

MEMORANDUM

Agenda Item No. 8(L)(1)

TO: Honorable Chairman Oliver G. Gilbert, III
and Members, Board of County Commissioners

DATE: July 2, 2024

FROM: Geri Bonzon-Keenan
County Attorney

SUBJECT: Resolution approving a
Cooperation Agreement between
the U.S. Army Corps of
Engineers and Miami-Dade
County for the rehabilitation of a
Federal Hurricane/Shore
Protection Project in Bal
Harbour, Florida; authorizing the
County Mayor to execute the
Agreement, and exercise any
termination provisions and all
other rights contained therein;
and authorizing the County
Mayor to execute certain
amendments to the Agreement

Resolution No. R-590-24

The accompanying resolution was prepared by the Regulatory and Economic Resources Department and placed on the agenda at the request of Prime Sponsor Commissioner Micky Steinberg.


Geri Bonzon-Keenan
County Attorney

GBK/ks

Memorandum



Date: July 2, 2024

To: Honorable Chairman Oliver G. Gilbert, III
and Members, Board of County Commissioners

From: Daniella Levine Cava
Mayor 

Subject: Resolution Approving a Cooperation Agreement between the U.S. Army Corps of Engineers and Miami-Dade County for the Rehabilitation of a Federal Hurricane/Shore Protection Project in Bal Harbour Village, Florida

Executive Summary

The purpose of this item is to gain approval of and authorization by the Board of County Commissioners (Board) for the County to execute a Cooperation Agreement (Agreement) between the U.S. Army Corps of Engineers (Army Corps) and Miami-Dade County (County) for the rehabilitation of the Federally authorized Hurricane/Shore Protection Project (HSPP) in Bal Harbour Village, Florida. The Agreement, which is attached as Attachment 1 to the resolution, establishes the partnership between the Army Corps and the County, as Non-Federal Sponsor, for the Army Corps to restore the HSPP in Bal Harbour, Florida, to a full construction template, with an estimated placement of 122,500 cubic yards of material at 100 percent Federal expense. Sand placement shall occur between Florida Department of Environmental Protection monuments R-27 and R-31.5.

For more than 45 years, the County as the Non-Federal Sponsor has worked in partnership with the Army Corps to implement the Federally authorized Coastal Storm Risk Management Project, which serves as a critical component of our community's resilience. Due to impacts from Hurricane Nicole, the Bal Harbour segment of the HSPP was found to be eligible for Flood Control and Coastal Emergency (FCCE) rehabilitation, which allows for 100 percent Federal funding of HSPP restoration. The Army Corps Project Information Report (PIR), which provides Federal justification for FCCE rehabilitation, is attached to this memo as Attachment A.

The Agreement also includes various duties and responsibilities related to post-construction operations and maintenance of the HSPP that will be fully funded by the County.

Recommendation

It is recommended that the Board approve the attached Agreement between the Army Corps and the County for rehabilitation efforts in Bal Harbour, Florida, currently estimated to cost \$11,300,000.00. The Agreement between the Army Corps and the County also establishes the County's cost share obligation of \$0 for the HSPP.

It is also recommended that the Board authorize the County Mayor or the County Mayor's designee to execute the Agreement and exercise the provisions contained therein; and delegates authority to the County Mayor or County Mayor's designee to execute amendments to the Agreement.

Delegation of Authority

This Board authorizes the County Mayor or County Mayor's designee to execute the Agreement, in substantially the form attached as Attachment 1, for and on behalf of Miami-Dade County; to exercise the provisions contained therein, including the termination provisions and all other rights contained therein; to take all actions necessary to effectuate same; and to execute future amendments for extensions of time to the Agreement, after approval by the County Attorney's Office for legal sufficiency.

Scope

The HSPP, Bal Harbour segment, covers shoreline areas in Commission District 4, which is represented by Commissioner Micky Steinberg.

Fiscal Impact/Funding Source

Under the proposed Agreement, the Army Corps will pay for 100 percent of the HSPP restoration cost of the Bal Harbour segment, estimated at \$11,300,000.00.

The County shall be responsible for post-construction maintenance activities, which are estimated to cost approximately \$25,000.00 per year in County staff time and contracted services. The actual amount to be paid by the County shall be paid from the County's Capital Budget – Beach - Erosion Mitigation and Renourishment Program 2000000344.

Track Record/Monitor

The Assistant Director for the Division of Environmental Resources Management (DERM) in the Department of Regulatory and Economic Resources (RER), Lisa Spadafina, will monitor the proposed Agreement.

Background

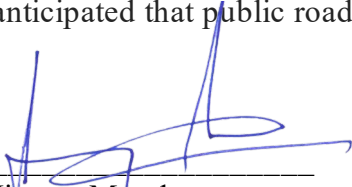
Maintaining the County's beaches is critical to protecting our residents and infrastructure from the impacts of erosion and storm surge, and our world-renowned beaches play an important role in supporting our tourism industry. Through long term agreements with the Army Corps, the County serves as the local Non-Federal Sponsor for beach re-nourishment activities along 13 miles of coastal beaches extending from Government Cut north through Sunny Isles Beach. These areas are part of a Federally authorized shore protection project administered by the Army Corps, with the County serving as the local Non-Federal Sponsor. Historically, the Army Corps has required that such activities be cost-shared with the Federal government, and such funding has generally been cost shared among the Federal (Army Corps) and non-Federal (County & State) partners, however, there have been some beach renourishment activities that have been 100% Federally funded. The main segment of the Federally authorized Dade County Beach Erosion Control and Hurricane Protection Project, encompassing 10.5 miles of Atlantic coastline from Government Cut to Haulover Park, was re-authorized in 2022 for another 50 years.

On December 2, 2022, the County provided a letter to the Army Corps requesting FCCE rehabilitation support for the Bal Harbour beaches as a result of damages sustained from Hurricane Nicole. On May 3, 2023, the Army Corps issued a PIR establishing economic justification for FCCE rehabilitation of the Bal Harbour, Florida, segment of the HSPP (Attachment A).

The attached Agreement (Attachment 1) establishes the partnership between the Army Corps and the County, as Non-Federal Sponsor, for the Army Corps to restore the HSPP in Bal Harbour, Florida, to a full construction template, with an estimated placement of 122,500 cubic yards of material at 100 percent Federal expense, currently estimated at \$11,300,000.00. The County shall be responsible for post-construction operations and maintenance activities, which are estimated to cost approximately \$25,000.00 per year in County staff time and contracted services.

Honorable Chairman Oliver G. Gilbert, III
and Members, Board of County Commissioners
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The Army Corps and the County are currently discussing the County's obligations related to certifying real estate interests for use by the contractor for staging areas. Based on the on-going discussions, it is anticipated that public road rights-of-way may be used, without cost to the County.



Jimmy Morales
Chief Operations Officer

ATTACHMENT A

PROJECT INFORMATION REPORT

FOR THE

**REHABILITATION EFFORT FOR THE
DADE COUNTY BEACH EROSION CONTROL AND HURRICANE
PROTECTION PROJECT – MAIN SEGMENT (BAL HARBOR)**

MIAMI-DADE COUNTY, FLORIDA

3 May 2023

MDC005

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**REHABILITATION EFFORT FOR THE
DADE COUNTY BEACH EROSION CONTROL AND HURRICANE
PROTECTION PROJECT – MAIN SEGMENT (BAL HARBOR)
MIAMI-DADE COUNTY, FLORIDA**

Part I. Executive Summary.

This Project Information Report (PIR) was prepared at the request of the project sponsor in a letter dated December 2, 2022. Funding for this report was provided by Public Law (PL) 117-43. This report finds that there is sufficient justification for Flood Control and Coastal Emergency (FCCE) rehabilitation of the Dade County, Beach Erosion Control and Hurricane Protection Project, Main Segment (Bal Harbor) under PL 84-99.

This report finds that, per ER 500-1-1, Hurricane Nicole was an extraordinary storm event that impacted the project area. Significant damage has occurred to the project, and nourishment will be needed to ensure continued coastal storm risk management for the property, structures, and infrastructure that this project is designed to protect. It is necessary to undertake the proposed rehabilitation effort under the authority of PL 84-99 to minimize potential future damages to the structures and infrastructure in the project area.

The proposed emergency work to fully restore the project's construction template at the full federal expense of \$11,134,300, in accordance with PL 117-328 is economically justified as the project will have a remaining benefit to remaining cost ratio of 2.00. The proposed emergency work will include nourishment of the full construction template with approximately 122,500 cubic yards (cy) of sand from the previously authorized upland sand mine. Environmental requirements have been determined to be current and sufficient for the proposed work as they relate to the Piping Plover Biological Opinion (P3BO) and the Statewide Programmatic Biological Opinion (SPBO) for Endangered Species Act (ESA) coordination with the U.S. Fish and Wildlife Service (USFWS). Essential Fish Habitat (EFH) and ESA consultation with the National Marine Fisheries Service (NMFS) will need to be updated to align with the 2020 South Atlantic Regional Biological Opinion (SARBO).

Part II. Basic Report.

1. NAME AND LOCATION.

The Beach Erosion Control and Hurricane Protection (BEC & HP) project for Miami-Dade County is the Dade County BEC and HP project, referring to the name of the county at the time of project authorization. Miami-Dade County is located along the southeast coast of Florida and contains the city of Miami. Miami-Dade County lies between Broward County to the north and Monroe County to the south (Figure 1) and the shoreline extends along two barrier island segments separated from the mainland by Biscayne Bay. Bal Harbour is located on the southernmost barrier island in Dade County, and is bounded by Government Cut to the south, and Bakers Haulover Inlet to the north. This barrier island contains the communities of (proceeding from north to south) Bal Harbour, Surfside, and Miami Beach. The Village of Bal Harbour extends along 0.85 mile of the Atlantic shorefront between Range (R) Monument 27 and R-31.5.

