

**BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY**

Meeting Date: November 17, 2015

Department: Sustainability

Bulk Item: No X

Staff Contact /Phone #: Rhonda Haag, 453-8774

AGENDA ITEM WORDING: Approval of a grant application submitted October 30, 2015, to the Florida Department of Environmental Protection (FDEP) to conduct a vulnerability assessment of an important community asset in the Monroe County area. If awarded, this work will include the identification of risk and loss for one asset, Bayshore Manor Assisted Living Facility, as a means of developing a method to quantify potential losses for various important assets in the Keys exacerbated by sea level rise. This method is being developed to facilitate later dialogue which will be focused on developing methods to prioritize assets to be considered for protection across all County-owned and County-assisted or facilitated asset types.

ITEM BACKGROUND:

Monroe County is finalizing its GreenKeys Sustainability Plan which has identified long-term risks to the community. An outcome of that work was an identified need to conduct further assessments on critical community facilities at a more finite level and develop adaptation strategies to address those long-term risks. Sea level rise will be observed over the timeframe of study, but the risks to facilities will be increasing due to higher water levels impacted by storm events in the area. A dialogue on that risk is needed.

Recent lessons in storm flooded areas (New York, Charleston) show that the loss of community facilities limits the community's ability to effectively respond and recover quickly, contributing to long-term community economic loss. Event-driven impacts' effects on facilities will be exacerbated by increasing nuisance and inundation flooding over time as well as increased surge. Monroe County would like to address this concern and needs to develop a process by which loss of such facility(ies) may be quantified in terms of projected damage to facilities, but also the cost of damage to or loss of the facility to the community. The project will include a cost-benefit estimate of employing strategies to either adapt the facility or relocate it based upon future projected impacts.

The methodology developed here will be carried forward to assess other facilities as a means of developing a process for prioritizing actions to ensure a more resilient future across the Florida Keys.

PREVIOUS RELEVANT BOCC ACTION: Not applicable

CONTRACT/AGREEMENT CHANGES: Not applicable

STAFF RECOMMENDATIONS: Approval

TOTAL COST: \$29,938.08 **INDIRECT COST:** Incidental **BUDGETED:** Yes X No

DIFFERENTIAL OF LOCAL PREFERENCE: N/A

COST TO COUNTY: \$14,969.04 **SOURCE OF FUNDS:** 50% Grant and 50% Budgeted

Sustainability Funds

REVENUE PRODUCING: Yes X No **AMOUNT PER MONTH** **Year**

APPROVED BY: County Atty P.M. OMB/Purchasing CB Risk Management Ⓞ

DOCUMENTATION: Included X Not Required

DISPOSITION:

AGENDA ITEM No. CAD #

COASTAL PARTNERSHIP INITIATIVE
www.dep.state.fl.us/cmp/grants/index.htm

GRANT APPLICATION

Refer to Rule Chapter 62S-4, Florida Administrative Code, available at <http://www.dep.state.fl.us/cmp/grants/index.htm> for information on funding requirements and evaluation criteria.

Eligible applicants for the Coastal Partnership Initiative are local governments of the 35 coastal counties and all municipalities within their boundaries required to include a coastal element in the local comprehensive plan. Florida colleges, community colleges, state universities, regional planning councils, national estuary programs and non-profit groups may also apply, as long as an eligible local government agrees to participate as a partner.

Submittal Requirements

1. One application per applicant may be submitted per grant cycle (i.e., one application per county, city, or other eligible applicant.)
2. Applicants may request:
 - a) no more than \$15,000 and no less than \$10,000 for planning, design and coordination activities; and
 - b) no more than \$30,000 and no less than \$10,000 for construction projects, habitat restoration, invasive exotic plant removal, and land acquisition. These projects cannot involve planning/coordination tasks or components.
3. Non-profit groups are not eligible to receive funds for construction projects, invasive exotic plant removal, habitat restoration, or land acquisition. Applications submitted by non-profit groups that propose these activities (as listed in 62S-4.004(2)(c)) will be disqualified.
4. Funding is available only for project work initiated and completed during a 12-month period beginning July 1 and ending June 30.
5. One original, signed application must be submitted along with four copies of the application and one CD/DVD copy of the application.
6. All applications must be submitted on the CPI Application Form.
7. Applications must be submitted in person, by certified or registered mail or by courier service by 4:00 p.m. on the date identified in the notice of availability of funds to:

Department of Environmental Protection
Florida Coastal Management Program, MS 47
ATTN: CPI Applications
3900 Commonwealth Blvd., Tallahassee, FL 32399-3000

Faxed, electronic, or late applications will not be considered and will be disqualified.

