

**DEP AGREEMENT NO. R1915
CHANGE ORDER NO. 002**

GRANTEE

Monroe County Board of County Commissioners
1100 Simonton Street
Key West, FL 33040

DEP Agreement No. **R1915** as entered into on the 5th day of August 2019, and as amended, is hereby revised as follows:

1. **Attachment 3, Grant Work Plan, Project Timeline** is hereby deleted in its entirety and replaced with the following, due to the Corona Virus Outbreak:

PROJECT TIMELINE

Task No.	Task Title	Deliverable Due Date	Funding Amount
1	Gap Analysis	09/30/2019	\$6,000
2	Draft Amendments	06/30/2020	\$16,000
3	Internal and External Engagement with Regional Collaboration	06/30/2020	\$18,400
Total			\$40,400

All other terms and conditions of the Agreement shall remain unchanged.

MONROE COUNTY BOARD OF COUNTY
COMMISSIONERS

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Michael Roberts, Grantee Grant Manager

Whitney Gray, DEP Grant Manager

Date: 3/23/2020

Date: _____

DEP AGREEMENT NO. R1915
CHANGE ORDER NO. #01

GRANTEE

Monroe County Board of County Commissioners
500 Whitehead Street
Key West, FL 33040

DEP Agreement No. **R1915** as entered into on the 5th day of August 2019, is hereby revised as follows:

1. **Attachment 3, Grant Work Plan, Project Timeline** is hereby deleted in its entirety and replaced with the following:

PROJECT TIMELINE			
Task No.	Task Title	Deliverable Due Date	Funding Amount
1	Gap Analysis	09/30/2019	\$6,000
2	Draft Amendments	04/30/2020	\$16,000
3	Internal and External Engagement with Regional Collaboration	05/31/2020	\$18,400
Total			\$40,400

All other terms and conditions of the Agreement shall remain unchanged.

MONROE COUNTY BOARD OF COUNTY COMMISSIONERS

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION


Michael Roberts, Grantee Grant Manager

Whitney Gray, DEP Grant Manager

Date: 2/26/2020

Date: _____

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
GRANT WORK PLAN
DEP AGREEMENT NO.: R1915**

ATTACHMENT 3

Project Title: Resilient Coastlines Program

Grantee

Organization Name: Monroe County Board of County Commissioners

Chief Elected Official or Agency Head: Roman Gastesi

Title: County Administrator

Address: 1100 Simonton Street

City: Key West

Zip Code: 33040-5714

Area Code and Telephone Number: 305 292 4644

E-Mail Address: Gastesi-Roman@MonroeCounty-Fl.Gov

Project Manager

Organization Name: Monroe County Board of County Commissioners

Name: Michael Roberts

Address: 2798 Overseas Highway

City: Marathon

Zip Code: 33050

Area Code and Telephone Number: 305 289 2502

E-Mail Address: Roberts-Michael@MonroeCounty-Fl.Gov

Fiscal Agent

Organization Name: Monroe County Board of County Commissioners

Name: Tina Boan

Address: 500 Whitehead Street

City: Key West

Zip Code: 33040-5714

Area Code and Telephone Number: 305 292 4472

E-Mail Address: Boan-Tina@MonroeCounty-Fl.Gov

FEID No.: 596000749

DUNS No.: 073876757000

Location: Monroe County, FL 24.5557° N, 81.7826° W



WORK PLAN

1. Project Summary or Abstract:

This proposed work continues Monroe County's effort to increase resiliency through Comprehensive Plan amendments to 1) comply with Peril of Flood requirements through text and organizational amendments and 2) updates of Elements to incorporate vulnerability work of the County; including: an initial vulnerability assessment, pilot road elevation analysis, interim road elevation design criteria and recent NOAA-funded Hazus modeling. Data gaps will be identified and work to date serve as the basis for Comprehensive Plan amendments providing a strong model for replication integrating sea level rise into Comprehensive Plans. Community meetings, and internal engagement will provide County stakeholders the opportunity to provide input into the updating process. External collaborations will support a regional dialogue of implementation strategy for integrating climate work into Comprehensive Plans.

