

# White Paper

## Update on USACE Collier County Coastal Storm Risk Feasibility Study

### Councilman Rich Blonna

### 8/7/23

#### Background

The following is a quick overview of the chronology of events related to the United States Army Corps of Engineers (USACE) Coastal Storm Risk Feasibility Study:

- 2018–Collier County agreed to become the non-federal sponsor for the 3-year Coastal Storm Risk Management (CSRM) Feasibility Study.
- 2021–CSRM Feasibility Study paused while awaiting the approval for the time and funding exemption request.
- 2022–CSRM Feasibility Study reinitiated and approved for an additional 3 years.
- 2023–Public meetings hosted by Collier County and USACE conducted along with Planning Charettes with stakeholders.
- 2023–CSRM Feasibility Study Advisory Committee formed (Collier County, 2023)

In 2020 the USACE published their initial findings in a report entitled: *Collier County Florida, Coastal Storm Risk Management Draft Integrated Feasibility Study and Draft Environmental Impact Statement July 31<sup>st</sup> 2020* (USACE, 2020). A delegation from the USACE addressed the Marco Island City Council regarding the study.

The study was intended to assess the impact of storm surge and coastal flooding associated with Hurricanes and other Storms. As indicated by the title it was designed to assess the risk posed by such events to both human development and environmental habitat. It was also supposed to present a comprehensive look at all available preventive approaches. A short list of available approaches taken from the study's Executive Summary (USACE, 2020, pg. ii) were:

- Beach berm and dune nourishment – These included plant-based features such as vegetative dune plantings.

- Structural measures – These measures included surge barriers with sector gates, jetties, concrete structures in the dune systems, floodwalls, and sluice gates.
- Natural and Nature-Based Features - Artificial reef structures near the Marco Island area that would provide storm surge dissipation.
- Dry floodproofing – structural improvements to critical infrastructure buildings that were identified as at risk of damage from coastal storms.
- Non-Structural Measures - The nonstructural measures recommended in the TSP include elevation and acquisition of residential property and floodproofing of nonresidential property.

From the outset, it seemed that Marco Island was never considered seriously for inclusion in the study. It seemed that we were perceived as a small-time (we lacked a Federal Channel) recreational boating and fishing community. This is a direct quote from page 6 the study:

“Marco Island (See Figures 1-1 & 1-3) is a highly developed, low-lying barrier island that also has public Gulf-facing beach along South Marco. Hideaway Beach (private) and the Tigertail Natural Area, located on the northwest side of the island, are not part of the study area. The inland bays of Marco Island, along with the adjacent Big Marco and Caxambas Passes are used almost exclusively for recreational fishing and boating and do not contain a federal channel. Marco Island is bordered on the north, east, and south by the Rookery Bay National Estuarine Research Reserve. For the purposes of this study, the Marco Island Area also includes the surrounding communities of Isles of Capri, Goodland, and Everglades City (USACE, 2020, pg. 6).

As you can see from this statement, from day one, two of the most vulnerable and valuable parts of our island, Hideaway Beach and Tigertail Natural Area were not included in the study.

The final report was supposed to be prepared in 2021 but was never finished for a lack of funding. In 2022, the study team received an additional \$2.98 million dollars to revise and continue the study for an additional 33 months (Collier County, 2023).

### **2023 Update**

On February 6<sup>th</sup>, 2023, Abigail Preddy of the USACE gave a virtual presentation of the Norfolk Division’s follow-up study entitled, *Re-initiation of the Collier County Coastal Storm Risk Management Study*. The presentation presented three “Goals Unique to Study Re-Initiation:”

1. Reengage Collier County community to address agency, stakeholder, and public comments and concerns from the first iteration of the study.
2. Reformulate the 2021 Recommended Plan using updated information and lessons learned.
3. Increased public coordination to promote community awareness and cooperation (USACE Norfolk Division, 2023).

I urge residents to watch the replay of that presentation to the City Council Meeting on 2/6/23. The discussion of the revised USACE Study begins at around 6 minutes and 45 seconds into the video replay of the City Council Meeting. Please pay particular attention to the comments of City Councilors following the presentation.

([https://marcoisland.granicus.com/player/clip/1628?view\\_id=3&redirect=true&h=8956a4707ae3302632c5777f0c49c8ba](https://marcoisland.granicus.com/player/clip/1628?view_id=3&redirect=true&h=8956a4707ae3302632c5777f0c49c8ba)).

In viewing the replay you will get a sense of our anger and frustration over the **continued lack of attention** given to Marco Island in the study. You will also see how concerns expressed by Councilors Brechnitz and Grifoni during the initial study presentation from 2020 **still haven't been addressed** (Marco Island, 2023).

The USACE Norfolk 2023 follow-up study and presentation completely dismiss the two specific things of most concern to the City Council:

- **Full Beach** berm and dune nourishment. – including Natural and Nature Based Features (NNBF) such as vegetative dune plantings.
- Structural measures – These measures include surge barriers with sector gates, jetties, concrete structures in the dune systems, floodwalls, and sluice gates.

After reading the revised study and hearing the presentation, I was furious over the USACE's disregard of these two vital components. My outrage was echoed by my fellow Councilors. Councilors Brechnitz, Folley, Grifoni and Rola echoed my beliefs that installing sea gates to block off the major openings to the island's canal system (Caxambas, Collier Creek, Marco River openings) would prevent the interior of the island from being flooded like it did during Hurricane Ian.

Councilor Rola emphasized that sea gate technology has been working effectively in the Buzzard's Bay area of Massachusetts for several decades.

Councilor Brechnitz expressed his disgust (my interpretation of his emotion) at the report's omission of beach berm and dune replenishment of the entire beachfront. The USACE ignored the fact that efforts to harden the beach must include the entire beach, not just sections that they deemed acceptable.