A. TITLE PAGE

Project Title: Resilient Infrastructure Assessment
CPI Initiative Priority Area(s): Resilient Communities
Applicant Name and Name of Partner Entity (if applicable):
Rhonda Haag, Monroe County

Official Contact Name: Rhonda Haag
Title: Sustainability Director
Phone/Fax: (305) 453-8774
Email Address: Haag-Rhonda@MonroeCounty-FL.Gov
Postal Address: 102050 Overseas Highway, Ste. 246
Key Largo, FL 33037
Applicant DUNS Number: 073876757

Proposed Project Manager Name: Rhonda Haag Email: Haag-Rhonda@MonroeCounty-FL.Gov

Certification Statement

- "By signing this title page, the undersigned certifies that:
- a. This application is in all respects fair and submitted in good faith without collusion or fraud;
 - b. If selected through this application process, the recipient will work in good faith and in partnership with the Florida Coastal Management Program to manage its subgrant in a timely and accurate manner;
 - c. Any funds awarded as a result of this application process will not be used to supplant or replace any state or local funds;
 - d. Any funds awarded as a result of this application process will not be used as matching funds to apply for or receive other federal funds;
 - e. No federal funds will be used as match for funds awarded as a result of this application process;
 - f. The applicant local government's adopted comprehensive plan has been found to be in compliance with Chapter 163, Part II, F.S.;
 - g. [If construction is proposed] The applicant has conducted preliminary consultation with appropriate federal, state, regional and local regulatory agencies regarding any construction proposed in the application and has documented the results of the consultation in the Project Description section of the Work Plan;
 - h. [If construction projects, habitat restoration or invasive species removal are proposed] The property on which these activities will take place is owned or leased by the applicant or the applicant holds a sufficient easement; and
 - i. The undersigned has full authority to bind the applicant."


Signature _____ Roman Gasteri, County Administrator 10-30-15
Name & Title _____ Date _____

If applicant is a Florida college, community college, state university, regional planning council, national estuary program or non-profit group, include the signature, name, and title of contact for partnering entity; the name of the eligible county or city partner; and the date.

Signature of Partner _____ Name & Title _____ County or City Partner Entity _____ Date _____

MONROE COUNTY ATTORNEY
APPROVED AS TO FORM
Date: 11/30/15

B. PROJECT LOCATION MAP

Include a project location map no larger than 8½" x 11".

(10 pts.)*

Figure 1 - Location of the Facility in Monroe County



Figure 2 - Location of the Facility Showing Surrounding Areas



* NOTE: The maximum number of points for scored application components is indicated in each section.

C. WORK PLAN (Expand text boxes as needed, keeping within the 10-page Work Plan limit)

This section describes the project and cannot exceed 10 single sided pages or 5 double sided pages. If letters of support or other materials are submitted to address the Work Plan components below, these items will count toward the maximum 10 pages of the application Work Plan; any additional pages or Appendices will be discarded and not considered in the evaluation of the application. The Title Page, Location Map, Budget and Budget Narrative do not count toward the 10-page limit of the Work Plan.

1. PROJECT DESCRIPTION.

- a. Describe in detail the activity or work to be conducted; include project location information. (15 pts.)

This work will be to conduct a vulnerability assessment of an important community asset in the Monroe County area. This work will include the identification of risk and loss for one asset, Bayshore Manor Assisted Living Facility, as a means of developing a method to quantify potential losses for various important assets in the keys exacerbated by sea level rise. This method is being developed to facilitate later dialogue which will be focused on developing methods to prioritize assets to be considered for protection across all county controlled or influenced asset types.

- b. Describe specific project objectives, tasks, and deliverables and related timelines for each. Objectives and tasks should clearly relate to the project description.

(20 pts.)

The project objective will be to develop a method by which existing and future risks to important community facilities may be quantified and strategies to address those risks, as it is a process which is not well represented currently in many/most flood risk assessments. This work would build upon previous work done by the County to characterize infrastructure vulnerability under various sea level rise scenarios. This work is to include the definition of the value of community service and use as a means of facilitating later dialogues on how to prioritize improvements under government control in coastal areas.

The scope of work outlined below is described in the figure below. The process defines vulnerabilities from two perspectives. The first is defining specific elements of facilities which can be impacted while flooding, the second in defining the expected flooding levels that may impact that facility exacerbated by future sea level rise.

Task 1 – Team Coordination

Monroe County is involved in the management of this facility. To enable the dialogue or risk to the facility, a team of professionals made up of engineering staff from various departments will be convened for the purpose of discussing this project. The intent of the initial meeting is to discuss the proposed work scope for the project and identify an appropriate facility to use for this effort. The team will conduct a peer review of an assessment methodology developed on other projects and recommended for application within the county. Changes to that methodology will be incorporated into subsequent project tasks. This methodology will be discussed and the approach to developing an understanding of the implications of loss of the facility developed.

