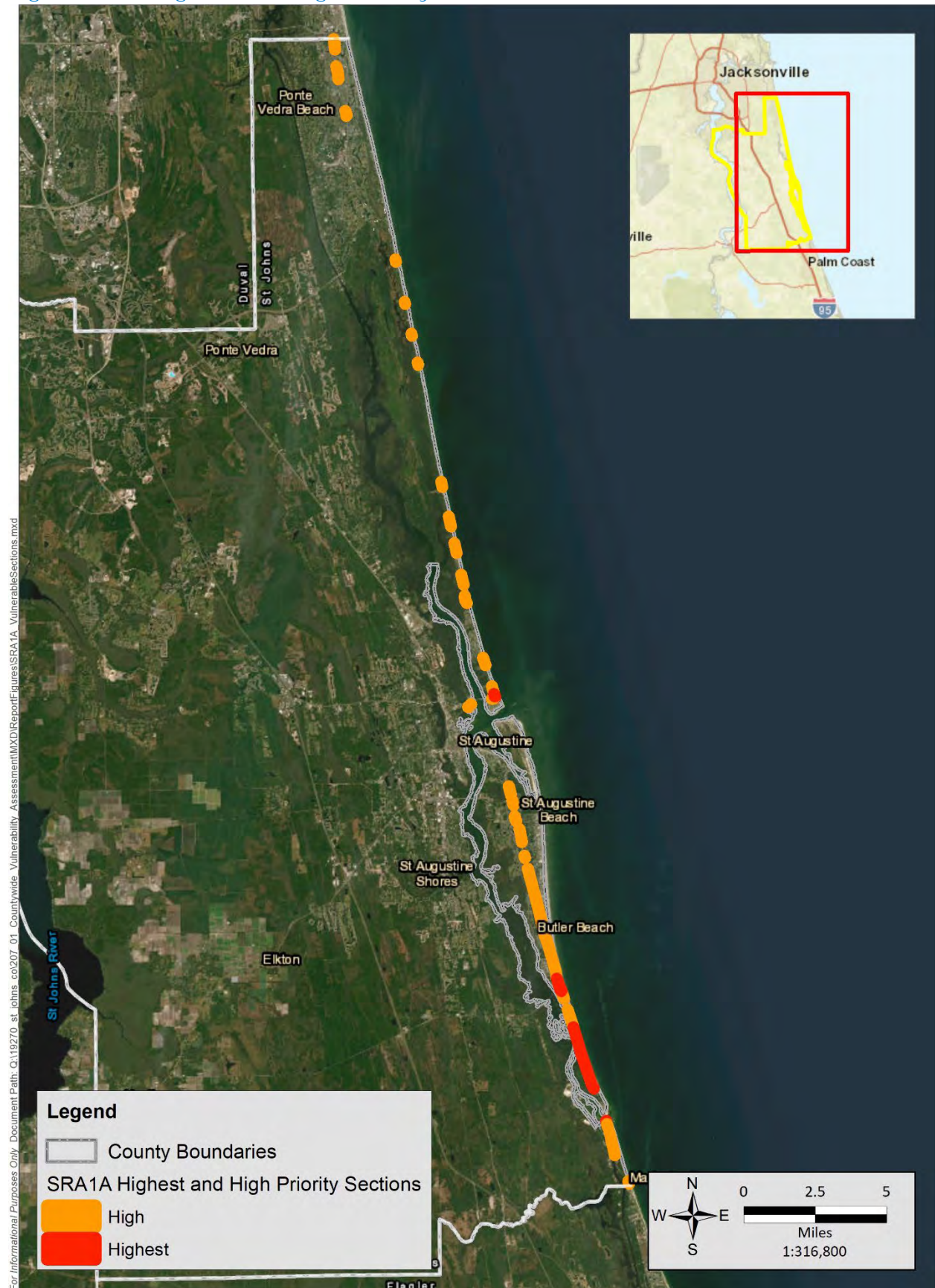
Table 2 Vulnerable Lift Station Summary Table