2. Project Description:

Monroe County is a charter member of the Southeast Florida Regional Climate Compact (Monroe, Miami-Dade, Broward and Palm Beach Counties) and was one of the first Counties in the state to integrate climate issues into their Comprehensive Plan through the development of a new "Energy and Climate" Element. The County has aggressively pursued the implementation of numerous Goals, Objectives and Policies in that 2013-adopted Plan and is currently working to implement more initiatives both within the Plan and supplementary to it. The 2010-2030 Comprehensive Plan adoption pre-dated the Peril of Flood amendments signed into law in 2015. Notwithstanding the fact that the County's initial steps pre-dated the new Section 163.3178, F.S. requirements for Coastal Elements, and vulnerability work has continued to date, the Comprehensive Plan has not been updated to comply with these requirements or to assimilate data and policy work over the last several years. The County's work includes its extensive GreenKeys planning effort, and further adaptation initiatives, but very important are the County's efforts at data collection including

countywide mobile LiDAR elevation data that can identify gaps and help inform further planning efforts. This data is currently being finalized for the County and will be used in a further countywide effort to phase, budget and plan for road and stormwater adaptation. A companion effort to update and reorganize the County's Goals, Objectives and Policies (and identify current data gaps) in the context of the Comprehensive Plan related to sea level rise is critical to maintain internal and external support necessary to continue the County's momentum on these initiatives. Given the work that the County has completed to date, and can complete with this grant assistance, the work products will serve as a unique and comprehensive model for local governments on how to best link (and continually interface) climate and comprehensive planning.

Infrastructure, land acquisition, land maintenance, growth and development pressures and the realities of Monroe County's unique vulnerabilities all interface in the County's Comprehensive Plan. As one of only 4 state of Florida "Areas of Critical State Concern" and its unique geography, being an island chain over 100 miles long, and its location within a National Marine Sanctuary, the Florida Keys is truly a unique community facing sea level rise and climate-related impacts. Knowing these unique vulnerabilities, the County has worked diligently to develop strong data sets to make science and data-based policy decisions relative to adaptation. This proposed scope of work will also continue to facilitate close cross-disciplinary coordination across County departments to harmonize these efforts.

Monroe County is truly a community practicing "on the ground" climate and adaptation planning and implementation. This grant provides a mechanism for the County to communicate and serve as a "case study" on strategies for how to link work related to floodplain management (through linkages between sea level rise planning and FEMA's Community Rating System), Local Mitigation Strategy development (updates within the next 2 years), use of disaster recovery funds, site-specific adaptation and infrastructure readiness. Very few communities, if any, have been able to dovetail these initiatives in such a way that departments and policy initiatives are paddling in the same direction. Instead of resulting work products encompassing a model of "just getting started", the work proposed within this application can serve as an approach viewed more as an example of how to actually take climate data and analysis and more holistically implement it through the Comprehensive Plan. Therefore, these amendments can serve as a very critical resource for other communities needing to answer the question of how to aggressively and holistically integrate best available data into the Comprehensive Plan.

Additionally, this work will further the tangible work products the County continues to pursue to aid in the best implementation strategies for vulnerability and adaptation planning through Comprehensive Plan, Code and policy recommendations. All work products will be shared openly with municipalities and other statewide and regional agencies and partners. While the County has been a leader on this type of integration, it is a continual process to integrate new data, comply with new statutory requirements and evolve policy priorities. Given the extensive work the County has done, the work products will serve as a valuable model to other communities on how to best link data, legal requirements in Chapter 163, F.S. and strong policy considerations in climate planning.

Public engagement in the Florida Keys is critical given the County's designation as an Area of Critical State Concern and location within the National Marine Sanctuary. The proposed work includes both internal and external engagement critical to the effort. Two series of public meetings at the beginning and near-end of the project will serve to both 1) engage residents in ideas to be incorporated into the amendment process as well as 2) foster an environment that builds on cross-disciplinary departmental planning absolutely critical to success.

The County will fulfill the tasks through a combination of work from County staff and contracted services.

3. Project Need and Benefit:

a. Explain the demonstrated need, which the project addresses.

It is without question that Florida in general is clearly vulnerable to the impacts of climate change and in particular, sea level rise. Visible impacts throughout the Florida Keys are ever-increasing including King Tide flooding, changing precipitation patterns and habitat shifts from sea level rise. Being a chain of islands over 100 miles long, with significant variations in elevation, adaptation in the Keys will not be one cohesive effort of common strategies. The County is beginning to enter into territory that will require it to consider future management and adaptation options that include elevation variations ranging from sea level to 18'. In 2015 and 2016, in Key Largo and Big Pine, portions of neighborhoods saw 12-18" of saltwater on roads for upwards of 3 weeks. From a policy perspective, Monroe County has unique challenges with its physical geography, water quality regulations and growth management system. And while the County has already begun taking steps to coalesce its approach to climate and sea level rise into its Comprehensive Plan, there is a significant need to update and better-organize this approach within the construct of the Comprehensive Plan.