2. PUBLIC SPONSOR.

Miami-Dade County Board of County Commissioners
Daniella Levine Cava, Mayor

3. POC FOR PUBLIC SPONSOR.

Alberto Pisani
Department of Regulatory and Economic Resources
Division of Environmental Resources Management
701 NW 1st Court, 5th Floor
Miami, Florida 33136-3912
Alberto.Pisani@miamidade.gov

4. PROJECT AUTHORIZATION.

The Rivers and Harbors Act of 1930 (PL 71-520) authorized the Chief of Engineers to study effective means of preventing erosion of the shores of coastal and lake waters by waves and currents, which would include the Project area. Congress authorized the Beach Erosion Control and Hurricane Protection Project (BEC & HP Project) for Dade County, Florida in Section 203 of the Flood Control Act of 1968 (PL 90-483). Section 69 of the 1974 Water Resources Development Act (PL 93-251) included the authorization for initial construction by non-Federal interests of the 0.85-mile segment along Bal Harbour Village, immediately south of Bakers Haulover Inlet. The Main Segment authorized project, as described in House Document 335/90/2, provided for the construction of a protective and recreational beach and a protective dune for 9.3 miles of shoreline between Government Cut and Bakers Haulover Inlet (encompassing Miami Beach, Surfside, and Bal Harbour), and for the construction of a protective and recreational beach along 1.4 miles of shoreline at Haulover Beach Park.

5. PROJECT CLASSIFICATION.

The primary purpose of the project is to provide storm damage reduction to structural improvements threatened by erosion. The authorized project at Miami Beach has a dune

for beach erosion control and hurricane protection along 9.3 miles and a protective and recreational beach along 3.7 miles. The design berm width is 50 feet at elevation +9.0 feet mean low water (MLW) for the Main Segment consisting of 10.5 miles. This project is not designed for a certain storm frequency or event. While the berm height of +9.0 feet MLW represents the 10-year storm surge elevation, it is specifically designed per EM 1110-2-1101 (Coastal Engineering Manual) which stipulates that the construction berm elevation should be the same or slightly less than the natural berm crest elevation. It is understood that the construction berm will erode, and the beach fill will be redistributed to a more naturally shaped profile. The widths of the design berms are optimized based on economic analysis in accordance with ER 1105-2-100 (Planning Guidance Notebook).

6. DESIGN DATA OF PROJECT.

The authorized project, Figure 1, provides for a protective dune along the ocean shoreline of Miami-Dade County. The Main Segment includes a dune with a 20-foot-wide crown at elevation 11.5 feet MLW and side slopes of 1 vertical on 5 horizontal down to a protective and recreational beach. It includes the following: a level berm 50 feet wide at elevation 9 feet MLW and a natural slope seaward as would be shaped by wave action, all for beach erosion control and hurricane flood protection along the 9.3 miles of shore between Government Cut and Bakers Haulover Inlet; a protective and recreational beach with a 50-foot level berm at elevation 9 feet MLW, and a seaward slope as would be shaped by wave action for beach erosion control along 1.2 miles of shore at Haulover Beach Park. Periodic nourishment of both segments is authorized for 50 years. Work on the Main Segment (as originally authorized) began in July 1975 and was completed in January 1982 at a total contract cost of about \$48 million. Due to the length of the shoreline involved, the project was constructed in several phases, with each phase administered under a separate contract.

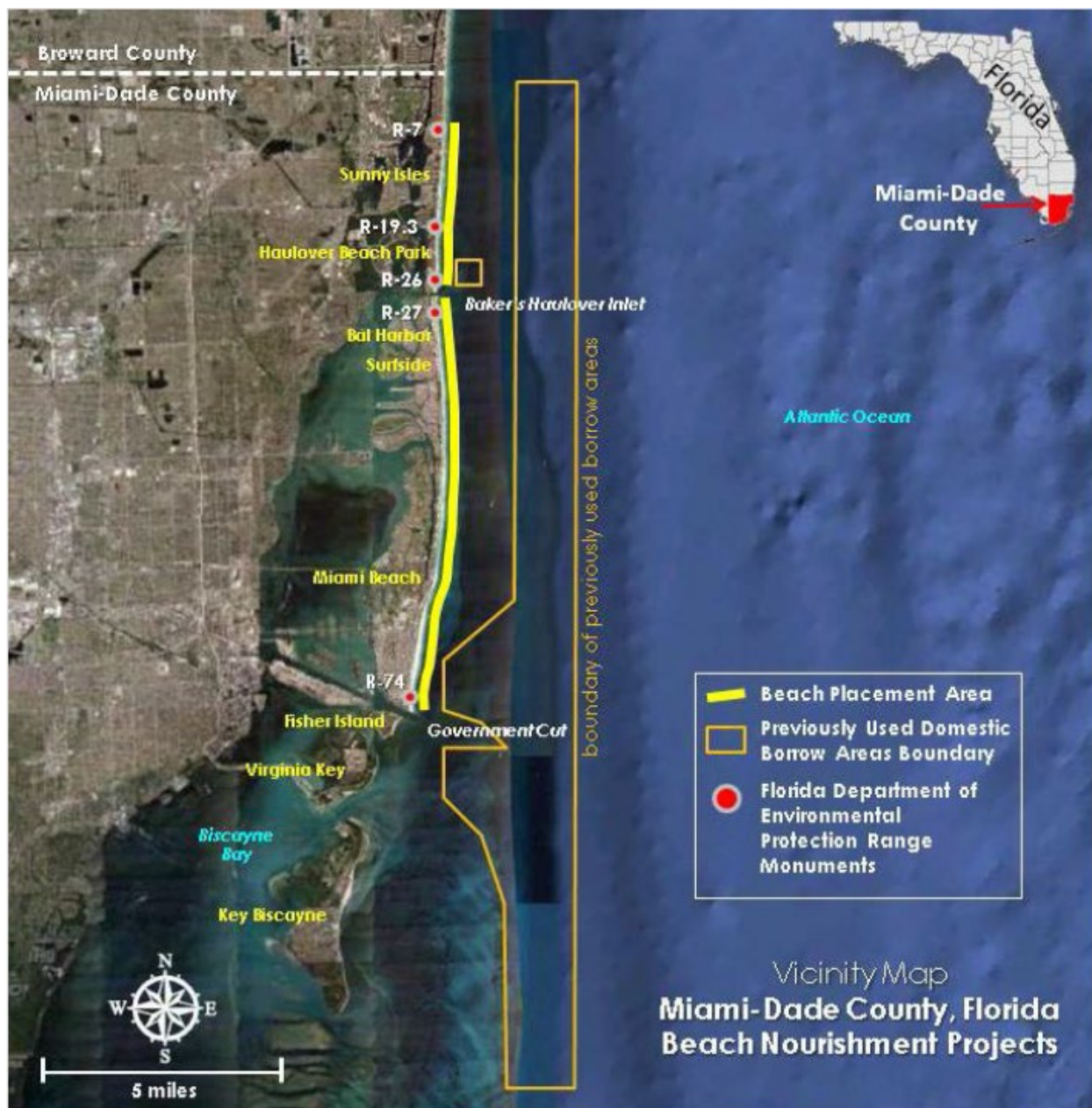


Figure 1. Dade County BEC&HP Project Map

7. MAINTENANCE.

The non-Federal sponsor is responsible for lands, easements, rights-of-way, relocations, and suitable borrow and/or disposal areas required for operation and maintenance of the project. Average annual monitoring costs for the entire Dade County BEC & HP Project are \$50,000. Project inspections include periodic beach profiles, surveys, data collection, and other activities sufficient to document current beach sand volumes. The sponsor has fulfilled all of their non-Federal responsibilities to date in accordance with the project agreements. The sponsor operates and maintains the project in accordance with the Florida Department of Environmental Protection (FDEP) permit. The sponsor performs

required hydrographic and environmental monitoring and compliance activities. This project is active in the Rehabilitation and Inspection Program (RIP).

8. PERIODIC NOURISHMENT.

Initial construction of the Dade County, Florida, BEC & HP Project Main Segment (Bal Harbour) was completed in several phases beginning in 1975.

Several periodic beach renourishments have been performed under the authority of the BEC & HP project, which is 500,000 cubic yards (cy) every ten years for the Main Segment, and several placements of beach-quality material dredged from the adjacent Federal navigation projects have occurred along reaches of the BEC & HP project since completion of initial construction of the project. These maintenance-related construction activities for the Main Segment (Bal Harbor) are detailed in Table 1.

Table 1: Periodic Nourishment for Dade County, Main Segment (Bal Harbour)

<i>Year</i>	<i>Placement Event</i>	<i>Sand Source</i>	<i>Volume (Cubic Yards)</i>
1990	<i>Nourishment of Bal Harbour</i>	<i>Offshore Borrow Areas</i>	225,000
1998	<i>Maintenance disposal – Bal Harbour</i>	<i>Bakers Haulover Inlet & Flood Shoal & AIWW</i>	
2003	<i>Renourishment of Bal Harbour</i>	<i>Bakers Haulover Inlet ebb shoal</i>	188,000
2007	<i>Maintenance disposal – Bal Harbour</i>	<i>Intracoastal Waterway (IWW)</i>	30,000
2009	<i>Renourishment of Bal Harbour</i>	<i>Upland Source (Ortona Mine)</i>	15,000
2010	<i>Renourishment of Bal Harbour</i>	<i>Maintenance dredging of the adjacent IWW</i>	33,080
2014	<i>Renourishment of Bal Harbour (Contract G)</i>	<i>Bakers Haulover Inlet ebb shoal</i>	235,733
2017	<i>Maintenance Disposal of Bal Harbour</i>	<i>AIWW</i>	37,000
2022	<i>Renourishment of Bal Harbour</i>	<i>Dredge AIWW & Flood Shoal / Truck Haul Garcia Sand Mine</i>	144,200/ 32,000

9. PREVIOUS PL 84-99 ASSISTANCE.

A PL 84-99 report was prepared in 2005 following the 2004 hurricane season when four hurricanes impacted the Project area. Storm damages resulted in a loss of 175,000 cy of material from the project (17% of the historic renourishment volume). The report's analyses and evaluation concluded the project ineligible for rehabilitation from impacts.