Map ID	Facility ID	Lift Station Name	General Location	Elevation (feet-NAVD88)	Priority Rating	Adjacent Flood Elevations from Recent Events (feet-NAVD88)
1	224	Bermuda Court	Ponte Vedra: TPC Sawgrass	3.2	Highest	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
2	231	TPC #4	Ponte Vedra: TPC Sawgrass	3.2	Highest	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
3	230	TPC #5	Ponte Vedra: TPC Sawgrass	4	Highest	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
4	210	Heron Lake	Ponte Vedra: Marsh Landing	4.3	Highest	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
5	225	Palmera	Ponte Vedra: TPC Sawgrass	4.4	Highest	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
6	202	Marsh Landing #24	Ponte Vedra: Marsh Landing	4.3	Highest	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
7	228	Seven Mile Drive	Ponte Vedra: TPC Sawgrass	4.4	Highest	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
8	N/A (North Beach)	Sherwood Avenue	North Beach/Vilano	4	Highest	Hurricane Matthew: 6.8. Hurricane Ian: 5.8. Hurricane Nicole: 5.9.
9	N/A (North Beach)	Herron Point 1 at Carcaba	North Beach/Vilano	4.1	Highest	Hurricane Matthew: 6.8. Hurricane Ian: 5.8. Hurricane Nicole: 5.9.
10	298	Sawmill Lakes #2	Ponte Vedra: Sawmill Lakes	4.7	Highest	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
11	223	Turtleback	Ponte Vedra: TPC Sawgrass	4.7	Highest	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
12	62	16th Street and Mickler Road	City of St. Augustine Beach	5.6	High	Hurricane Matthew: 6.8 to 7.8. Hurricane Irma: 5.5 to 6.9. Hurricane Ian: 6.6 to 7.4. Hurricane Nicole: 5.5 to 6.3.
13	219	Clear Lake	Ponte Vedra: Marsh Landing	4.5	Highest	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
14	209	Merganser Drive	Ponte Vedra: Marsh Landing	4.6	Highest	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
15	N/A (North Beach)	Myrtle and Fifth	North Beach/Vilano	4.5	Highest	Hurricane Matthew: 6.8. Hurricane Ian: 5.8. Hurricane Nicole: 5.9.
16	N/A (North Beach)	Villages of Vilano 2	North Beach/Vilano	4.5	Highest	Hurricane Matthew: 6.8. Hurricane Ian: 5.8. Hurricane Nicole: 5.9.
17	300	Odams Mills #2	Ponte Vedra: Odom's Mill	4.9	Highest	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
18	287	Muirfield	Ponte Vedra: Plantation	5.8	High	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.

Map ID	Facility ID	Lift Station Name	General Location	Elevation (feet-NAVD88)	Priority Rating	Adjacent Flood Elevations from Recent Events (feet-NAVD88)
19	369	Hastings LS 6 – E. St. Johns Avenue	Hastings	3.4	High	Hurricane Matthew: 4.9. Hurricane Irma: 5.9 to 6.9. Hurricane Ian: 4.2.
20	324	14th Street (Minorca)	City of St. Augustine Beach	6.1	High	Hurricane Matthew: 6.8 to 7.8. Hurricane Irma: 5.5 to 6.9. Hurricane Ian: 6.6 to 7.4. Hurricane Nicole: 5.5 to 6.3.
21	74	Marsh Creek #2	Marsh Creek	5.6	High	Hurricane Matthew: 6.8 to 7.8. Hurricane Irma: 5.5 to 6.9. Hurricane Ian: 6.6 to 7.4. Hurricane Nicole: 5.5 to 6.3.
22	N/A (North Beach)	Beaches Rest and Marina 1	North Beach/Vilano	5.7	High	Hurricane Matthew: 6.8. Hurricane Ian: 5.8. Hurricane Nicole: 5.9.
23	323	10th Street (Chautauqua Beach)	City of St. Augustine Beach	6.1	High	Hurricane Matthew: 6.8 to 7.8. Hurricane Irma: 5.5 to 6.9. Hurricane Ian: 6.6 to 7.4. Hurricane Nicole: 5.5 to 6.3.
24	61	Anastasia Oaks	City of St. Augustine Beach	6.3	High	Hurricane Matthew: 6.8 to 7.8. Hurricane Irma: 5.5 to 6.9. Hurricane Ian: 6.6 to 7.4. Hurricane Nicole: 5.5 to 6.3.
25	208	St. Andrews	Ponte Vedra: Marsh Landing	4.8	High	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
26	152	Eagle Creek #4	Eagle Creek	5.1	Medium	Hurricane Matthew: 6.8. Hurricane Ian: 5.8. Hurricane Nicole: 5.9.
27	6	Ocean House	Crescent Beach: Ocean House	5.7	Medium	Hurricane Matthew: 7.7. Hurricane Irma: 6.7. Hurricane Ian: 6.7. Hurricane Nicole: 6.6.
28	222	Salt Creek	Ponte Vedra: TPC Sawgrass	5.2	High	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
29	221	Hammock Cove	Ponte Vedra: TPC Sawgrass	5.3	High	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
30	367	Hastings LS-3 – Park Avenue	Hastings	3.9	High	Hurricane Matthew: 4.9. Hurricane Irma: 5.9 to 6.9. Hurricane Ian: 4.2.
31	284	Governors	Ponte Vedra: Plantation	5.5	High	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.
32	365	Ocean Ridge	City of St. Augustine Beach	6.7	High	Hurricane Matthew: 6.8 to 7.8. Hurricane Irma: 5.5 to 6.9. Hurricane Ian: 6.6 to 7.4. Hurricane Nicole: 5.5 to 6.3.
33	N/A (North Beach)	Back Camp Resort	North Beach/Vilano	5.5	High	Hurricane Matthew: 6.8. Hurricane Ian: 5.8. Hurricane Nicole: 5.9.
34	204	Royal Tern South	Ponte Vedra: Marsh Landing	4.7	High	Hurricane Matthew: 5.0 to 5.2. Hurricane Irma: 5.5 to 6.0. Hurricane Nicole: 5.2 to 5.5.