While many communities across the state have taken initial steps to begin these planning conversations, and these are critical efforts, the need exists for a model that goes further to actually incorporate vulnerability data into the Comprehensive Plan. "Actionable policy" is the primary goal of this scope of work to take the critical work products generated by the County thus far (primarily from sustainability and resiliency staff) and incorporate them into a reorganized and cohesive strategy within the Comprehensive Plan that incorporates all of the latest data and recommendations- results of significant staff and fiscal resources to proactively plan for the future. The County does not consider this grant opportunity as a mechanism to meet a "minimum" to start the conversation surrounding climate adaptation (although that is important to launch a planning process). The County considers this grant opportunity as one to optimize its efforts and serve as an important example on how to continually gather, assimilate and act upon vulnerability data and adaptation priorities.

Monroe County has a strong history of successful execution of state-level grants (on time and on budget) with regard to climate adaptation and it must continue to evolve its approach to climate and vulnerability challenges. But the need to update its Comprehensive Plan, with its recent initiatives, is critical to remain focused on key policy initiatives and their implementation.

Finally, this grant will continue to foster a close working relationship between sustainability/resiliency, planning, floodplain, emergency management and capital planning staff. Work products generated by the sustainability/resiliency staff are the cornerstone of integrating these efforts into the Comprehensive Plan.

b. Explain how the proposed project meets the purpose of one or more of the Goals and/or Priority Areas for the funding source you are applying for.

This scope of work addresses Resiliency Planning Grant Goal (or Priority Areas) 1 and Goal 4.

Goal 1: Compliance with "Peril of Flood" statute (Sec. 163.3178(2)(f) F.S.) for communities with a Coastal Management Element in their comprehensive plan. Process components of Goal 1 included within this scope of work are:

3. Conducting public meetings in the subject community to present the findings of the vulnerability assessment and to gather additional information and comments.

4. Producing draft proposed comprehensive plan amendments in strike-through and underline format based on the information and data obtained in the vulnerability assessment and public meetings that satisfy the “Peril of Flood” requirements in Section 163.3178(2)(f), Florida Statutes, and which include a minimum of 4 examples each of strategies, principles, and related engineering solutions that reduce flood risk in coastal areas, and a minimum of 4 site development techniques that may reduce losses to the local government and property owners due to coastal flooding.

The proposed project meets the purpose of Goals (or Priority Areas) 1 and 4 for Resiliency Planning Grants. Given that the County already has developed data on its vulnerabilities, meeting the process components of 3 and 4 (of Goal 1) are a centerpiece of this scope of work. The County has already amended its Comprehensive Plan to include an Energy and Climate Element, but it has not yet processed its amendments that satisfy Section 163.3178(2)(f), F.S. Through the assistance of DEP’s Resiliency Planning Grant funds, the County can update its Conservation and Coastal Management Element to comply with these requirements as well as integrate with the Energy and Climate Element (and other Elements). This will result in more accurate data from its vulnerability planning efforts being integrated into the Comprehensive Plan. This proposed scope of work builds upon the County’s extensive vulnerability and adaptation planning efforts to update its Comprehensive Plan to comply with state law. The amendments will include a minimum of 4 examples each of strategies, principles, and related engineering solutions that reduce flood risk in coastal areas, and a minimum of 4 site development techniques that may reduce losses to the local government and property owners due to coastal flooding.

Goal 4: Regional collaboration efforts.

Additionally, as described, an internal and external engagement strategy ensures the participation of the public. All work products will be shared with the County’s 5 municipalities for a collaborative process throughout the Keys region. The grant scope also includes a workshop or webinar to be offered to the Southeast Florida Regional Compact Communities as a case study on sea level rise, vulnerability and adaptation planning and integration with the Comprehensive Plan. Finally, the grant scope could serve as an excellent model for an “Informational Webinar” for the Office of Resilient Coastlines and that potential has been built into the budget and schedule.

c. Discuss how the project is feasible and can be completed by the Deadline.

The project will be completed by June 19, 2020 as required for RPG projects. The consultant selection process will be initiated upon notice of pending award so that a team is under contract and ready to proceed when the funds are available.