The dialogue for this meeting will also include establishing the analysis timeframe for the project. Typical options for this type of assessment include longer term planning horizons, in the 50 to 100 year timeframe. Establishing this value will be important to the quantification of potential costs of impacts and also the benefits of any identified strategy.

Timeline: Within one month of project initiation

Deliverable: Meeting minutes documenting dialogue and decisions

Task 2 – Asset Vulnerability Definition

The facility assessment will be focused on understanding the implications of flooding on causing damage to a facility including sea level rise assumptions. A facilitated on-site dialogue between county officials, facility operations staff, and engineering team members will be held to define the planning level parameters of impact that are critical to any facility assessment. Those parameters would include:

- Failure points – that is the water elevations that could cause minor, significant, or catastrophic loss of a facility. Defining these values critical to establishing the understanding of the facility and enabling a vulnerability assessment. Each failure point, will include an estimate of:
 - Cost of repair, relocation or adaptation
 - Time of outage, loss of service
 - Community impacts (number of residents / commercial interest impacted)

Timeline: Within 2 months of project initiation

Deliverable: Documentation of specific facility information required to define loss and failure. To include a short memorandum and drawings, if available.

Task 3 – Flooding/Surge Definition

Any vulnerability assessment requires the quantification of what may happen at a facility, in terms of flooding. This task will utilize information already generated in earlier studies, including the County's GreenKeys Plan, to identify the water levels and surge type (wave zone vs still water) expected at the facility. These values will be taken from completed studies to identify expected levels for existing surge (FEMA) as well as water elevation levels including contributions from expected sea level rise in the area. This effort will not include the development of new surge models (an effort greater than resources available for this grant) but will instead build upon the vulnerability assessment already conducted by the County. This effort will include the definition of timeframes expected for sea level rise, based on various climate scenarios tied to the Southeast Regional Climate Compact and the GreenKeys Plan. The outcome of this effort will be a table of values for flood levels at the facility, including current return periods and return periods estimated for selected future years.

Timeline: Within 3 months of project initiation

Deliverable: Documentation of identified surge levels, including assumptions for increased surge levels from sea level rise.

Task 4 – Define Consequence Costs of Damage/Loss

Information generated in tasks 1 and 2 above will be combined to develop an understanding of potential damage/loss to the facility and adaptation or relocation of the facility over the project time period. This effort will include the application of economic factors to define broader community impacts of loss of the facility. The results of this task will include a present value of loss of the facility, and the identification of various factors to be applied in generating the quantification of potential loss over time and an analysis of adaptation versus relocation strategies.

Timeline: Within 6 months of project initiation

Deliverable: Methodology summary describing method for quantifying potential loss/damage over time using econometric values.

2. PROJECT NEED AND BENEFIT.

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

(25 pts.)

Monroe County is finalizing its GreenKeys Plan which has identified long-term risks to the community. An outcome of that work was an identified need to conduct further assessments on critical community facilities

at a more finite level and develop adaptation strategies to address those long-term risks. Sea level rise will be observed over the timeframe of study— but the risks to facilities will be increasing due to higher water levels impacted by storm events in the area. A dialogue on that risk is needed.

Recent lessons in storm flooded areas (NY, Charleston) show that the loss of community facilities limits the ability of a community to respond and recover quickly, contributing to long term economic loss for a community. The effect on facilities from event-driven impacts will be exacerbated by increasing nuisance and inundation flooding over time as well as increased surge. Monroe County would like to address this concern and needs to develop a process by which loss of a facility may be quantified in terms of the damage to a facility but also the cost of loss of the facility to a community. The project will include a cost benefit estimate of employing strategies to either adapt the facility or relocate the facility based on future projected impacts.

The methodology developed here will be carried forward to assess other facilities as a means of developing a process for prioritizing actions to ensure a more resilient future across the Florida Keys.

b. Explain how the proposed project meets the purpose of at least one CPI priority area. (10 pts.)

CPI priority area "Resilient Communities" is focused on helping coastal communities prepare for and respond to the effects of sea level rise and climate change. This grant application is directly applicable for that purpose as it will help not only the Florida Keys community but also other coastal Florida communities through the development of a methodology that will be applicable elsewhere.

c. Discuss the extent to which the project will improve the management and protection of coastal resources. (25 pts.)