Figure 20 Highest and High Priority Sections of SRA1A



## 1.4 PRIORITIZED PROJECTS BY ASSET CLASS

As defined in Subsection 380.093(2), FS, Table 3 lists the prioritized adaptation strategies that were identified for the preliminary Adaptation Plan. The list of strategies and prioritization will be refined for the standalone adaptation plan.

**Table 3** Prioritized Adaptation Projects by Asset Class

Asset Class	Adaptation Project	Priority	Estimated Cost (Millions)
Transportation and Evacuation Routes	Elevate Sixmile Creek Bridge Approaches of CR 13N	High	\$5.1 – \$6.6
	CR 13 Cross-Culvert Capacity Improvements	High	\$6.6 – \$8.6
	Elevate Low Spots on CR 13N	High	\$19 – \$24.8
	Elevate Mickler Road and Ponte Vedra Boulevard Adjacent to SR A1A	High	\$3.0 – \$3.8
	Elevate Landrum Lane	High	\$4.9 – \$6.4
	Elevate Low Sections of Roscoe Boulevard and Canal Boulevard	High	\$14.3 – \$18.7
	FDOT Coordination for SR A1A	High	N/A
	Elevate Masters Drive, SR 16, and Lewis Speedway	High	\$11.8 - \$15.4
	South Whitney and West King Street Drainage Improvements	High	Already Funded
	SR A1A and Pope Road Drainage Improvements	High	\$0.6
	Big Soeey Stormwater Pond/Pump Station	Medium	\$4 – \$6.5
	Holtz and Chase Street Drainage Improvements	Medium	\$0.9 – \$1.2
	Palatka Trail Crossing Improvements	Medium	\$0.8 – \$1.1
	Santa Rosa Drainage Improvements	Medium	\$6.6
	Porpoise Point Drainage Improvements	Medium	\$0.6
Critical Infrastructure	North Beach Drainage Improvements	High	\$2.6 – \$7.3
	Raise/Modify Vulnerable Sanitary Sewer Lift Stations	High	\$10 – \$11
	Detailed Evaluations of Vulnerable WTPs and WWTPs	High	\$0.05 – \$0.1
	SR A1A and Pope Road Drainage Improvements	High	\$0.6
	Big Soeey Stormwater Pond/Pump Station	Medium	\$4 – \$6.5
	Palatka Trail Crossing Improvements	Medium	\$0.8 – \$1.1
	Porpoise Point Drainage Improvements	Medium	\$0.6
Critical Community and Emergency Facilities	No adaptation needs/projects were identified for the preliminary adaptation plan.	N/A	N/A
Natural, Cultural, and Historical Resources	North Beach Drainage Improvements	High	\$2.6 – \$7.3
	Big Soeey Stormwater Pond/Pump Station	Medium	\$4 – \$6.5