A PL 84-99 report was prepared in 2016 following Hurricane Matthew; however, the project area did not meet the criteria for “significant damage” pursuant to ER 500-1-1 (Emergency Employment of Army and Other Resources – Civil Emergency Management Program). The report’s analyses and evaluation concluded the project ineligible for rehabilitation from impacts.

10. DISASTER INCIDENT.

Hurricane Nicole was an a highly unusual category 1 hurricane that impacted the Florida peninsula. Around 0800 Universal Coordinated Time (UTC) on 10 November 2022, the category one hurricane made landfall just south of Vero Beach in central Florida. Nicole moved inland and weakened as it crossed the state before exiting into the Gulf of Mexico north of Tampa and making a final landfall in the Florida Big Bend region.

The movement of the storm center described above does not adequately describe the storm impacts. While hurricane force winds were confined to a narrow band near the storm center, tropical storm force winds extended hundreds of kilometers beyond the storm center. This large wind field that both preceded and followed the storm center resulted in days of high winds and elevated water levels and waves on Florida beaches.

As required by ER 500-1-1 Paragraph 5-20(e), USACE has made an “extraordinary storm” determination regarding Nicole’s effects in Miami-Dade County, where this project is located. The determination was based upon an analysis conducted by the U.S. Army Engineer Research and Development Center (ERDC). ERDC has determined that Hurricane Nicole meets the definition of an “extraordinary storm” for southeast Florida:

Southeast Florida (St. Lucie through Miami-Dade Counties): Nicole made landfall near the border of Indian River and St. Lucie Counties as a Category 1 Hurricane. At many of the South Florida water level gauges Nicole produced the highest recorded water levels in the analyzed records. Wave data at the Fort Pierce buoy show that Nicole produced very large wave impacts to the region despite the buoy failing well before peak conditions were experienced. This area did not experience extraordinary impacts from Hurricane Ian, but erosion of area beaches was reported. Nicole alone was likely an extraordinary event for the area, and considering the combined impacts of both storms, Nicole should be considered extraordinary in South Florida.

11. DAMAGE DESCRIPTION

Hurricane Nicole caused sand loss from the dry beach berm of the Dade County BEC & HP project Main Segment (Bal Harbour). Pre- to post-storm surveys indicate a loss of 70,500 cy within the project limits (see Table 2). Table 2 also shows the volume required to fill the authorized design template at 200 cy and the volume required to fill the construction template at 122,500 cy.

Table 2: Summary of volume change of the Bal Harbour shoreline

Project Segment	Volume to Fill Design Template (cy)	Volume to Fill Construction Template (cy)	Pre-Nicole to Post-Nicole Volume Change (cy)
Bal Harbour	200	122,500	-70,500

A post-storm project inspection, conducted on November 17, 2022, observed berm loss across the entire project area, with greater losses along the southern stretch of the project. The storm caused erosion of sand on the south side of the south jetty, which was subsequently repaired by the local sponsor by pushing sand from the adjacent beach up against the jetty. Relict groins, which were buried by the beach renourishment projects, can be seen in the water at R-29 and between R-30 and R-31. There was evidence that storm waves overtopped the berm and pushed sand back into the dune vegetation. The beach at this location is regularly raked to remove trash and dead sea grass, so evidence of erosion is not always easily discerned. However, a recovery berm was observed along the shoreline, indicative of upper profiles losses during the storm and subsequent shoreline recovery. Typical conditions of the post-storm project area beach are shown in Figure 2 - Figure 5. These storm-induced losses, quantified in greater detail below, have significantly lessened the Project's ability to provide the designed coastal storm risk management.



Figure 2: Photo facing north at the north end inlet of the Miami-Dade County Main Segment (Bal Harbour) (R-27) showing moderate sand loss and erosion on 17 November 2022.



Figure 3: Photo facing northeast towards the northern end of the Miami-Dade County Main Segment (Bal Harbour) (R-27) showing the jetty protection that resulted in a comparatively less deflated berm from the rest of the project area 17 November 2022.



Figure 4: Photo facing south of the Miami-Dade County Main Segment (Bal Harbour) (R-29) showing berm deflation but no scarping due to consistent raking of the beach on 17 November 2022.



Figure 5: Photo facing shore perpendicular of the Miami-Dade County Main Segment (Bal Harbour) (R-30) showing flattened dune vegetation from wave overtopping on 17 November 2022.

Damages are assessed volumetrically in terms of how the project changed due to the storm and how the current (post-storm) condition of the project compares to the federally authorized design template and construction template. These damages are characterized by comparison of the pre-Hurricane Ian (June 2022) to the post-Hurricane Nicole (November 2022) surveys, as well as the design template and construction template (see Figure 5) to the post-Hurricane Nicole survey. The pre-storm survey was a monitoring survey conducted in assessment prior to Hurricane Ian.

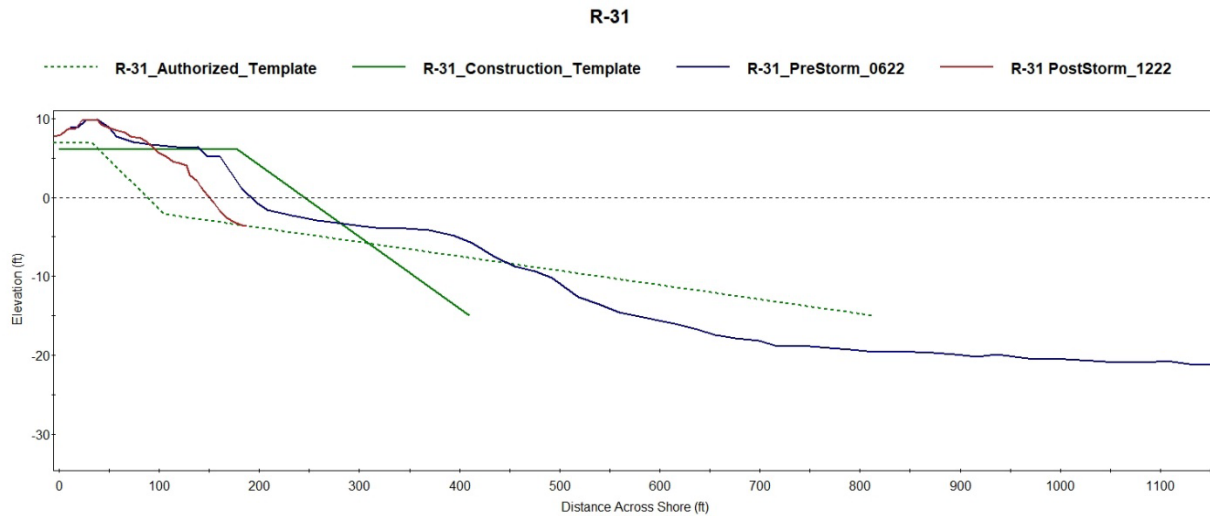


Figure 6: Typical beach profile showing berm erosion ('Distance Across Shore (ft)' is equivalent to distance from R-Monument)

The net measured storm-induced sand loss to the project area is 70,500 cy. Volume loss over this time existed along the project footprint, averaging 11.5 cy/ft, with moderate variability from transect to transect. Filling the authorized template is estimated to require approximately 200 cy (0.03 cy/ft) of sand. Filling the project construction template would require about 122,500 cy (19.9 cy/ft) of sand. These volumes are summarized in Table 3.

Table 3: Summary of volume losses along the Miami-Dade County Main Segment (Bal Harbour)*

Area Description	FDEP R-Mon	Controlling Distance (ft)	Authorized Template to Post-Storm		Construction Template to Post-Storm		Pre-Storm to Post-Storm	
			Unit Volume Change (cy/lf)	Volume Change (cy)	Unit Volume Change (cy/lf)	Volume Change (cy)	Unit Volume Change (cy/lf)	Volume Change (cy)
	R-28		-0.1		-29.6		-16.6	
		3,135		-100		-85,200		-45,800
	R-31		0.0		-24.8		-12.7	
		3,015		-100		-37,300		-24,700
	R-34		-0.1		n/a		-3.7	
	Total Length (ft)	6,150						
Volume Fed Fill Area (R-28 to R-34)			-0.03	-200	-19.9	-122,500	-11.5	-70,500

* Totals shown in Table 3 are rounded to the nearest hundred for distance and thousand for volume

12. NEED FOR PL 84-99 REHABILITATION.

Hurricane Nicole was an extraordinary storm event per ER 500-1-1, 5-20.f as described in Section 10.

Hurricane Nicole eroded an estimated 70,500 cy from the project area when analyzing the pre-storm (June 2022) to post-storm conditions (November 2022). Following the storm, an estimated 200 cy is needed to rebuild the project's authorized design template and an estimated 122,500 cy is needed to rebuild the full construction template.

One of the applicable criteria described in ER 500-1-1, 5-20.e.(2) for determining if significant damage has occurred has been met.

