

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
GRANT WORK PLAN
DEP AGREEMENT NO.: R2124**

ATTACHMENT 3

I. TITLE PAGE

1. PROJECT TITLE: Resilient Volusia Phase 2 - Adaptation Action Areas

2. GRANTEE Contact Information:

Organization Name: Volusia County

Name of Authorized Signer: George Recktenwald

Title: County Manager

Address: 123 W. Indiana Avenue

City: DeLand

Zip Code: 32720

Area Code and Telephone Number: 386 736-5927

E-mail Address: grecktenwald@volusia.org

3. GRANT MANAGER Contact Information:

Organization Name: Volusia County, Environmental Management

Name: Katrina Locke

Title: Sustainability and Natural Resources Director

Address: 123 W Indiana Avenue

City: DeLand

Zip Code: 32720

Area Code and Telephone Number: 386 736-5927

E-mail Address: klocke@volusia.org

4. FISCAL AGENT Contact Information:

Organization Name: Volusia County

Name: Kathy Ebding

Title: _____

Address: 123 W Indiana Avenue

City: DeLand

Zip Code: 32720

Area Code and Telephone Number: 386 736-5927

E-mail Address: kebding@volusia.org

5. FEID No. (a.k.a. Tax ID#): 59-6000885 Seq No. 008

6. WORK PERFORMED BY: (Select only one)

☐ Grantee ONLY
☒ Subcontractor ONLY
☐ BOTH the Grantee & Sub-Contractor
☐ To Be Determined

7. SUBCONTRACTORS CONTACT INFORMATION: *(If applicable & known)*

Organization Name: East Central Florida Regional Planning Council
Name: Tara McCue
Title: Director of Planning and Community Development
Address: 455 N. Garland Avenue
City: Orlando
Zip Code: 32801
Area Code and Telephone Number: 407 245-0300
E-mail Address: tara@ecfrpc.org

8. PROJECT LOCATION:

A. List of County(ies): Volusia County

B. List of City(ies)/Town(s)/Village(s): Unincorporated area of Volusia County

C. State Lands Lease Agreement Number(s): N/A

Provide lease agreement number(s) for any work that will be performed on State Lands. If work will not be on any state lands, please indicate N/A.

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II. WORK PLAN

9. **PROJECT SUMMARY:** Building on adopted resiliency plans and on current resiliency initiatives, this project will focus on developing Adaptation Action Areas (AAAs) in unincorporated Volusia County. Through a partnership with the East Central Florida Regional Planning Council (ECFRPC), Florida Sea Grant and Volusia County, the project will identify areas and develop policies for AAAs (including goals and objectives), review existing language in planning documents including the comprehensive plan, and engage internal and external stakeholders. Additionally, the team will develop a checklist and procedures for infrastructure capital improvement projects within the identified AAAs, which will address adaptation and protect investments.
10. **PROJECT DESCRIPTION:** Volusia County is subject to the impacts of sea level rise and flooding from the Atlantic Ocean and the Halifax/Indian River on the east side of the County and the St. Johns River on the west side. This application will focus on developing Adaptation Action Areas (AAAs) for the unincorporated areas of the County with the goal of reducing these impacts and increase community resiliency. Determining adaptation strategies specific to each AAA, developing policies and engaging stakeholders are integral parts of this project. Additionally, an assessment of infrastructure within these AAA areas will enhance the County's ability to recover from and/or respond to climatic shocks and stressors.

To date, resiliency planning work has included the completion of Resilient Volusia (<http://bit.ly/ResilientVolusia>), which examined impacts on critical infrastructure based on a 100 year storm event, and the East Central Florida Regional Resiliency Action Plan (ECF RRAP) which is a regional approach to sea-level rise planning based on "the Rockefeller Foundation 100 Resilient Cities program" (<http://bit.ly/ECFRRAP>). The ECF RRAP incorporates a five-year planning horizon based around four main focus areas: Leadership and Strategy, Economic and Society, Infrastructure and Environment, and Health and Wellbeing." These initiatives provide us with the data to fulfill the Peril of Flood requirements for the comprehensive plan. They also set the ground work for the project team to determine which areas impacted by sea level rise, storm surge and flooding will be targeted for AAAs. Developing AAAs will build on the work in the initial two plans and implement tasks that will fulfill goals and objectives in the ECF RRAP. Through this grant we will identify AAAs and determine adaptation strategies for these areas using "Adaptation Action Areas, A Planning Guidebook for Florida's Local Governments" Prepared by the South Florida Regional Planning Council and partners (shortened) as guidance.