Attachment 5  
Adaptation Project  
Cost Estimates

**TABLE 1: ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST**

PROJECT NAME: ELEVATE CR13 SIXMILE CREEK BRIDGE APPROACHES				CLIENT: ST. JOHNS COUNTY		
LENGTH OF PROJECT: N/A				PREPARED BY: J. HIRNEISE		
ESTIMATE TYPE: ASTM E2516 - CLASS 4				CHECKED BY: B. MYHRE		
PROJECT NUMBER: 19270-207-01				DATE: June 20, 2024		
ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	LOW ESTIMATE	HIGH ESTIMATE	COST
<b>GENERAL</b>						
MOBILIZATION (10%)	LS	1	\$248,340	\$198,800	\$323,000	\$248,400
MAINTENANCE OF TRAFFIC (15%)	LS	1	\$372,510	\$298,100	\$484,400	\$372,600
PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION (5%)	LS	1	\$118,255	\$94,700	\$153,800	\$118,300
<b>ELEVATE CR 13 SIXMILE CREEK BRIDGE APPROACHES</b>						
REMOVAL OF EXISTING PAVEMENT	SY	9,778	\$15	\$117,400	\$190,800	\$146,700
CLEARING AND GRUBBING	AC	3.67	\$30,000	\$88,200	\$143,300	\$110,200
TYPE B STABILIZATION	SY	13,333	\$12	\$128,000	\$208,000	\$160,000
OPTIONAL BASE GROUP 9 (10" LIMEROCK) (LBR 100)	SY	13,333	\$55	\$586,800	\$953,500	\$733,400
SUPERPAVE ASPHALT CONCRETE (TRAFFIC C)	TN	2,690	\$170	\$366,000	\$594,700	\$457,400
GUARDRAIL LOW SPEED TL-2	LF	10,000	\$25	\$200,000	\$325,000	\$250,000
GUARDRAIL END TREATMENT	EA	8	\$2,000	\$12,800	\$20,800	\$16,000
EMBANKMENT	CY	14,519	\$26	\$302,000	\$490,800	\$377,500
SODDING	SY	17,778	\$5	\$71,200	\$115,600	\$88,900
PAVEMENT MARKING	LS	1	\$25,000	\$20,000	\$32,500	\$25,000
<b>CONSTRUCTION SUBTOTAL</b>				\$2,484,000	\$4,036,200	\$3,104,400
<b>OVERALL ITEMS</b>						
CONTINGENCY (40%)	LS	1	\$1,241,760	\$993,500	\$1,614,400	\$1,241,800
DESING/PERMITTING/DATA COLLECTION (25%)	LS	1	\$776,100	\$620,900	\$1,009,000	\$776,100
			<b>TOTAL</b>	<b>\$4,099,000</b>	<b>\$6,660,000</b>	<b>\$5,123,000</b>

**TABLE 2: ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST**

PROJECT NAME: CR 13 CROSS-CULVERT CAPACITY IMPROVEMENTS				CLIENT: ST. JOHNS COUNTY		
LENGTH OF PROJECT: N/A				PREPARED BY: J. HIRNEISE		
ESTIMATE TYPE: ASTM E2516 - CLASS 4				CHECKED BY: B. MYHRE		
PROJECT NUMBER: 19270-207-01				DATE: June 20, 2024		
ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	LOW ESTIMATE	HIGH ESTIMATE	COST
<b>GENERAL</b>						
MOBILIZATION (10%)	LS	1	\$320,300	\$256,300	\$416,400	\$320,300
MAINTENANCE OF TRAFFIC (15%)	LS	1	\$480,450	\$384,400	\$624,700	\$480,500
PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION (5%)	LS	1	\$152,520	\$122,100	\$198,400	\$152,600
<b>COLSON BRANCH CULVERT IMPROVEMENT</b>						
REMOVAL OF EXISTING PAVEMENT	SY	667	\$15	\$8,000	\$13,000	\$10,000
CLEARING AND GRUBBING	AC	1.00	\$30,000	\$24,000	\$39,000	\$30,000
TYPE B STABILIZATION	SY	667	\$12	\$6,400	\$10,400	\$8,000
OPTIONAL BASE GROUP 9 (10" LIMEROCK) (LBR 100)	SY	667	\$55	\$29,400	\$47,800	\$36,700
SUPERPAVE ASPHALT CONCRETE (TRAFFIC C)	TN	135	\$170	\$18,400	\$29,800	\$22,900
CONCRETE BOX CULVERT 5'X10'	LF	200	\$3,000	\$480,000	\$780,000	\$600,000
CONCRETE HEADWALLS (8) 5'X10' BOX CULVERTS	EA	2	\$125,000	\$200,000	\$325,000	\$250,000
GUARDRAIL LOW SPEED TL-2	LF	700	\$25	\$14,000	\$22,800	\$17,500
GUARDRAIL END TREATMENT	EA	4	\$2,000	\$6,400	\$10,400	\$8,000
RIPRAP, RUBBLE	TN	600	\$250	\$120,000	\$195,000	\$150,000
SODDING	SY	2,000	\$5	\$8,000	\$13,000	\$10,000
DEWATERING	LS	1	\$100,000	\$80,000	\$130,000	\$100,000
<b>WEST MOCCASIN BRANCH CULVERT IMPROVEMENT</b>						
REMOVAL OF EXISTING PAVEMENT	SY	1,778	\$15	\$21,400	\$34,800	\$26,700
REMOVAL OF EXISTING CULVERTS AND HEADWALLS	LS	1	\$50,000	\$40,000	\$65,000	\$50,000
CLEARING AND GRUBBING	AC	1.00	\$30,000	\$24,000	\$39,000	\$30,000
TYPE B STABILIZATION	SY	1,778	\$12	\$17,200	\$27,900	\$21,400
OPTIONAL BASE GROUP 9 (10" LIMEROCK) (LBR 100)	SY	1,778	\$55	\$78,300	\$127,200	\$97,800
SUPERPAVE ASPHALT CONCRETE (TRAFFIC C)	TN	359	\$170	\$48,800	\$79,300	\$61,000
CONCRETE BOX CULVERT 6'X7'	LF	220	\$3,000	\$528,000	\$858,000	\$660,000
CONCRETE HEADWALLS (4) 6'X7' BOX CULVERTS	EA	2	\$100,000	\$160,000	\$260,000	\$200,000
CONCRETE BOX CULVERT 4'X10'	LF	70	\$3,000	\$168,000	\$273,000	\$210,000
CONCRETE HEADWALLS (2) 4'X10' BOX CULVERTS	EA	2	\$75,000	\$120,000	\$195,000	\$150,000
GUARDRAIL LOW SPEED TL-2	LF	600	\$25	\$12,000	\$19,500	\$15,000
GUARDRAIL END TREATMENT	EA	8	\$2,000	\$12,800	\$20,800	\$16,000
RIPRAP, RUBBLE	TN	800	\$195	\$124,800	\$202,800	\$156,000
SODDING	SY	2,667	\$5	\$10,800	\$17,500	\$13,400
DEWATERING	LS	1	\$100,000	\$80,000	\$130,000	\$100,000
<b>CONSTRUCTION SUBTOTAL</b>				\$3,203,500	\$5,205,500	\$4,003,800
<b>OVERALL ITEMS</b>						
CONTINGENCY (40%)	LS	1	\$1,601,520	\$1,281,300	\$2,082,100	\$1,601,600
DESIGN/PERMITTING/DATA COLLECTION (25%)	LS	1	\$1,000,950	\$800,800	\$1,301,300	\$1,001,000
			<b>TOTAL</b>	<b>\$5,286,000</b>	<b>\$8,589,000</b>	<b>\$6,607,000</b>