- (a) The cost of the construction effort to effect repair of the project (based on pre- to post-storm losses) exclusive of dredge mobilization/demobilization costs exceeds \$1 million (\$5,977,000) and is greater than 2 percent (22.40%) of the original project construction costs expressed in current day dollars (\$608,800).

The remaining two criteria for determining if significant damage has occurred have not been met.

- (b) The cost of the construction effort to effect repair of the project (based on pre- to post-storm losses) exclusive of dredge mobilization/demobilization costs (\$5,977,000) does not exceed \$6 million.
- (c) Less than one-third of the planned or historically placed sand for renourishment was lost. The planned nourishment volume for future nourishments is 275,000 cy. Approximately 70,500 cy was lost from pre- to post-storm, which is approximately 25.64% of the planned periodic nourishment volume.

ER 500-1-1, 5-20.d. states that "The need for funding under PL 84-99 will be based on an assessment of the risk to life and property, and the need for immediate action." It is recommended to undertake the proposed rehabilitation effort under the authority of PL 84-99 to minimize potential damages to the structures and infrastructure in the project area. The next hurricane season begins on June 1, 2023; however, nor'easters could occur throughout the year and are most frequent in the fall and winter.

13. PROPOSED WORK.

The Disaster Relief Supplemental Appropriations Act of 2023 (PL 117-328) (DRSAA 2023) states that, "funding provided under this heading in this Act and utilized for authorized shore protection projects shall restore such projects to the full project profile at full Federal expense." Although implementation guidance for DRSAA 2023 interpreting this provision has yet to be issued, this language mirrors that of the Disaster Relief Supplemental Appropriations Act of 2022 (PL 117-43). The Assistant Secretary of the Army for Civil Works (ASA(CW)) memo, Subject: Policy Guidance on Implementation of Disaster Relief Supplemental Appropriations Act, 2022 (PL 117-43), dated April 25, 2022 clarifies that, "Full project profile is defined as the authorized beach profile of the project in a fully renourished state." Accordingly, in anticipation that the DRSAA 2023

implementation guidance will substantially define “full project profile” in the same manner, the proposed work will include nourishment of the full construction template.

The beach nourishment work will take place within the previously constructed project footprint (R-27 to R-31.5), and the sand source will be a previously authorized upland sand mine. Approximately 122,500 cubic yards will be needed to restore the full construction template. The contract quantity of sand required to fill the full construction template may differ from that estimated here due to beach changes between the post-storm survey and construction as well as for the purposes of constructability (e.g. template elevation tolerance). The specific details of the design will be developed during Pre-Construction Engineering and Design (PED).

14. COST ESTIMATE.

Costs to restore the pre- to post-storm losses were estimated to determine if significant damage criteria had been met as discussed in Section 12. Costs to rebuild the full construction template were estimated to reflect the cost for the proposed rehabilitation described in Section 13.

The amount of sand needed to restore the pre- to post-storm losses is estimated at 70,500 cy. The total estimated cost to restore the pre- to post-storm losses is \$6,993,500. This estimate includes mobilization, demobilization, and preparatory costs; template construction and incidental costs (i.e., monitoring, beach tilling, surveys, etc.); contingency; planning, engineering, and design; and supervision and administration (S&A) in accordance with Engineer Pamphlet (EP) 500-1-1.

The total cost, including mobilization and other associated costs, to rebuild the full construction template with approximately 122,500 cy is estimated at \$11,134,300. The estimated costs presented in this report (Table 4) are at the Fiscal Year 2023 (FY23) price level (October 1, 2022 – September 30, 2023). These costs were generated from the volumetric quantities required for each of the options mentioned above.

Table 4. Cost Allocation for Rehabilitation to Full Construction Template^(1,2,3)

		Dade County BEC & HP PIR Cost Summary	
WBS Code	Project Feature	Restore Pre-Post Storm Losses	Restore to Full Construction Template
17	Mobilization and Demobilization	\$608,800	\$608,800
17	Beach Replenishment	\$4,843,100	\$8,324,900
17	Associated General Items	\$766,600	\$1,009,200
01	Real Estate	\$50,000	\$50,000
30	Engineering and Design	\$357,500	\$570,700
31	Construction Management	\$357,500	\$570,700
Total Cost		\$6,993,500	\$11,134,300

1. All cost estimates are at FY23 Price Levels.
2. Code 17 costs above contain contingencies per EP 500-1-1: "FCCE-funded portions of dredge mobilization/demobilization costs and sand renourishment (dredging) costs are limited to" 15%.
3. Code 31 costs above are S&A costs included in accordance with EP 500-1-1. Currently using rate based on last certified cost, which is being calculated as 7.5% of construction costs (including contingencies).

15. ECONOMICS.

Economic justification has been determined by analyzing the remaining costs and benefits for the remaining period of Federal participation with the inclusion of the proposed emergency work. The proposed emergency work would begin in FY23, and there are no more scheduled periodic nourishments for the remaining period of Federal participation. Benefits from the last approved report (1975 GDM, FY 1974 Price Levels) have been used. Costs have been deflated back to the approved benefit price levels by applying the Civil Works Construction Cost Index System (CWCCIS) yearly cost index published September 30, 2022. Recreation benefits are not used for justification of the emergency work.

With the proposed emergency work, the project would have remaining average annual benefits of \$1,613,000 (not including incidental recreation benefits of \$16,349,000) and remaining average annual costs of \$837,000 using the current discount rate of 2.5%. The proposed emergency work is economically justified with the project having a remaining benefit to remaining cost ratio of 2.0 and remaining average annual net benefits of \$838,000 using the current discount rate of 2.5%. Additional details on the economic justification analysis can be found in Appendix L.

16. ENVIRONMENTAL CONSIDERATIONS.

(a) National Environmental Policy Act (NEPA)

An Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) were completed in 2020 to evaluate the use of additional sand sources for renourishment of Bal Harbour Beach, Miami-Dade County, Florida, under the Dade County Beach Erosion Control and Hurricane Protection Project (BECHPP). Placement of beach quality material between Florida Department of Environmental Protection (FDEP) coastal range monuments R-27 and R-31.5 is not expected to result in significantly different environmental effects than those previously analyzed as the proposed action is consistent with prior NEPA evaluations. Based on this, no supplemental NEPA analysis is required, and the proposed project complies with NEPA and the Corps' Engineering Regulation (ER) 200-2-2 for implementing NEPA on Civil Works actions and Department of the Interior (DOI) regulations implementing NEPA (43 CFR 46).

Additional environmental documentation related to this work includes:

- Final Environmental Impact Statement, Beach Erosion Control and Hurricane Surge Protection Project, Dade County, Florida. U.S. Army Corps of Engineers, Jacksonville District, April 1975.
- Final Environmental Assessment, Second Periodic Nourishment, Sunny Isles and Miami Beach Segments, Beach Erosion Control and Hurricane Protection Project, Dade County, Florida. U.S. Army Corps of Engineers, Jacksonville District, May 1995.
- Coast of Florida Erosion and Storm Effects Study, Region III, Feasibility Report with Final Environmental Impact Statement. U.S. Army Corps of Engineers, Jacksonville District, October 1996.
- Final Environmental Assessment, Beach Erosion Control and Hurricane Protection Project Dade County, Florida, Second Periodic Nourishment, Surfside and South Miami Beach Segments. U.S. Army Corps of Engineers, Jacksonville District, April 1997.
- Final Environmental Impact Statement, Beach Erosion Control and Hurricane Protection Project Dade County, Florida, Modifications at Sunny Isles, July 1998.
- Final Environmental Assessment, Renourishment at Miami Beach in the Vicinity of 63rd Street, Beach Erosion Control and Hurricane Protection Project, Dade County, Florida, November 2000.
- Beach Erosion Control and Hurricane Protection Project, Dade County, Florida. Proposed Test Fill from a Domestic Upland Sand Source. Environmental Assessment. U.S. Army Corps of Engineers, Jacksonville District, August 2002.
- Proposed Modifications to 5 Groins Between Beach Monuments R-27 and R-31.5 Bal Harbour Beach Erosion Control Project Bal Harbour, Dade County Florida. Environmental Assessment. U.S. Army Corps of Engineers, Jacksonville District, 2005.
- Beach Erosion Control and Hurricane Protection Project. Dade County, Florida. Contract E – Beach Renourishment Project. Final Environmental Assessment. U.S. Army Corps of Engineers, Jacksonville District. February 2011.

- Final Supplemental Environmental Impact Statement. Martin County Hurricane and Storm Damage Reduction Project. Hutchinson Island, Martin County, Florida. U.S. Army Corps of Engineers, Jacksonville District and Bureau of Ocean Energy Management (BOEM). August 2011. [http://www.boem.gov/uploadedFiles/Combined%20BOEM%20ROD%20and%20USACE %20SEIS.pdf](http://www.boem.gov/uploadedFiles/Combined%20BOEM%20ROD%20and%20USACE%20SEIS.pdf)
- Final Environmental Assessment. Continued Operations and Maintenance Dredging Placement of Dredged Material on Dade County Beach Erosion Control Project. Intracoastal Waterway, Cut DA-9 at Bakers Haulover Inlet. Miami-Dade County, Florida. U.S. Army Corps of Engineers, Jacksonville District, August 2017.

(b) Impacts, Beach Nourishment

i. **Hardbottom**

Based on many years of renourishment events in Miami-Dade County and other Florida beaches, impacts to hardbottom and reefs can be predicted for the area. Utilization of an upland sand mine and truck haul of the beach placement material eliminates potential impacts to hardbottoms that would otherwise occur with pipeline placement, nearshore placement, or dredging activities. Elkhorn and Staghorn corals (Acroporid) were listed as “threatened” under the Endangered Species Act (ESA) in May 2006, and in 2008 the National Marine Fisheries Service (NMFS) published the final rule for designated critical habitat of these coral species.