Volusia County and ECFRPC are currently working on a project titled "Integrating Future Storm Surge into Emergency Management Planning" that will provide maps and data to update the Local Mitigation Strategy (LMS project). The project will look at future conditions of storm surge impacts, extent and depth, along the east and west side of the county. The model produced through this currently FDEP funded project will be used to assess the impact sea level rise will have on future storm surge extent and depth and ultimately on various facilities in the county. A second initiative, which has tentatively been approved (pending program budget funding) through Florida Sea Grant, titled "Optimizing coupled human and natural system benefits for public land acquisitions in the east central Florida coastal zone: An applied spatial planning and ecosystem services approach" will provide sea level rise impact data using the Sea Level Affecting Marshes Model, Marxan software, and sea level rise scenarios from the RRAP. Both of these initiatives would provide additional data and strategies for this proposal. The project team will also determine how the U.S. Army Corps of Engineers, South Atlantic Coastal Study, focused on vulnerability and flood risk reduction, will factor into the AAA mapping process. Overlaying the findings from this project with work being done simultaneously in other resiliency planning efforts will ensure the comprehensive plan and AAA process work, which will also set this and other grant work up for implementation success.

It is anticipated that the proposed AAAs will be presented to County Council for discussion. The checklist and procedures for infrastructure capital improvement projects within the identified AAAs will be part of this discussion. The project process and findings will be presented to the East Central Florida Regional Resilience Collaborative partners to help build capacity around adaptation strategies around the region.

11. PROJECT NEED AND BENEFIT:

- A. Explain the demonstrated need, which the project addresses.** Volusia County Council adopted the ECF RRAP on July 16, 2019. By adopting the plan, the County recognized the need to move towards a more resilient future through the implementation of adaptation strategies.

The ECF RRAP was stakeholder driven through workshops, steering and sub committees, which guided the development of the documents. Through this process, AAAs were identified as an adaptation strategy which included, but wasn't limited to, the following tasks: "Develop prioritization process and funding mechanisms for infrastructure projects in Adaptation Action Areas. Incorporate into Stormwater master plan; Adopt an "Adaptation Action Area" that includes the 100-year floodplain, the adopted sea level rise hazard zone, and the Coastal High Hazard Zone (Category 1 Storm Surge); Prioritize public infrastructure within Adaptation Action Areas for adaptation/mitigation strategies to the effects of high winds, storm surge, flooding and wave velocity; and Research potential strategies addressing undeveloped parcels located within the Adaptation Action Area."

The ECF RRAP process included a survey of local jurisdictions that was used to assess regional progress on integrating resiliency into local planning documents. The survey included the following question: "Have you identified and adopted Adaptation Action Areas in the most recent version of the Coastal Element of your Comprehensive Plan?" Of the 29 respondents, 28% indicated that they intended to include AAAs but had not drafted language, and 21% were interested had not moved forwards due to lack of capacity (listed as staff, time, resources, money, etc.). Staff time and drafting language were the main issues. This proposal could help to advance adaptation strategies and the use of AAAs because local governments within our region will be able to use the final report to assess how a similar project could work in their jurisdiction. The final report will act as guidance document for identifying AAAs, determining appropriate adaptation strategies for different areas, drafting language that local governments could integrate into their planning documents and how to integrate prioritizing projects in AAA into the capital improvement project process and everyday planning and engineering activities.

- B. Explain how the proposed project meets the purpose of one or more of the Goals and Priorities for FRCP.** This proposal will identify AAAs and develop adaptation strategies and policy language for the comprehensive plan. It is anticipated that the project outcomes, including goals, objectives and strategies for the identified AAAs, will be presented to Volusia County Council for discussion, and upon approval, inclusion in the comprehensive plan. Therefore, this grant meets the purpose of the FRCP priority "Development of Adaptation Action Areas and associated Goals, Objectives, and Policies for communities with a Coastal Management Element in their comprehensive plan."