**TABLE 3: ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST**

PROJECT NAME: ELEVATE LOW SPOTS ALONGS CR 13N			CLIENT: ST. JOHNS COUNTY			
LENGTH OF PROJECT: N/A			PREPARED BY: J. HIRNEISE			
ESTIMATE TYPE: ASTM E2516 - CLASS 4			CHECKED BY: B. MYHRE			
PROJECT NUMBER: 19270-207-01			DATE: June 20, 2024			
ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	LOW ESTIMATE	HIGH ESTIMATE	COST
<b>GENERAL</b>						
MOBILIZATION (10%)	LS	1	\$922,070	\$737,700	\$1,198,800	\$922,100
MAINTENANCE OF TRAFFIC (15%)	LS	1	\$1,383,105	\$1,106,600	\$1,798,200	\$1,383,200
PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION (5%)	LS	1	\$439,080	\$351,300	\$570,900	\$439,100
<b>ELEVATE SECTION SOUTH OF KEMPERLAND PARKWAY</b>						
REMOVAL OF EXISTING PAVEMENT	SY	21,941	\$15	\$263,400	\$428,000	\$329,200
REMOVAL OF EXISTING (3) 48" CMP CULVERTS AND HEADWALLS	LS	1	\$30,000	\$24,000	\$39,000	\$30,000
CLEARING AND GRUBBING	AC	8.24	\$30,000	\$197,900	\$321,500	\$247,300
TYPE B STABILIZATION	SY	29,920	\$12	\$287,300	\$466,900	\$359,100
OPTIONAL BASE GROUP 9 (10" LIMEROCK) (LBR 100)	SY	29,920	\$55	\$1,316,500	\$2,139,300	\$1,645,600
SUPERPAVE ASPHALT CONCRETE (TRAFFIC C)	TN	6,037	\$170	\$821,100	\$1,334,200	\$1,026,300
GUARDRAIL LOW SPEED TL-2	LF	17,952	\$25	\$359,100	\$583,500	\$448,800
GUARDRAIL END TREATMENT	EA	8	\$2,000	\$12,800	\$20,800	\$16,000
PIPE CULVERT (RCP) 60"	LF	210	\$650	\$109,200	\$177,500	\$136,500
CONCRETE HEADWALL, (3) 60" RCP	EA	2	\$75,000	\$120,000	\$195,000	\$150,000
EMBANKMENT	CY	19,947	\$26	\$415,000	\$674,400	\$518,700
SODDING	SY	39,893	\$5	\$159,600	\$259,400	\$199,500
DEWATERING	LS	1	\$50,000	\$40,000	\$65,000	\$50,000
<b>ELEVATE SECTION NORTH OF COUNTY ROAD 214</b>						
REMOVAL OF EXISTING PAVEMENT	SY	12,907	\$15	\$154,900	\$251,700	\$193,600
REMOVAL OF EXISTING (2) 60" CMP CULVERTS AND HEADWALLS	LS	1	\$30,000	\$24,000	\$39,000	\$30,000
CLEARING AND GRUBBING	AC	4.85	\$30,000	\$116,400	\$189,200	\$145,500
TYPE B STABILIZATION	SY	17,600	\$12	\$169,000	\$274,600	\$211,200
OPTIONAL BASE GROUP 9 (10" LIMEROCK) (LBR 100)	SY	17,600	\$55	\$774,400	\$1,258,400	\$968,000
SUPERPAVE ASPHALT CONCRETE (TRAFFIC C)	TN	3,551	\$170	\$483,100	\$785,000	\$603,800
GUARDRAIL LOW SPEED TL-2	LF	10,560	\$25	\$211,200	\$343,200	\$264,000
GUARDRAIL END TREATMENT	EA	8	\$2,000	\$12,800	\$20,800	\$16,000
CONCRETE BOX CULVERT 9'X8'	LF	130	\$4,000	\$416,000	\$676,000	\$520,000
CONCRETE HEADWALLS (2) 9'X8' BOX CULVERTS	EA	2	\$100,000	\$160,000	\$260,000	\$200,000
EMBANKMENT	CY	11,733	\$26	\$244,100	\$396,700	\$305,100
SODDING	SY	23,467	\$5	\$94,000	\$152,700	\$117,400
DEWATERING	LS	1	\$50,000	\$40,000	\$65,000	\$50,000
<b>CONSTRUCTION SUBTOTAL</b>				\$9,221,400	\$14,984,700	\$11,526,000
<b>OVERALL ITEMS</b>						
CONTINGENCY (40%)	LS	1	\$4,610,400	\$3,688,400	\$5,993,600	\$4,610,400
DESIGN/PERMITTING/DATA COLLECTION (25%)	LS	1	\$2,881,500	\$2,305,200	\$3,746,000	\$2,881,500
			<b>TOTAL</b>	<b>\$15,215,000</b>	<b>\$24,725,000</b>	<b>\$19,018,000</b>