This project fills a need for defining existing and long term risks to critical community facilities as conditions change with increased event-driven impacts exacerbated by climate change. Considerations of the consequences of loss and adaptation are required as a means of identifying investment strategies for improving community resiliency. Developing knowledge which considers the implications of loss across an entire community and its assets is the first step in developing effective management practices for response and adaptation.

d. Discuss how project is feasible and can be completed within one year. (10 Pts.)

The project is feasible as it utilizes methods employed elsewhere in the county. As this work is focused solely on one facility as a means to develop this methodology, it is felt this work can be accomplished comfortably within 6 months.

BUDGET and BUDGET NARRATIVE

(15 Pts.)

Type dollar amounts only in applicable categories (round to nearest dollar; no cents) and leave other categories blank. A recipient will be required to provide 100% (1:1) matching funds, cash or in-kind. No more than one-half (50%) of match can be provided by a third party.

<u>Budget Category</u>	<u>FCMP Funds</u>	<u>MATCH Funds</u>
1. Salaries	<u>\$4,943.19</u>	<u>\$4,943.19</u>
2. Fringe Benefits	<u>\$9,085.58</u>	<u>\$9,085.58</u>
3. Travel	<u>\$960.00</u>	<u>\$960.00</u>
4. Equipment	<u> </u>	<u> </u>
5. Supplies	<u> </u>	<u> </u>
6. Contractual Services	<u> </u>	<u> </u>
7. Other Expenses	<u> </u>	<u> </u>
8. Indirect Charges	<u> </u>	<u> </u>
FCMP Total	<u>\$14,988.77</u>	
Match Total		<u>\$14,988.78</u>
Total FCMP & Match Funds	<u>\$29,977.55</u>	

If budget exceeds the amount shown on the "Total" line above, indicate the total project cost: \$ _____

BUDGET NARRATIVE: Describe line items for each applicable budget category shown above. Provide sufficient detail to show cost relationship to project activities for both FCMP and match items. Indirect costs are not allowed as match.

Total FCMP Funds Requested \$14,988.77

Salaries: As shown in the hours and budget estimate in Attachment 1. To pay for labor hours for the consultant to complete the work for the county. The requested funds will cover ½ of costs incurred.

Fringe Benefits: As shown in the attached budget summary. To include corporate overhead and fee for consultant work on the project. The requested funds will cover ½ of costs incurred.

Travel: To cover funds for the consultants to travel to identified project meetings. The requested funds will cover ½ of costs incurred.

Equipment:

Supplies:

Contractual Services:

Other Expenses:

Indirect Charges:

Total Match Funds: \$14,988.77

Salaries: As shown in the hours and budget estimate in Attachment 1. To pay for labor hours for the consultant to complete the work for the county. The match funds will cover ½ of costs incurred.

Fringe Benefits: As shown in the attached budget summary. To include corporate overhead and fee for consultant work on the project. The match funds will cover ½ of costs incurred.

Travel: To cover funds for the consultants to travel to identified project meetings. The match funds will cover ½ of costs incurred.

Equipment:

Supplies:

Contractual Services:

Other Expenses:

NOTE: Project costs will be evaluated for reasonability, and the application is eligible for up to 10 points based on the evaluation of costs.

Project Cost Estimate - Parsons Brinckerhoff - Attachment 1

Discipline	PERSONNEL CATEGORIES / MANHOURS							Summary
	Project Manager	Architect	Coastal Engineer	Climate / Spatial	Economist	Policy and Planning		
	Flood	Dregany	Ramsden	Dorney	Da Silva	Deady/Evans		
1.0 Team Coordination	8	4	0	8	0	8	12	
2.0 Asset Vulnerability Definition	4	12	0	4	0		16	
3.0 Flooding/Surge Definition	4	0	12	8	0		4	
4.0 Define Consequence Costs of Damage/Loss	4	12	18	16	18	8	16	
Total Hours	20	28	28	36	18	16	64	
LOADED FIXED HOURLY RATE	\$ 309.29	\$ 207.68	\$ 173.77	\$ 154.98	\$ 89.54	\$ 250.00		
TOTAL DIRECT LABOR COST	\$6,185.70	\$5,815.18	\$4,865.58	\$5,579.39	\$1,611.70	\$4,000.00		\$28,057.56

<i>Direct Costs</i>	Quantity	Unit Cost
Flights (round trip)	2	\$400.00
Lodging (hotel nights)	4	\$150.00
Ground Transportation (days)	4	\$80.00
Meals	8	\$25.00
<i>Total Direct Costs</i>		
Project Total (Labor + Direct Costs)		

\$	800.00
\$	600.00
\$	320.00
\$	200.00
\$	1,920.00
\$	29,977.56