Additionally, the previous work carried out by ECFRPC and the County for regional resiliency planning has met the requirement for compliance with "Peril of Flood" statute (Sec. 163.3178(2)(f) F.S.) for communities with a Coastal Management Element in their comprehensive plan.

- C. Discuss how the project is feasible and can be completed by the grant period deadline.** The project will be completed within the grant funding timeframe; the final report with all deliverables will be completed by April 16, 2021. Utilizing the expertise of Florida Sea Grant, the ECFRPC and the established partnership with the County will help move this forward in an efficient and effective manner. Project team members, Tara McCue with ECFRPC and Thomas Ruppert with Florida Sea

Grant, are established experts in resiliency planning and have completed many grant funded projects, on time and within budget.

Staff would begin work on the project in late August to early September 2020. The work completed to date will provide background mapping and data for this project, giving the project team a substantial advantage from which to start this project. Vulnerability assessments and mapping have been completed in previous planning efforts and resiliency conversations have started in the county. Additionally, if timing allows, the County will work jointly with the ECFRPC and Stetson to address stakeholder engagement in both the proposed FDEP and Sea Grant projects simultaneously to illustrate the connection between the projects and aid in efficiency of the team and utilization of stakeholder time and resources.

Project team members also include Volusia County staff Ginger Adair and Katrina Locke with Environmental Management, and Susan Jackson and Patricia Smith with Planning and Zoning. County staff will assist with all aspects of the project including providing any available maps or data. County staff were members of the project teams for the Resilient Volusia and the ECF RRAP. In addition to Tara McCue, ECFRPC has staff who will work on this project to ensure timely completion.

D. Explain how this project is addressing social vulnerability or vulnerability of historic resources or stormwater management systems. Once AAAs are identified, staff will identify infrastructure within those areas. The infrastructure may include roads, stormwater and wastewater management etc. A checklist and procedural process will be developed for guiding review of infrastructure improvements, re-location or new projects. Additionally, the County's Parks, Recreation and Culture Division staff will be consulted with regards to the location of historic resources within the identified AAAs.

The RRAP was based on the 100 resilient cities framework which addresses physical, social and economic challenges of becoming more resilient. One of the workshops for the planning process addressed social resilience which is included in the plan sections "Economic and Society" and "Health and Equity". These sections address improving social equity and justice in preparation for and recovery from stressors and shocks by improving social equity and justice, and economic resilience, in decision making processes. The project team will follow the recommendations in the RRAP throughout this process to ensure we address social vulnerability throughout the AAA process.

A public survey, conducted for this project, and available community demographics will be used to assess socio economics within the identified AAAs. The development of policies for these AAAs will take this information into account together with any additional community input from meetings or workshops.

12. DESCRIPTION OF PROJECT OUTCOMES: We anticipate the following outcomes from this project:

- Strengthening of policy language in planning documents including the comprehensive plan as a result of a policy language review
- Final analysis report.
- Adoption of the AAAs developed through the project. The project outcomes including identified AAAs, policies, and infrastructure procedures will be presented to county leadership, county manager and county council, for discussion on adoption and inclusion within the Comprehensive Plan.
- Increased stakeholder engagement in resiliency planning. The internal and external stakeholder engagement and education process will increase stakeholder knowledge in resiliency planning and implementation. The engagement process also will solidify the importance of a county staff team approach to resiliency policy and planning.
- Identification of funding mechanism to improve infrastructure resiliency.

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- Best practice approach for resilient planning to be transferred through the regional resilience collaborative.

The ECFRPC is leading regional resiliency efforts through the formation of the East Central Florida Regional Resilience Collaborative (Collaborative), which covers an eight-county region. We anticipate that by sharing information about this project with other local governments we will build capacity within Volusia County and the region. The project team will work with the Collaborative technical advisory committee to host a webinar/info session that will provide an overview of the AAA grant funded project, describe the approach and share the methodology with other members of the Collaborative.

- 13. BUDGET SUMMARY:** Allowable budget categories and form of payment with the costs for this project are listed in the table below.

BUDGET SUMMARY BREAKDOWN

Budget Categories	Payment	Task 1	Task 2	Grant Amount Awarded
Salaries & Fringe	Fixed Price	\$	\$	\$
Contractual Services*	Fixed Price	\$55,000	\$20,000	\$75,000
GRANT AGREEMENT TOTAL		\$55,000	\$20,000	\$75,000

- A. Describe how the project costs was determined:** Costs were determined based on input from ECFRPC and Florida Sea Grant. Costs were based on previous grant funded projects and outputs they have completed.