**TABLE 4: ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST**

PROJECT NAME: ELEVATE MICKLER ROAD AND PONTE VEDRA BOULEVARD				CLIENT: ST. JOHNS COUNTY		
LENGTH OF PROJECT: N/A				PREPARED BY: J. HIRNEISE		
ESTIMATE TYPE: ASTM E2516 - CLASS 4				CHECKED BY: B. MYHRE		
PROJECT NUMBER: 19270-207-01				DATE: June 20, 2024		
ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	LOW ESTIMATE	HIGH ESTIMATE	COST
<b>GENERAL</b>						
MOBILIZATION (10%)	LS	1	\$143,360	\$114,800	\$186,500	\$143,400
MAINTENANCE OF TRAFFIC (15%)	LS	1	\$215,040	\$172,100	\$279,700	\$215,100
PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION (5%)	LS	1	\$68,265	\$54,700	\$88,800	\$68,300
<b>ELEVATE MICKLER ROAD AND PONTE VEDRA BOULEVARD</b>						
REMOVAL OF EXISTING PAVEMENT	SY	8,222	\$15	\$98,800	\$160,500	\$123,400
CLEARING AND GRUBBING	AC	1.84	\$30,000	\$44,100	\$71,700	\$55,100
TYPE B STABILIZATION	SY	8,222	\$12	\$79,000	\$128,400	\$98,700
OPTIONAL BASE GROUP 9 (10" LIMEROCK) (LBR 100)	SY	8,222	\$55	\$361,900	\$588,000	\$452,300
SUPERPAVE ASPHALT CONCRETE (TRAFFIC C)	TN	1,659	\$170	\$225,700	\$366,800	\$282,100
CURB INLET	EA	8	\$10,000	\$64,000	\$104,000	\$80,000
CONCRETE CURB & GUTTER	LF	250	\$50	\$10,000	\$16,300	\$12,500
EMBANKMENT	CY	8,333	\$26	\$173,400	\$281,800	\$216,700
SODDING	SY	8,889	\$5	\$35,600	\$57,900	\$44,500
<b>CONSTRUCTION SUBTOTAL</b>				\$1,434,100	\$2,330,400	\$1,792,100
<b>OVERALL ITEMS</b>						
CONTINGENCY (40%)	LS	1	\$716,840	\$573,600	\$932,000	\$716,900
DESIGN/PERMITTING/DATA COLLECTION (25%)	LS	1	\$448,025	\$358,500	\$582,600	\$448,100
			<b>TOTAL</b>	<b>\$2,367,000</b>	<b>\$3,845,000</b>	<b>\$2,958,000</b>