At the end of the re-initiation study presentation Chairman Folley asked Ms. Preddy, the presenter, if the USACE would incorporate the feedback she received from the City Council regarding our desire to see structural changes and full beach nourishment included in the USACE study moving forward. She answered, "Yes sir, yeah, we want to take another look at the range of alternatives in the plan. We want to do that reformulation and we want you all to be involved and make sure that your concerns are taken seriously."

Based on my most recent observations of the USACE's efforts, I do not think they have taken our concerns seriously.

In fact, I think just the opposite has happened. The two most important measures identified by the City Council initially in 2020 and again on 2/6/23 as being critical to helping Marco Island **have been eliminated** by the USACE. They have literally been crossed out of the planning documents (Collier County 2023).

### **The Charette, Virtual Meeting, and 7/26/23 Weekly Meeting**

In order to meet the goals of the re-initiation study, the USACE Norfolk Division established a working group with representation from all of the municipalities within Collier County. The group began meeting weekly to assess the progress of the study and gauge the community's pulse regarding coastal storm risk management.

In addition to the ongoing meetings there were virtual meetings and a Charette (working group meeting) involving the working group members and concerned citizens. Justin Martin, Director of Public Works and Mohamed Dabees PhD, Coastal Engineer (the city's professional services consultant) have been representing the interests of the city at the USACE CSRSM meetings.

I attended the Virtual Meeting and Charette (charade?) in the Spring of 2023. It was evident from the Virtual Meeting and Charette that Marco Island's needs were being overshadowed by folks from USACE, Naples, and Unincorporated Collier County. Most of the voices in the room and online were against structural hardening measures. Attendees seemed more focused on Environmental Compliance and Environmental Justice Communities (see references for definition) than protecting Marco Island's valuable real estate.

One piece of environmental legislation, the Coastal Barrier Resources Act (CBRA) of 1982, has continually been cited as the main environmental compliance act that needed to be followed. The Act as amended, 16 U.S.C. 3501, prohibits Federal funding for building and development in undeveloped portions of designated coastal barriers, including the Great Lakes and otherwise protected areas (OPAs). CBRA is administered by the US Fish and Wildlife Service (USFWS, 2023).

Our representatives have been fighting to no avail to have the USACE Norfolk representatives understand that the purpose of ensuring beach berm and dune renourishment along the entire stretch of Marco Island including Tigertail Park and Hideaway beach is to **protect** this area from storm surge, **not develop it**. These areas are already developed (Hideaway) or protected (Tigertail is a County Park).

On 7/26/23 I represented the City of Marco Island at the inaugural meeting of the Collier County Storm Risk Management Feasibility Study Advisory Committee and at the afternoon Weekly Coastal Storm Risk Management Public Meeting.

In both meetings, the same message was repeated: **No progress has been made** in having the re-initiation study include a comprehensive cost-benefit analysis of either of our two concerns:

- Beach berm and dune nourishment. – including Natural and Nature Based Features (NNBF) such as vegetative dune plantings.
- Structural measures – These measures included surge barriers with sector gates, jetties, concrete structures in the dune systems, floodwalls, and sluice gates.

Citing time and financial constraints the USACE has **removed those items from consideration**, essentially **shutting the door** on the City of Marco Island.

I find the actions of the USACE Norfolk Division unacceptable for the residents of Marco Island. I believe that the time and financial constraints cited for their failure to explore the feasibility of the two measures Marco Island needs most are self-imposed.

The needs of Marco Island have been overlooked while the USACE and the working group have focused on issues that were either tangential (Environmental Justice Communities) or misunderstood (CBRA and our beaches) as they related to Marco Island.

### **Desired Action**

I feel that we need to take this issue to a political level and use our power as a body of elected officials to pressure the USACE to better represent Marco Island.

I would like the City Council to reach out to our Board of County Commissioners, Representative Rommel, Senator Passidomo, Governor DeSantis, US Congressman Donalds, and US Senators Scott and Rubio.

I am seeking a motion to do so.

### **References**

USACE Norfolk Division (2020). *Collier County Florida, Coastal Storm Risk Management Draft Integrated Feasibility Study and Draft Environmental Impact Statement July 31<sup>st</sup> 2020* Norfolk: VA.

USACE Norfolk Division (2023). *Re-initiation of the Collier County Coastal Storm Risk Management Study City of Marco Island*. (Presentation given to Marco Island City Council). Norfolk: VA. United States Army Corps of Engineers Printing.

Collier County (2023). *Study Status-Staff Report*. PowerPoint Presentation to Collier County Coastal Storm Risk Management Feasibility Study Advisory Committee, 2/26/23. Collier County Growth Management Community Development Department. Naples: FL.

USFWS (2023). *Coastal Barrier Resources Act*. Website: <https://www.fws.gov/program/coastal-barrier-resources-act>.

Environmental Protection Agency (EPA), (2023). *Environmental Justice*. Website: <https://www.epa.gov/environmentaljustice>

Marco Island (2023). Video Replay of Marco Island City Council Meeting, 2/6/23. City Council ([https://marcoisland.granicus.com/player/clip/1628?view\\_id=3&redirect=true&h=8956a4707ae3302632c5777f0c49c8ba](https://marcoisland.granicus.com/player/clip/1628?view_id=3&redirect=true&h=8956a4707ae3302632c5777f0c49c8ba)).

### **Definitions:**

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This goal will be achieved when everyone enjoys:

- The same degree of protection from environmental and health hazards, and
- Equal access to the decision-making process to have a healthy environment in which to live, learn, and work (EPA, 2023).