Surveys in October 2019 conducted by Miami-Dade County found hardbottom habitat in only 9 of 159 sites assessed. 7 of the 9 sites occurred Southwest of the Intracoastal Waterway. The project is not expected to have any measurable impact to these identified reef and nearshore areas. The 2020 South Atlantic Regional Biological Opinion (SARBO) requires hardbottom surveys to be completed within 2 years of a project beginning, therefore, updated surveys will likely be required for the proposed renourishment event. The need for and extent of these surveys will be coordinated with NMFS prior to construction.

ii. **Vegetation**

A dune system in Miami-Dade County between Government Cut and Bakers Haulover Inlet is largely artificial and was built as a component of the Dade County BEC & HP Project. The dominant plant species in the dune communities include sea grapes (*Coccoloba uvifera*); the beach morning glory (*Ipomoea pescaprea*); beach bean (*Canavalia rosea*); sea oats (*Uniola paniculate*); dune panic grass (*Panicum amarulum*); bay bean (*Canavalia maritima*); the beachberry or inkberry (*Scaevola plumieri*); sea lavender (*Malotonia gnaphalodes*); spider lily (*Hymenocallis latifolia*); beach star (*Remirea maritima*); and coconut palm (*Coco nucifera*). There may be temporary effects to dune vegetation during placement activities, but no permanent effects are expected.

iii. Threatened and Endangered Species

Threatened and endangered species that may occur within the Project area include Hawksbill, Kemp's Ridley, Green, Leatherback, and Loggerhead Sea turtles, Rufa Red Knot, and Piping Plover. There has been no newly designated Critical Habitat or other triggers that would warrant additional analysis to be done under NEPA. Plans and specifications for this project will include the appropriate protection and/or minimization requirements for these listed species.

Nesting sea turtles are closely monitored along Miami-Dade County's public beaches, and detected nests are relocated as necessary to avoid impacts to the hatchlings, eggs, and nesting mothers. Lack of regular renourishment on these beaches would result in loss of suitable nesting habitat in this portion of South Florida. The minor adverse impacts of beach nourishment are anticipated; however, long-term benefits to sea turtles are expected. Due to the highly urbanized nature of the beaches in Miami-Dade County, there are fewer nesting sea turtles than in counties north of this area.

In this area of Florida, five species of sea turtles occur within the surrounding waters: loggerhead (*Caretta caretta*), green (*Chelonia mydas*), Kemp's ridley (*Lepidochelys kempii*), leatherback (*Dermochelys coriacea*) and hawksbill (*Eretmochelys imbricata*). Of these, the loggerhead is listed under the ESA as threatened, while the others are listed as "endangered". Only three of these species are documented to have been nesting on the beaches of Miami-Dade County: loggerhead, green, and leatherback. The loggerhead turtles establish the most nests in this area, with fewer green and leatherback nests recorded. Kemp's ridley and hawksbill turtles are infrequent nesters along the east coast of Florida and haven't been documented as nesting on County beaches.

The Least Tern (*Sterna antillarum*) is protected under Florida state and federal laws and are listed as "threatened". Terns nest on beaches and gravel rooftops where nearby waters provide foraging area for small fish. These birds typically return to the same nesting site each year unless the colony has consistently failed to fledge young. Nesting begins in May and young are fledged through August or early September, with migration away from South Florida beginning in August through September. Though ground colonies are known to occur in Miami-Dade County, few have been documented since the late 1990s.

Beach placement has the potential to impact nesting sea turtles and shorebirds due to burial and/or changes in sand composition. Any applicable requirements under the SPBO, P3BO, and South Atlantic Regional Biological Opinion (SARBO) will be implemented during the project construction as consistent with USFWS and National Marine Fisheries Service (NMFS) coordination, such as monitoring and relocation of sea turtle nests between 1-March and 25-September.

(c) Environmental Coordination

USACE coordinated with the State of Florida in compliance with the Coastal Zone Management Act (CZMA) via Federal Consistency Determination (FCD). Concurrence with the USACE determination that the project is consistent with the enforceable policies of the CZMA was received in June 2020.

While USACE previously coordinated with the USFWS for beach renourishment activities as part of the EA process for the BECHPP, further consultation in regard to the Coastal Barrier Resources Act (CBRA) is not needed as the only federal restriction in Otherwise Protected Areas (OPAs) such as FL-21P is for federal flood insurance. The proposed project complies with this act.

The Section 404(b)(1) Clean Water Act guidelines evaluation was completed as part of the EA process for the BECHPP. Additional coordination may be required to obtain the required authorizations and/or concurrences for the proposed project.

EFH consultation with the NMFS was completed in August 2020 and the proposed project is in compliance with the Magnuson-Stevens Fishery Conservation and Management Act.

Endangered Species Act (ESA) consultations with the USFWS and NMFS were completed in the EA process in 2020, and the proposed project is not expected to have significantly different effects than those evaluated previously. The proposed project is in compliance with this act through the programmatic agreements with NMFS and USFWS, the SPBO, P3BO, and 2020 SARBO.

(e) Archeological and Cultural Resources

The area of potential effects (APE) for this project includes the shoreline between R-27 and R-31.5 and the sand sources. The proposed sand sources for the project will be in-water sources supplemented by an upland source from which material will be truck hauled to the project location. In-water sand sources include sand from the Bal Harbour Inlet (BHI) flood and ebb shoals, and sand from maintenance dredging of the Intracoastal Waterway and the BHI Channel in the vicinity of Bal Harbour Beach. Upland borrow sites may include Ortona (Glades County), Witherspoon (Glades County), Cemex (Polk County) and Garcia (Henry County) sand mines. All of these sources are potential options for the Project.

Based on archival research of the Florida Master Site File (FMSF), no prehistoric archaeological sites or historic resources are recorded within the beach placement area. Beach placement of sand will have a beneficial effect to historic properties by preventing future erosion.

In 1997 Tidewater Atlantic Research (TAR), Inc. conducted a submerged cultural resource survey, identifying eight magnetic anomalies in a survey of the area between Bakers Haulover Inlet and the Intracoastal Waterway (Division of Historic Resources [DHR] Survey #4838). The USACE determined all targets to be modern and ineligible for inclusion in the National Register of Historic Places (NRHP). In a letter dated 17 March

1997 (DHR No. 9706311), the Florida State Historic Preservation Office (SHPO) concurred with this determination. In addition, according to the 2017 EA entitled: Continued Operations and Maintenance Dredging Placement of Dredged Material on Dade County Beach Erosion Control Project, the federal channel in the vicinity of Bal Harbour has been dredged and maintained at least five times since 1997. The most recent determination of no adverse effects and consultation by the USACE regarding the Dade County BEC & HP project Bal Harbour Segment was in 2017 (DHR Project File No.: 2017-3251-B). The SHPO concurred that the continued Operations and Maintenance dredging of IWW DA-9 with placement on the beach will have no effect on historic properties eligible for inclusion in the NRHP.

The commercial upland sand sources identified for the Bal Harbour Segment of the BEC & HP project include the Ortona Sand Mine and the Witherspoon Sand Mine. Over the years, a number of cultural resource surveys have been conducted for the Ortona Sand Mine (DHR Survey Nos. 6689, 4847, 3021, 17005, and 16862). Several prehistoric archaeological sites associated with the Ortona Mound complex have been identified and recorded within the mine property including Ortona Canal East (8GL4a), Quarry Mound (8GL81), Lance's Mound (8GL419), Sawpalmetto Haven Mound (8GL420), and Tallant Mound (8GL00083). FMSF records indicate that the Ortona Canal East (8GL4a) and Quarry Mound (8GL81) have been mitigated. Cultural resources investigations for the adjacent Witherspoon sand mine have been completed (DHR Survey No. 4602). Two archaeological sites (8GL378 and 8GL379) were identified as eligible for inclusion in the NRHP. These sites will not be impacted by the sand mining activities. Any upland sand mines (including CEMEX and Garcia Land Mines) employed for this project are subject to the requirement of proving compliance with the State of Florida's statutory requirements in Chapter 267 for protection of historical resources in the sand source footprints before the USACE will approve utilizing the source.

Based on this information, the USACE has determined that the in-water sourcing of sand from the BHI flood and ebb shoals, and sand from maintenance dredging of the IWW and the BHI Channel in the vicinity of Bal Harbour Beach poses no effect to historic properties. In addition, the USACE has determined that truck haul of sand from upland commercial sand mines and placement of materials on the beach between R-27 to R-31.5 poses no adverse effect to historic properties. The Florida SHPO concurred with the Corp's determination of effects in a letter dated July 30, 2020 (DHR Project File No.: 2020-2209-B).

i. Emergency Procedures

The implementing regulations of the NHPA include provisions during emergency procedures (36 CFR 800.12). These regulations apply when the President, a tribal government, or the Governor of a State declares a disaster or emergency, or if an immediate threat to life or property is identified. This only applies within the first 30 days after the formal declaration of the appropriate authority and may require additional consultation. The storm event in question occurred greater than 30 days prior to the date of this PIR, therefore provisions for emergency procedures under 36 CFR 800.12 do not apply.

ii. Inadvertent Discoveries

All project specifications include a clause for unanticipated discoveries, consistent with 36 CFR 800.13.

17. PERMITS.

The FDEP Joint Coastal Permit for the Main Segment (Bal Harbor) of the Dade County BEC & HP project (Bal Harbor Nourishment; Permit No. 0307741-005-JM; expires 11 July 2028) constitutes water quality certification pursuant to Section 401 of the Clean Water Act and the State's final consistency concurrence pursuant to the Coastal Zone Management Act. This permit has been issued to the Sponsor and USACE as co-permittees.