**TABLE 5: ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST**

PROJECT NAME: ELEVATE LANDRUM LANE				CLIENT: ST. JOHNS COUNTY		
LENGTH OF PROJECT: N/A				PREPARED BY: J. HIRNEISE		
ESTIMATE TYPE: ASTM E2516 - CLASS 4				CHECKED BY: B. MYHRE		
PROJECT NUMBER: 19270-207-01				DATE: June 20, 2024		
ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	LOW ESTIMATE	HIGH ESTIMATE	COST
<b>GENERAL</b>						
MOBILIZATION (10%)	LS	1	\$246,320	\$197,200	\$320,400	\$246,400
MAINTENANCE OF TRAFFIC (10%)	LS	1	\$246,320	\$197,200	\$320,400	\$246,400
PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION (2%)	LS	1	\$48,298	\$38,700	\$62,800	\$48,300
<b>ELEVATE LANDRUM LANE</b>						
REMOVAL OF EXISTING PAVEMENT	SY	16,000	\$15	\$192,000	\$312,000	\$240,000
CLEARING AND GRUBBING	AC	3.67	\$30,000	\$88,200	\$143,300	\$110,200
TYPE B STABILIZATION	SY	16,000	\$12	\$153,600	\$249,600	\$192,000
OPTIONAL BASE GROUP 9 (10" LIMEROCK) (LBR 100)	SY	16,000	\$55	\$704,000	\$1,144,000	\$880,000
SUPERPAVE ASPHALT CONCRETE (TRAFFIC C)	TN	3,228	\$170	\$439,200	\$713,600	\$548,900
CONCRETE SIDEWALK AND DRIVEWAYS, 4"	SY	1,333	\$40	\$42,800	\$69,500	\$53,400
CONCRETE CURB & GUTTER	LF	250	\$50	\$10,000	\$16,300	\$12,500
GUARDRAIL LOW SPEED TL-2	LF	500	\$25	\$10,000	\$16,300	\$12,500
GUARDRAIL END TREATMENT	EA	4	\$2,000	\$6,400	\$10,400	\$8,000
EMBANKMENT	CY	10,667	\$26	\$222,000	\$360,700	\$277,400
SODDING	SY	16,000	\$5	\$64,000	\$104,000	\$80,000
<b>CONSTRUCTION SUBTOTAL</b>				\$2,365,300	\$3,843,300	\$2,956,000
<b>OVERALL ITEMS</b>						
CONTINGENCY (40%)	LS	1	\$1,182,400	\$946,000	\$1,537,200	\$1,182,400
DESING/PERMITTING/DATA COLLECTION (25%)	LS	1	\$739,000	\$591,200	\$960,700	\$739,000
			<b>TOTAL</b>	<b>\$3,903,000</b>	<b>\$6,342,000</b>	<b>\$4,878,000</b>

**TABLE 6: ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST**

PROJECT NAME: ELEVATE ROSCOE BOULEVARD AND CANAL BOULEVARD				CLIENT: ST. JOHNS COUNTY		
LENGTH OF PROJECT: N/A				PREPARED BY: J. HIRNEISE		
ESTIMATE TYPE: ASTM E2516 - CLASS 4				CHECKED BY: B. MYHRE		
PROJECT NUMBER: 19270-207-01				DATE: June 20, 2024		
ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	LOW ESTIMATE	HIGH ESTIMATE	COST
<b>GENERAL</b>						
MOBILIZATION (10%)	LS	1	\$724,860	\$580,000	\$942,400	\$724,900
MAINTENANCE OF TRAFFIC (10%)	LS	1	\$724,860	\$580,000	\$942,400	\$724,900
PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION (5%)	LS	1	\$345,170	\$276,200	\$448,800	\$345,200
<b>ELEVATE ROSCOE BOULEVARD AND CANAL BOULEVARD</b>						
REMOVAL OF EXISTING PAVEMENT	SY	22,000	\$15	\$264,000	\$429,000	\$330,000
CLEARING AND GRUBBING	AC	7.16	\$30,000	\$172,000	\$279,400	\$214,900
TYPE B STABILIZATION	SY	30,000	\$12	\$288,000	\$468,000	\$360,000
OPTIONAL BASE GROUP 9 (10" LIMEROCK) (LBR 100)	SY	30,000	\$55	\$1,320,000	\$2,145,000	\$1,650,000
SUPERPAVE ASPHALT CONCRETE (TRAFFIC C)	TN	6,053	\$170	\$823,300	\$1,337,900	\$1,029,100
PIPE CULVERT (RCP, Round) 24"-36"	LF	5,800	\$250	\$1,160,000	\$1,885,000	\$1,450,000
TYPE C DITCH BOTTOM INLET	EA	115	\$10,000	\$920,000	\$1,495,000	\$1,150,000
CONCRETE DRIVEWAYS, 4"	SY	4,250	\$40	\$136,000	\$221,000	\$170,000
CONCRETE CURB & GUTTER	LF	1,800	\$50	\$72,000	\$117,000	\$90,000
EMBANKMENT	CY	11,000	\$26	\$228,800	\$371,800	\$286,000
SODDING	SY	34,667	\$5	\$138,800	\$225,500	\$173,400
<b>CONSTRUCTION SUBTOTAL</b>				\$6,959,100	\$11,308,200	\$8,698,400
<b>OVERALL ITEMS</b>						
CONTINGENCY (40%)	LS	1	\$3,479,360	\$2,783,600	\$4,523,300	\$3,479,400
DESING/PERMITTING/DATA COLLECTION (25%)	LS	1	\$2,174,600	\$1,739,700	\$2,827,000	\$2,174,600
			<b>TOTAL</b>	<b>\$11,483,000</b>	<b>\$18,659,000</b>	<b>\$14,353,000</b>