4. **Budget Summary:** Allowable budget categories and costs for this project are listed in the table below.

FIXED PRICE	Grant Amount Awarded
AGREEMENT TOTAL	\$40,400

5. **Project Timeline:** All tasks are to be completed and submitted no later than the Deliverable due date listed in the table below. Request for any change must be submitted prior to the current deliverable due date listed in the project timeline. Request 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	Funding Amount

1	Gap Analysis	09/30/2019	\$6,000
2	Draft Amendments	04/30/2020	\$16,000
3	Internal and External Engagement with Regional Collaboration	04/30/2020	\$18,400
Total			\$40,400

6. **Performance Measure:** The Department's Grant Manager will review the 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. All deliverable documents must be provided in an electronic downloadable format.
7. **Consequences for Non-Performance:** The Department will reduce each Task Funding Amount by 5% for every day that the 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 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.
8. **Payment Request Schedule:** 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 Deliverable Due Date.

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 Deliverable Due Date.

TASKS & DELIVERABLES

Task #1

- A. **Title:** Gap Analysis to Support Comprehensive Plan Amendments
- B. **Description:** To update and reorganize elements of the Comprehensive Plan to incorporate vulnerability and adaptation information, primarily in the Conservation and Coastal Management Element, data gaps need to be determined and identified to serve as the basis for the update. First, what do we have? and, second, what do we need? are questions that must be answered to serve as the basis for Comprehensive Plan amendments. The County has completed extensive work in its GreenKeys planning effort, gathered countywide mobile LiDAR, updated modeling using Hazus and has begun a countywide adaptation and vulnerability analysis for roads. Analyzing these data sets will be critical to understand where policy priorities can be captured in new Comprehensive Plan amendments focused on compliance with new Peril of Flood legislation within Section 163.3178, F.S. Any data needs will also be identified. Ultimately, a single deliverable under this task will include a "Gap Memorandum" identifying current and needed data to support existing and new

Comprehensive Plan Amendments, again, focused on the Conservation and Coastal Management Element.

This Task will be completed at the beginning of the grant period to serve as a basis for the development of Comprehensive Plan amendment language or support materials. Data will be collected in a centralized location harmonizing internal work products between planning and sustainability/resiliency professionals.

C. Deliverables:

- 1) Research existing and needed data sources correlated to existing Comprehensive Plan Goals, Objectives and Policies.
- 2) Submit a copy of the Gap Memorandum identifying current and needed data to support existing and new Comprehensive Plan Amendments.

Task #2

A. Title: Draft Amendments to the Monroe County Comprehensive Plan, Including Compliance with Peril of Flood Requirements.

B. Description: This Task will begin with a review of the current 2010-2030 Monroe County Comprehensive Plan to develop a strategy to focus Comprehensive Plan amendments on compliance with the Peril of Flood legislation (Section 163.3178, F.S. 2015). The County has already accomplished much with the adoption of the Energy and Climate Element which predated the adoption of the Peril of Flood legislation in 2015 by two years. That said, the County's GreenKeys Climate and Sea Level Rise Plan was adopted in that same timeframe and the County has begun significant data and vulnerability initiatives aimed at developing an improved policy structure that accounts for climate change. Through this grant scope, the County seeks to significantly update its Comprehensive Plan to comply with new Chapter 163, F.S. requirements, within the Conservation and Coastal Management Element, as well as reorganize the County's Goals, Objectives and Policies related to sea level rise and climate change.

This Task recognizes the complexity of Comprehensive Planning within an Area of Critical State Concern with an active internal and external engagement Task (to be discussed in next section), but through multiple drafts of plan amendments that will be vetted internally and externally. The first component that will build upon the Gap Analysis in Task 1, is to review the existing elements to determine the reorganization strategy for climate, energy and sea level rise policies and data throughout the Comprehensive Plan. For example, organizational decisions related coastal King Tide flooding may be addressed in the Conservation and Coastal Management Element, while other types of precipitation flooding issues may be addressed in other Elements.