18. REAL ESTATE

The following section describes the project sponsor's previous certification of lands for the Miami-Dade County, Florida, Bal Harbour Segment to USACE.

The lands required for the Miami-Dade County, Florida, Bal Harbour Segment are located between the FDEP survey monuments of R-27 to approximately 350 feet south of R-31.

Lands seaward of the established Erosion Control Line (ECL) require a State of Florida letter of consent. USACE and Miami-Dade, as co-permittees, acquired the consent over sovereign submerged lands from the State of Florida for lands between FDEP monuments R-27 to approximately 350 feet south of R-31 on 8 December 2020, under Permit No. 0307741-002-JC. This permit expires on 11 July 2028.

The authorized construction provided a dune 20 feet wide at +11.5-ft above mean low water (MLW) and a level berm 50 feet wide at elevation +9 feet MLW. This land is located seaward of the ECL.

Miami-Dade County provided three separate certifications, dated 12 March 2021, certifying Haulover Park staging and access areas, a temporary easement over the Haulover Park flood shoal borrow area as well as the consent contained within Permit No.

0307741-002-JC. Staging and access will require new land certification once project is approved in this report.

19. IMPLEMENTATION SCHEDULE.

The anticipated schedule for activities needed to complete the proposed emergency work is as follows.

- Pre-construction Engineering and Design (PED) activities would begin in April 2023 (or as soon as PED funds are provided) and be completed by June 2023.
- A contract would be awarded, and construction would begin in July 2023.
- Construction would be completed by January 2024.

20. RECOMMENDATIONS.

Based on study findings, Hurricane Nicole impacts on the project area between November 10, 2022 and November 11, 2022 meet the applicable criteria described in ER 500-1-1 for extraordinary storm event, significant amounts of damage, and the need for immediate nourishment. The proposed emergency work to restore the full construction template at full federal expense is economically justified with the project having a remaining benefit to remaining cost ratio of 2.00. I recommend that emergency rehabilitation of the Dade County, Beach Erosion Control and Hurricane Protection Project, Main Segment (Bal Harbor), as described herein, be performed under the authority of PL 84-99.

List of Acronyms

ASA(CW) – Assistant Secretary of the Army for Civil Works
BCR – Benefit-to-Cost Ratio
BEC & HP – Beach Erosion Control and Hurricane Protection
CA – Cooperation Agreement
CBRA – Coastal Barrier Resource Act
CG – Construction General
CWCCIS – Civil Works Construction Cost Index System
CWWBS – Civil Works Work Breakdown Structure
CY – cubic yards
EA – Environmental Assessment
ECL – Erosion Control Line
EIS – Environmental Impact Statement
EM – Engineering Manual
ERDC – Engineering Research and Development Center
ESA – Endangered Species Act
FCCE – Flood Control and Coastal Emergency
FDEP – Florida Department of Environmental Protection
FONSI – Finding of No Significant Impact
FY – Fiscal year
MCACES/MII – Micro-Computer Aided Cost Estimating System/ Second Generation
MLW – Mean Low Water
NEPA – National Environmental Policy Act
NMFS – National Marine Fisheries Service
NOS – National Ocean Service
PCA – Project Cooperation Agreement
PED – Preconstruction, Engineering and Design
PL 84-99 – Public Law 84-99
R – Range Monument
RBO – Regional Biological Opinion
RIP – Rehabilitation and Inspection Program
S&A – Supervision and administration
SEI – Storm Erosion Index
SHPO – State Historic Preservation Office
SPBO – Statewide Programmatic Biological Opinion
SPP – Shore Protection Project
USACE – U.S. Army Corps of Engineers
USFWS – U.S. Fish and Wildlife Service
UTC – Coordinated Universal Time

Part III. Appendices

Appendix A. Public sponsor's request for assistance



Department of Regulatory and Economic Resources
Environmental Resources Management
701 NW 1st Court, 5th Floor
Miami, Florida 33136-3912
T 305-372-6529 F 305-372-6425
miamidade.gov

December 2, 2022

U.S. Army Corps of Engineers, Jacksonville District
ATTN: CESAJ-PPMD
701 San Marco Blvd.
Jacksonville, FL 32207

Subject: Request to the U.S. Army Corps of Engineers (USACE) to Seek Rehabilitation for the Miami-Dade Shore Protection Project Due to Hurricane Nicole November 2022

Dear Colonel Booth,

The Miami-Dade County Shore Protection Project has received damage from Hurricane Nicole from R-27 to R-32 (Bal Harbour Segment). We respectfully request that the USACE evaluate and repair the damage to this project. Attached are photos that represent the pre and post-storm condition for the project area. We can provide pre-and post-storm field evaluation data as needed on request.

The point of contact for this request is:

Alberto Pisani, P.E., ENV SP
Sr. Professional Engineer
(786) 493-1439
Alberto.Pisani@miamidade.gov

Thank you for your assistance in this matter.

Sincerely,

A blue ink signature of Rashid Z. Istambouli.

Rashid Z. Istambouli, P.E., Interim Director
Division of Environmental Resources Management

Appendix B. Project map(s)

See Figure 1 in Section 1 of the main report.

Appendix C. Project Overview

See Section 1-8 in the main report.

Appendix D. Project Design Data

See Section 6 in the main report.

Appendix E. Project Maintenance Data

See Section 7 in the main report.

Appendix F. Project Renourishment Data

See Section 8 of the main report.

Appendix G. Previous PL 84-99 or Other Federal Agency Assistance

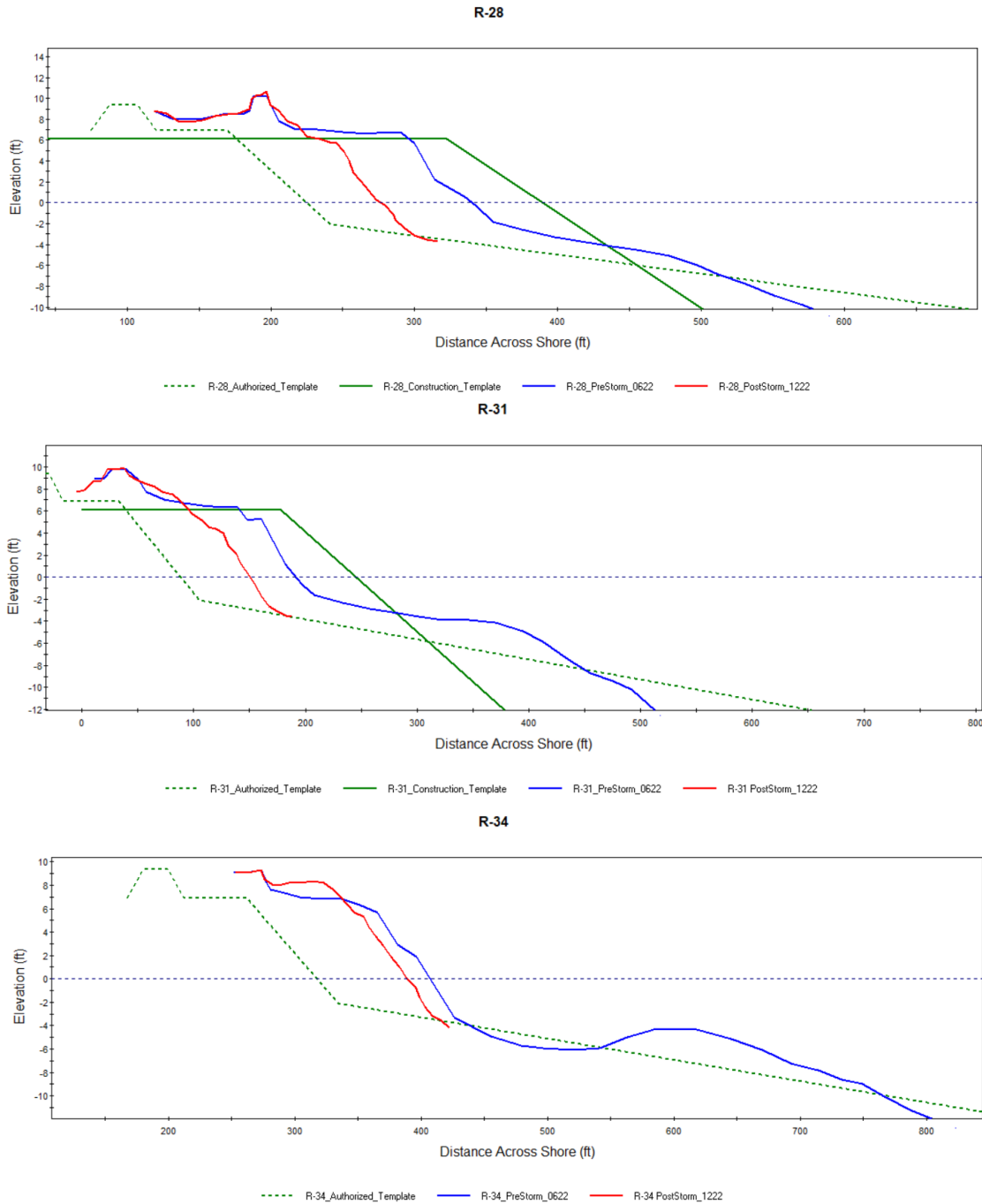
See Section 9 in the main report.