- B. Contractual Services Selection*:** Upon a selected Sub-Contractor(s) (if applicable), the Grantee will Provide a signed certification statement giving a description of the procurement process that was utilized for the selection of the sub-contractors. The description must include:
- What procurement process was utilized
 - Justification as to how & why you made your final selection.
 - For competitively obtained Sub-Contractor also include:
 - A list of all entities that you received bids/quotes from,
 - Names and addresses of those entities that provided bids/quotes,
 - Actual amounts of the bids/quotes that were submitted.

- 14. PROJECT TIMELINE:** All tasks are to be completed and submitted no later than the task/deliverable due date listed in the table below. Requests for any change must be submitted prior to the current task/deliverable due date listed in the project timeline. Requests are to be sent via separate email to the Department's Grant Manager, with the details of the request being made and the reason for the request.

PROJECT TIMELINE

Task No.	Task Title	Deliverable Due Date	Task Amount
1	Identification of and development of policies for AAAs	04/16/2021	\$55,000
2	Assessment of infrastructure in identified AAAs	04/16/2021	\$20,000
Total			\$75,000

- 15. PERFORMANCE MEASURES:** The Grantee will submit all deliverables for each task via **one pdf document** to the Department's Grant Manager on or before the Task/Deliverable Due Date listed in the Project Timeline. The Department's Grant Manager will review the task/deliverables to verify that they

meet the specifications in the Grant Work Plan and this task description, to include any work being performed by any sub-contractor(s). Upon review and written acceptance by the Department's Grant Manager of all deliverables under this task, the Grantee may proceed with payment request submittal.

- 16. CONSEQUENCES FOR NON-PERFORMANCE:** The Department will reduce each Task Funding Amount by 5% for every day that the task/deliverable(s) is not received on the specified due date in the most recent Project Timeline, for the Agreement. Should a Change Order or Amendment be requested on the date of or after the most current task/deliverable due date, the 5% reduction of that Task Funding Amount will be imposed until the date of the requested change is received, via email by the Department.
- 17. PAYMENT REQUEST SCHEUDLE:** Grantee may submit a request for the Task Funding Amount to be paid using the Exhibit C, after all deliverables for that task have been approved by the Department. Request(s) for payment must include the Exhibit A showing 100% completion of that task and must be submitted within 45 days of the task/deliverable due date. Please refer to the [website Grants page](#) for "How to Request Payment", and "Checklist for Requesting Payment".

Or

Grantee may submit one request for the Grant Amount Awarded, by using the Exhibit C, after the project is 100% completed. The request for the Grant Amount Awarded, must include an Exhibit A showing 100% completion for all tasks, and must be submitted within 45 days of the last task/deliverable due date.

- 18. FUNDING SOURCE:** Grantee agrees to include on all publications, printed reports, audiovisuals (including videos, slides, and websites except that unless required under special terms of this Agreement, this requirement does not apply to audiovisuals produced as research instruments or for documenting experimentation or findings and which are not intended for presentation to the general public) or similar materials must include the DEP logo (which can be found on the Department's website at <https://floridadep.gov/resilience> or by contacting the Department's Grant Manager for a copy) and the following statement on, the following language.

"This work was funded in part through a grant agreement from the Florida Department of Environmental Protection, Florida Resilient Coastlines Program, by a grant provided by the Office of Resilience and Coastal Protection. 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."

The next printed line shall identify the month and year of the publication.

III. TASKS & DELIVERABLES

Task #1

- A. Title:** Identification and development of policies for AAAs
- B. Goal:** To develop AAAs that will include adaptation strategies that increase community resiliency, protect public infrastructure and personal property. Provide a planning strategy that will protect unincorporated areas of the county that are vulnerable to sea level rise including flooding and storm surge.
- C. Description:**

Task 1 includes internal and external stakeholder engagement, assessment of existing maps and vulnerability analyses, identification of areas in unincorporated Volusia County for AAAs, development of specific policy language related to adaptation strategies for each of the AAAs, and assessment of current planning document (including the county's comprehensive plan) language related to resiliency.