The timing of these amendments is acutely important as the County is also addressing floodplain management policies and rebuilding policies in light of the Hurricane Irma disaster and subsequent relief initiatives. Better awareness of mechanisms to be resilient post-storm event also provides opportunities to meet Peril of Flood requirements related to best practices that reduce loss due to flooding and development and redevelopment principles, strategies, and engineering solutions that reduce the flood risk in coastal areas. The point is, the collective work the County has done in the context of GreenKeys, and its implementation, as well as continuing to shore up better data overall, and incorporate dramatic lessons learned in the aftermath of Hurricane Irma, all provide a unique and important model for incorporating resiliency into the Monroe County Comprehensive Plan. All of this information must be reviewed to cohesively develop a strategy for integration into the Comprehensive Plan.

Draft 1 will serve as the public interface to start the conversation with the Community on how to best coordinate this information into the Comprehensive Plan. It is best to provide the community an initial working draft to provide concepts for them to react to and provide input upon. That input will be gathered, with additional internal review, and be refined into Draft 2. Draft 2, will then be reviewed against the existing Comprehensive Plan to determine if additional refinements are necessary throughout the other various elements to develop an organized and strong “package of Comprehensive Plan amendments” that will include, but not be limited to the Conservation and Coastal Management Element, the proverbial “home” of the Peril of Flood amendment compliance. After all elements are read together and a final “package” of amendments is developed to comprehensively address these issues through the Comprehensive Plan, a Final Draft of amendments will be compiled for final County action. The final result will be the aforementioned “Actionable policy” of pulling together all County efforts into one group of text amendments for the 2010-2030 Monroe County Comprehensive Plan.

These amendments will meet the RPG criteria including, but not limited to: a minimum of 4 examples each of strategies, principles, and related engineering solutions that reduce flood risk in coastal areas, and a minimum of 4 site development techniques that may reduce losses to the local government and property owners due to coastal flooding

C. Deliverables:

- 1) Review existing elements to determine strategy for Peril of Flood Amendment compliance.
- 2) Draft 1 of Peril of Flood Amendments for Conservation and Coastal Management (with internal review).
- 3) Draft 2 of Peril of Flood Amendments for Conservation and Coastal Management (with internal review).
- 4) Develop recommendations for Amendments and reorganization of related Comprehensive Plan Elements .
- 5) Final Draft of Peril of Flood Amendments for Conservation and Coastal Management (with internal review).

Task #3

A. Title: Internal and External Engagement with Regional Collaboration

B. Description: The grant scope includes internal, external and regional engagement components that will ensure internal vetting as well as strong public involvement. Quarterly internal work sessions and bi-monthly project management calls/meetings will ensure timelines and deliverables will be met for completion and submittal to the Grants Office. After the 1st Draft of amendments, a public workshop series will be undertaken, in 3 locations throughout the Upper, Middle and Lower Keys to maximize public involvement opportunities. In a County as lengthy as the Keys, each series of public meetings must be held in triplicate to convey information and opportunity for input, in a meaningful way. A Board of County Commissioners briefing will occur during the engagement process to provide an additional opportunity for public input.

Social media content will be developed for the engagement process to provide notice of opportunities for input as well as project status. The Final Draft of the amendments will capture public and Board of County Commissioners input for the final package of sea level rise/climate amendments to the 2010-2030 Comprehensive Plan.

To address Goal 4 of Regional Collaboration, the grant scope also includes a workshop for all 5 municipalities within Monroe County. Additionally, a workshop or webinar will be offered to the Southeast Florida Regional Compact Communities as a case study on sea level rise, vulnerability and adaptation planning integration into the Comprehensive Plan. Finally, the grant scope could serve as an excellent model for an “Informational Webinar” for the Office of Resilient Coastlines and this potential mechanism is a way to further communicate lessons learned. Given the amount of work products and data that will be integrated into the 2010-2030 Monroe County Comprehensive Plan, the final work products will serve as an excellent case study looking to utilize Peril of Flood compliance as a catalyst for sea level rise issues to be addressed in the context of comprehensive planning.

C. Deliverables:

- 1) Quarterly internal work sessions (4 mtgs total) with agendas and minutes.
- 2) Bi-monthly project management calls/meetings (24 total).
- 3) 1st Draft public mtgs (3 mtgs total) with sign-in sheets, agendas and minutes.
- 4) Board of County Commissioners Briefing with agendas and minutes.
- 5) Final Draft public mtgs (3 mtgs total) with sign-in sheets, agendas and minutes.
- 6) “Implementation Workshop” offered to the Compact Communities with materials and agendas.
- 7) Briefing for the quarterly “Informational Webinar” of the DEP Florida Resiliency Coastlines Program with materials and agendas.
- 8) Social media content for public meetings.