Appendix H. Disaster Incident

Staff at the USACE Engineering Research and Development Center (ERDC) conducted an analysis to determine the regions where Hurricane Nicole was an extraordinary event. This analysis concluded that Hurricane Nicole was an extraordinary event for southeast Florida (St. Lucie through Miami-Dade Counties) where this project area is located. This determination was based largely on the combined duration and magnitude of the wave impacts in southeast Florida. The complete analysis is described in USACE ERDC “Extraordinary Storm Analysis – Hurricane Nicole.”

Appendix I. Damage Description

*'Distance Across Shore (ft)' is equivalent to distance from R-Monument



Appendix J. Proposed Work

See Section 13 of the main report.

Appendix K. Cost Estimate Data

K.1 GENERAL INFORMATION

US Army Corps of Engineers' cost estimates for planning purposes are prepared in accordance with the following guidance:

- Engineer Technical Letter (ETL) 1110-2-573, Construction Cost Estimating Guide for Civil Works, 30 September 2008
- Engineer Regulation (ER) 1110-1-1300, Cost Engineering Policy and General Requirements, 26 March 1993
- ER 1110-2-1302, Civil Works Cost Engineering, 30 June 2016
- ER 1110-2-1150, Engineering and Design for Civil Works Projects, 31 August 1999
- Engineer Manual (EM) 1110-2-1304 (Tables Revised 30 September 2022), Civil Works Construction Cost Index System, 31 March 2017
- EP 500-1-1 Emergency Employment of Army and Other Resources, Civil Emergency Management Program – Procedures, 30 September 2001
- Implementation Guidance WRRDA 2014 Section 3029a, 30 May 2017
- Public Law 84-99, Section 5 Flood Control Act of 1941 (PL 84-99)

The cost estimates for the rehabilitation of the BEC & HP project at the Bal Harbour segment of Dade County are based on truck hauling material from an upland sand source and placing that material on areas damaged by the recent storm event. This material will be placed as beach fill and then shaped into a protective berm for protection against storm damage.

These estimates have undergone a Discipline Quality Check and Review in accordance with 02611-SAJ, 02612-SAJ, 02613-SAJ, and 02614-SAJ and have been prepared in accordance with ER 1110-2-1302, ER 500-1-1, and EP 500-1-1. These estimates reference the last certified cost. A Cost ATR review was performed by the Cost MCX as part of the study process with a certification for the Budget Submission products received in March 2020.

K.1.1 Rehabilitation Plan

The rehabilitation of a shore protection project within the requirements of PL 84-99 requires the calculation of two separate cost estimates. The first cost estimate for consideration is the cost to restore the project from the post storm condition back to the design template. This estimate includes all labor, equipment, and material to return the protective features to the full design template. The second estimate for consideration is to restore the project from the post storm condition to the Full Construction Template.

The Micro-Computer Aided Cost Estimating System/ Second Generation (MCACES/MII) cost estimates are based on the scopes and are formatted in

the Civil Works Work Breakdown Structure (CWWBS). These include pricing at the Fiscal Year 2022 price level (1 October 2021 - 30 September 2022).

The construction costs fall under the following feature code:

- 17 Beach Replenishment

The non-construction costs fall under the following feature codes:

- 01 Real Estate
- 30 Engineering and Design
- 31 Construction Management

K.1.2 Construction Cost

Construction costs were developed in MCACES/MII and include all major project components categorized under the appropriate CWWBS to the sub-feature level. The construction costs for dredging operations were developed using the Cost Engineering Dredge Estimating Program (CEDEP) and then transferred into the MCACES/MII estimates. Total Project Costs on each plan contain contingencies that were in accordance with the requirements of EP 500-1-1, which set a maximum contingency for dredging projects at 15%.

K.1.3 Non-Construction Cost

Non-construction costs typically include Lands and Damages (Real Estate), Engineering & Design (E&D) and Construction Management Costs (Supervision & Administration, S&A). These costs were previously provided by the Project Manager and appropriate PDT members as a lump sum cost and have been reviewed for this PIR effort. The lump sum amounts for 30 account E&D and 31 account S&A are estimated at the maximum of 6% of the construction contract costs as specified in ER 500-1-1 Section 5. Lands and Damages cover the real estate administration costs necessary for verifying easements prior to award of the construction contract. This allows the contractor to access the beach and use as an equipment laydown area. Engineering and Design (E&D) costs accounts for preparation of contract plans and specifications (P&S). Construction Management (S&A) costs are for the supervision and administration of the contract required to perform the various aspects of construction required for this project and includes Project Management, Construction Quality Assurance and Contract Administration costs.

K.2 PIR COST ESTIMATES

Cost estimates were generated based on quantities reflecting pre- to post-storm losses and the full construction template. These quantities were used to derive cost estimates that reflect as best as possible the conditions expected in each of these scenarios. The pre- to post-storm cost estimates were used to determine if significant damage had

occurred per ER 500-1-1, 5-20.e.(2)(a) and (b). The full template cost estimates were used for the proposed work and economic justification calculations.

K.2.1. FCCE Cost Estimate

Material will be truck hauled from an upland sand source and placed in areas damaged by the recent storm event. This is the quantity required to return the project to the design template for the protective berm. The cost includes mobilization/demobilization of the dredge plant and associated equipment, dredging of material, placement on the beach, environmental monitoring, beach tilling, vibration monitoring, surveys, etc. Additionally, non-construction costs include construction management costs. The MII estimate for restoring the pre-to post-storm losses is summarized in the following table.

<u>WBS Code</u>	<u>Project Feature</u>	<u>Post Storm to Design Cost Estimate</u>
17	Mobilization and Demobilization	\$608,800
17	Beach Replenishment	\$4,843,100
17	Associated General Items	\$776,600
01	Real Estate	\$50,000
30	Engineering and Design	\$357,500
31	Construction Management	\$357,500
Total Cost		\$6,993,500

1. All cost estimates are at FY22 Price Levels.
2. Code 17 costs above contain contingencies per EP 500-1-1: "FCCE-funded portions of dredge mobilization/demobilization costs and sand renourishment (dredging) costs are limited to" 15%.
3. Code 01 cost for lands was a flat rate
4. Code 30 cost above are EDC costs included in accordance with EP 500-1-1. Currently using rate based on last certified cost, which is being calculated as 6.0% of construction costs (including contingencies).
5. Code 31 costs above are S&A costs included in accordance with EP 500-1-1. Currently using rate based on last certified cost, which is being calculated as 6.0% of construction costs (including contingencies).

K.2.2. Full Construction Template Cost Estimate

Borrow material will be taken from a borrow area approximately 8.2 miles offshore. This is the quantity required to return the project to the full construction template for the protective berm. The cost includes mobilization/demobilization of the dredge

plant and associated equipment, dredging of material, placement on the beach, environmental monitoring, beach tilling, vibration monitoring, surveys, etc. Additionally, non-construction costs include Real Estate, Engineering and Design and construction management costs. The MII estimate for restoring the full construction template is summarized in the following table.

<u>WBS Code</u>	<u>Project Feature</u>	<u>Restore to Full Construction Cost Estimate</u>
17	Mobilization and Demobilization	\$608,800
17	Beach Replenishment	\$8,324,900
17	Associated General Items	\$1,009,200
01	Real Estate	\$50,000
30	Engineering and Design	\$570,700
31	Construction Management	\$570,700
Total Cost		\$11,134,300

1. All cost estimates are at FY22 Price Levels.
2. Code 17 costs above contain contingencies per EP 500-1-1: "FCCE-funded portions of dredge mobilization/demobilization costs and sand renourishment (dredging) costs are limited to" 15%.
3. Code 01 cost for lands was a flat rate
4. Code 30 cost above are EDC costs included in accordance with EP 500-1-1. Currently using rate based on last certified cost, which is being calculated as 6.0% of construction costs (including contingencies).
5. Code 31 costs above are S&A costs included in accordance with EP 500-1-1. Currently using rate based on last certified cost, which is being calculated as 6.0% of construction costs (including contingencies).

Appendix L. BCR Data

Benefit Summary Table

Summary of Last Approved Report	
1975 GDM (Price Level 1974)	1Q74
Average Annual Storm Damage Reduction Benefits	\$ 1,675,000
Average Annual Recreation Benefits	\$ 16,349,000
Average Annual Total Project Benefits	\$18,024,000

Remaining Period of Federal Participation (Period of Analysis)

Initial Construction		1975
Yrs of Federal Participation:		50
Last Year of Fed Participation:		2024
FCCE+Full Construction Completion Year		2023
Remaining Yrs of Fed Participation :		2

Present Value Worksheet

Present Value Worksheet					
Current Discount Rate:	FY23				
Rate:	2.500%		Adjust Present Worth to:	2023	
Remaining Years:	2		Adjust Price Level to:	1Q74	
CRF:	0.51882716				
Price Level	1Q23	Example: 1Q23			
Price Level FY for Costs	FY	Costs	Current Rate Present Worth Adj. Factor	Price Level Adj. Factor	Price Level & Present Worth Adj.
1Q23	2023	\$ 11,134,300	1.0000	0.1449	\$ 1,613,135

BCR Table (Without Recreation Benefits)

Rate:	2.500%
Total Cost Present Value:	\$ 1,613,000
AAEQ Cost	\$837,000
AAEQ Benefits	\$1,675,000
AAEQ Net-Benefits	\$838,000
Total BCR	2.00

Appendix M. Environmental Considerations

Tab M-1. The project's environmental effects are covered under NEPA through the 2020 EA and FONSI. The Corps has reviewed the previously analyzed impacts associated with the project and has determined that the proposed project is similar in impact and effects to the environment, therefore an updated NEPA is not needed for this event.

Tab M-2. ESA consultation with USFWS and NMFS occurred utilizing the SPBO, P3BO, and 2020 SARBO through the EA process. Updated hardbottom surveys will likely be required in compliance with the 2020 SARBO through coordination with NMFS.