TABLE 7: ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST						
PROJECT NAME: ELEVATE MASTERS DRIVE, SR16, AND LEWIS SPEEDWAY			CLIENT: ST. JOHNS COUNTY			
LENGTH OF PROJECT: N/A			PREPARED BY: J. HIRNEISE			
ESTIMATE TYPE: ASTM E2516 - CLASS 4			CHECKED BY: B. MYHRE			
PROJECT NUMBER: 19270-207-01			DATE: June 20, 2024			
ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	LOW ESTIMATE	HIGH ESTIMATE	COST
GENERAL						
MOBILIZATION (10%)	LS	1	\$572,020	\$457,700	\$743,800	\$572,100
MAINTENANCE OF TRAFFIC (15%)	LS	1	\$858,030	\$686,500	\$1,115,600	\$858,100
PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION (5%)	LS	1	\$272,390	\$218,000	\$354,200	\$272,400
ELEVATE MASTERS, SR16, AND LEWIS SPEEDWAY						
REMOVAL OF EXISTING PAVEMENT	SY	27,000	\$15	\$324,000	\$526,500	\$405,000
REMOVAL OF EXISTING CURB AND GUTTER	LF	6,000	\$10	\$48,000	\$78,000	\$60,000
REMOVAL OF EXISTING SIDEWALK AND DRIVEWAYS	SY	4,444	\$10	\$35,600	\$57,900	\$44,500
REMOVAL OF EXISTING CURB INLETS	EA	40	\$1,000	\$32,000	\$52,000	\$40,000
CLEARING AND GRUBBING	AC	3.40	\$30,000	\$81,600	\$132,600	\$102,000
TYPE B STABILIZATION	SY	27,000	\$12	\$259,200	\$421,200	\$324,000
OPTIONAL BASE GROUP 9 (10" LIMEROCK) (LBR 100)	SY	27,000	\$55	\$1,188,000	\$1,930,500	\$1,485,000
SUPERPAVE ASPHALT CONCRETE (TRAFFIC C)	TN	5,448	\$170	\$741,000	\$1,204,100	\$926,200
PIPE CULVERT (RCP, Elliptical) 24-30"	LF	3,000	\$250	\$600,000	\$975,000	\$750,000
CURB INLET	EA	40	\$10,000	\$320,000	\$520,000	\$400,000
CONCRETE SIDEWALK AND DRIVEWAYS, 4"	SY	4,444	\$40	\$142,300	\$231,200	\$177,800
CONCRETE CURB & GUTTER	LF	6,000	\$50	\$240,000	\$390,000	\$300,000
EMBANKMENT	CY	13,500	\$26	\$280,800	\$456,300	\$351,000
SODDING	SY	16,444	\$5	\$65,900	\$107,000	\$82,300
CONSTRUCTION SUBTOTAL				\$5,720,600	\$9,295,900	\$7,150,400
OVERALL ITEMS						
CONTINGENCY (40%)	LS	1	\$2,860,160	\$2,288,200	\$3,718,300	\$2,860,200
DESING/PERMITTING/DATA COLLECTION (25%)	LS	1	\$1,787,600	\$1,430,100	\$2,323,900	\$1,787,600
			TOTAL	\$9,439,000	\$15,339,000	\$11,799,000