The team will review the opportunities and best practices for public participation listed in the Florida Adaptation Planning Guidebook (FAPG) to develop an approach to internal and external stakeholder engagement which will include planning meetings, surveys and workshops. This approach will build capacity around resiliency.

The project team will develop an internal stakeholder group, which will include, but not be limited to, planning, emergency management, public works, and environmental management staff. Through the public engagement process residents within the identified AAAs will be engaged in the resiliency conversation. An initial community survey will be developed using a public survey platform to assess the residents' knowledge of resiliency and adaptation strategies. The survey will also be used to identify best practices the project team should use to further engage the public in the AAA development process. A well-designed public engagement process, that includes on-site education, will help the community become better informed about resiliency and adaptation strategies.

Staff will review existing available maps and data, created through Resilient Volusia and the ECF RRAP, and will utilize ongoing mapping projects (LMS and Sea Grant projects), to identify areas that will be impacted by future conditions including SLR, storm surge and flooding. AAAs will be identified and mapped through this review process.

Per the FAPG, through stakeholder feedback the project team will evaluate and determine specific adaptation strategies for each AAA. The team will utilize the Adaptation Action Areas: Policy Options for Adaptive Planning for Rising Sea levels prepared by the South Florida Regional Planning Council for guidance in establishing adaptation strategies for the AAAs as well as other local best practices such as Satellite Beach. The project team will then develop policy language for the AAAs. The team recognizes that adaptation strategies and policy language for each AAA may be different.

Members of the project team will assess resiliency language in current planning documents including the comprehensive plan. As needed, recommendations will be given for strengthening the existing language and connect to the AAA goals, objectives and policies.

D. Deliverable(s): The Grantee will submit all deliverables for each task via **one pdf document** to the Department's Grant Manager on or before the Task/Deliverable Due Date listed in the Project Timeline.

- 1) List of internal stakeholders recruited, including each member's role/title in Volusia County Government
- 2) Copy of all community survey(s)
- 3) Copies of all survey announcements/advertisements
- 4) Summary report describing community survey results
- 5) Description of the public engagement strategy
- 6) If public meetings are held:
 - a. Copies of all workshop/meeting announcements/advertisements
 - b. Agendas and sign-in sheets from each workshop/meeting indicating location, date, and time of the meeting
 - c. Presentations and other meeting materials/handouts

- d. Brief summary report from each workshop/meeting including attendee feedback and workshop outcomes
- e. Any materials created at each workshop/meeting (as applicable)
- 7) Report on AAA development including:
 - a. Methodology used to identify AAAs
 - b. Map of the AAA locations
 - c. Adaptation strategies recommended for each AAA identified and Volusia County plans
 - d. Draft of Goals, Objectives, and Policies (GOPs) for Volusia County for adoption into the Comprehensive Plan for AAAs.
- 8) Timeline for Presentation of the GOPs to the local governing body
- 9) Final draft of proposed changes to the comprehensive plan based on AAA policies.

Task #2

A. Title: Assessment of infrastructure in AAAs identified in Task 1.

B. Goal: To create a checklist and procedural process for capital improvement projects in the AAAs identified in task 1, which will protect capital investments.

C. Description:

The project team, working with internal stakeholders, will utilize available, current data and maps and planning documents, and public works projects and plans to identify infrastructure within the identified AAAs. Datasets will be updated to include reference to inclusion in proposed AAAs and a summary report of these infrastructure and assets will be developed for the County.

Additionally, a checklist and procedural process for managing capital improvement projects within the AAAs will be developed for use by the County in their prioritization and assessment process of capital improvement projects. This will be one of the first steps to the inter-departmental integration of assessing future projects for vulnerabilities and identifying measurements to increase project resilience. The procedural process to be developed will also work to establish a prioritization mechanism for projects within and outside AAAs. The project team will also identify funding mechanisms, as available, for infrastructure improvement projects that could be used to make the infrastructure more resilient to flooding and storm surge.

D. Deliverable(s): The Grantee will submit all deliverables for each task via **one pdf document** to the Department's Grant Manager on or before the Task/Deliverable Due Date listed in the Project Timeline.

- 1) Checklist and procedural process for capital improvements projects related to infrastructure within the AAAs identified in Task 1.
- 2) List of funding mechanisms for capital improvements.
- 3) Summary report of infrastructure and assets included in each AAA; relevant data sets.