Tab M-3. See section 16, paragraph (c) in the main report

Tab M-4. A statement on the applicability of Executive Order (EO) 11988 (Floodplain Management)..

To comply with EO 11988, the policy of USACE is to formulate projects that, to the extent possible, avoid or minimize adverse effects associated with the use of the floodplain and avoid inducing development in the floodplain unless there is no practicable alternative. The project is located within a Special Flood Hazard Area (Zones AO and VE), as defined by EO 11988 as a “Regulatory Floodway.” The project shoreline is significantly developed, and further development is anticipated to be minimal.

Tab M-5. Cultural Resources.

- See section 16, paragraph (d) in the main report

Tab M-6. NHPA.

- See section 16, paragraph (d) in the main report

Appendix N – Y

Not applicable.

Appendix Z. PIR Review Checklist

	YES	NO	N/A	
1.	X			The project is a Federally authorized and constructed coastal storm risk management project (CSRM). [ER, 5-20.a.]
2.	X			The Project is Active in the RIP [ER, 5-2.a.]. Last inspection date: 17 November 2022
3.	X			The Public Sponsor has requested CSRM Rehabilitation Assistance in writing. [EP, 5-18.b.]
4.	X			The FCCE-funded CSRM Rehabilitation Assistance is necessary to restore the project to its design level of protection.
5.	X			There is sufficient evidence in the PIR to support a finding that the CSRM was damaged by an extraordinary storm. [ER, 5-20.e.]
6.	X			There are "significant amounts of damage" to the CSRM. [ER, 5-20.e.(2)] The criterion used to make this determination is: <u>Yes.</u> the cost of the construction effort to effect repair of the CSRM (<i>exclusive of dredge mob/demob costs</i>) (a) exceeds \$1 million and (b) is greater than 2 percent of the original project construction costs (expressed in current day dollars.); or, <u>No.</u> the cost of the construction effort to effect repair of the CSRM (<i>exclusive of dredge mob/demob costs</i>) exceeds \$6 million; or, <u>No.</u> more than one-third of the planned or historically placed sand for renourishment was lost. <u>NA.</u> only hard features are involved.
7.	X			The public sponsor has agreed to sign the Cooperation Agreement which will occur before USACE begins rehabilitation work. [EP, 5-18.1]
8.	X			The rehabilitation Project has a favorable benefit cost ratio of greater than 1.0:1 [ER, 5-20.a.].
9.	X			The public sponsor has access to sufficient funds to meet its required cost contributions. [EP, 5-18.h.]
10.	X			The cost estimate in the PIR itemizes the work and identifies the Public Sponsor's cost responsibility for items such as deferred and deficient maintenance. [ER, 5-2.g.]
11.	X			The cost estimate in the PIR allocates costs between what may be paid for under PL84-99 Rehabilitation Assistance, and what is cost shared between the Corps (using CG funds) and the public sponsor under periodic renourishment terms of the PCA. [EP, 5-18.d.].
12.	X			Dredge mobilization/demobilization costs are borne proportionally among contributing sources of funds for sand renourishment. [ER, 5-20.i.]
13.	X			Contingency funds for the FCCE-funded portion of the Project are limited to 15 percent for dredging-related costs, and 10 percent for all other costs. [ER, 5-2.v.]

Dade County, Beach Erosion Control and Hurricane Protection Project – Main Segment (Bal Harbor)

14.		X	The repair option selected is the option that is the least cost to the Federal government. [ER, 5-2.h.]
15.	X		The benefit cost ratio calculation excludes all recreation benefits. [ER, 5-20.a.]
16.		X	Betterments are paid by the Public Sponsor. [ER, 5-20.o.]
17.		X	Cost for betterments are identified separately in the cost estimate. [ER, 5-2.o.]
18.		X	Based on the Projected schedule, Project history, anticipated degree of contention of undertaking the Project, and similar items, the Rehabilitation Assistance will be finished prior to the onset of the next storm season, or within one year of the date of occurrence of the damage, whichever is less. [ER, 5-20.j.]
19.	X		The proposed work will not modify the CSRM to increase the degree of protection or capacity, or provide protection to a larger area. [ER, 5-2.n.]
20.	X		An assessment of environmental requirements was completed. [ER, 5-13.e.]
21.	X		The Endangered Species Act was appropriately considered and applicable requirements have been satisfied or will be satisfied prior to the funds transmittal of construction phase activities (and supplemented to the PIR). When emergency circumstances mandate, ESA Section 7 consultation may be conducted informally through alternative procedures with formal consultation completed after construction consistent with 50 CFR 402.05. Dredging will not be adversely affected. [ER, 5-13.g., and EP, Figure 5-3., paragraph 12.]
22.	X		The Archeological and Historical Preservation Act was appropriately considered. [ER, 5-13.h.]
23.	X		EO 11988 requirements were considered in the process of evaluating the proposed project for rehabilitation or will be considered prior to the funds transmittal of construction phase activities (and supplemented to the PIR). [ER, 5-13.f., and EP, Figure 5-2, paragraph 12.]
24.		X	Other permitting and evaluations were appropriately considered and result in no impediment to the Rehabilitation Assistance effort. [ER, 5-13.a.]
25.	X		The cover letter forwarding the PIR to the MSC will contain the Projected schedule for completing the Rehabilitation Assistance. [EP, 5-18.f.(2)]
26.	X		The completed PIR has been reviewed and the PIR checklist has been reviewed and signed by the Emergency Management Office. [EP, 5-18.f.(1)]
27.	X		The completed PIR meets all policy, procedural, content, and formatting requirements of ER 500-1-1 and EP 500-1-1. [ER, 2-3.b.]



MEMORANDUM

(Revised)

TO: Honorable Chairman Oliver G. Gilbert, III
and Members, Board of County Commissioners

DATE: July 2, 2024

FROM: 
Gen Bonzon-Keenan
County Attorney

SUBJECT: Agenda Item No. 8(L)(1)

Please note any items checked.

- ☐ "3-Day Rule" for committees applicable if raised
- ☐ 6 weeks required between first reading and public hearing
- ☐ 4 weeks notification to municipal officials required prior to public hearing
- ☐ Decreases revenues or increases expenditures without balancing budget
- ☐ Budget required
- ☐ Statement of fiscal impact required
- ☐ Statement of social equity required
- ☐ Ordinance creating a new board requires detailed County Mayor's report for public hearing
- ☐ No committee review
- ☐ Applicable legislation requires more than a majority vote (i.e., 2/3's present ____, 2/3 membership ____, 3/5's ____, unanimous ____, CDMP 7 vote requirement per 2-116.1(3)(h) or (4)(c) ____, CDMP 2/3 vote requirement per 2-116.1(3)(h) or (4)(c) ____, or CDMP 9 vote requirement per 2-116.1(4)(c)(2) ____ to approve
- ☐ Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required

Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 8(L)(1)
7-2-24

RESOLUTION NO. _____ R-590-24

RESOLUTION APPROVING A COOPERATION AGREEMENT BETWEEN THE U.S. ARMY CORPS OF ENGINEERS AND MIAMI-DADE COUNTY FOR THE REHABILITATION OF A FEDERAL HURRICANE/SHORE PROTECTION PROJECT IN BAL HARBOUR, FLORIDA; AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO EXECUTE THE AGREEMENT, AND EXERCISE ANY TERMINATION PROVISIONS AND ALL OTHER RIGHTS CONTAINED THEREIN; AND AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO EXECUTE CERTAIN AMENDMENTS TO THE AGREEMENT

WHEREAS, this Board desires to accomplish the purposes outlined in the accompanying memorandum, a copy of which is incorporated herein by reference,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that:

Section 1. This Board approves the Cooperation Agreement (Agreement) between the U.S. Army Corps of Engineers and Miami-Dade County, attached hereto as Attachment 1 and made a part hereof, by which the Army Corps would provide 100 percent of the construction costs for the restoration of the Bal Harbour beaches, currently estimated to be \$11,300,000.00.

Section 2. This Board authorizes the County Mayor or County Mayor's designee to execute the Agreement, in substantially the form attached as Attachment 1, for and on behalf of Miami-Dade County; to exercise the provisions contained therein, including the termination provisions and all other rights contained therein; to take all actions necessary to effectuate same; and to execute future amendments for extensions of time to the Agreement, after approval by the County Attorney's Office for legal sufficiency.

The foregoing resolution was offered by Commissioner **Danielle Cohen Higgins** ,
 who moved its adoption. The motion was seconded by Commissioner **Kionne L. McGhee**
 and upon being put to a vote, the vote was as follows:

Oliver G. Gilbert, III, Chairman	aye		
Anthony Rodríguez, Vice Chairman	aye		
Marleine Bastien	aye	Juan Carlos Bermudez	aye
Kevin Marino Cabrera	aye	Sen. René García	aye
Roberto J. Gonzalez	aye	Keon Hardemon	aye
Danielle Cohen Higgins	aye	Eileen Higgins	absent
Kionne L. McGhee	aye	Raquel A. Regalado	aye
Micky Steinberg	aye		

The Chairperson thereupon declared this resolution duly passed and adopted this 2nd day of July, 2024. This resolution shall become effective upon the earlier of (1) 10 days after the date of its adoption unless vetoed by the County Mayor, and if vetoed, shall become effective only upon an override by this Board, or (2) approval by the County Mayor of this resolution and the filing of this approval with the Clerk of the Board.



MIAMI-DADE COUNTY, FLORIDA
 BY ITS BOARD OF
 COUNTY COMMISSIONERS

JUAN FERNANDEZ-BARQUIN, CLERK

By: **Basia Pruna**
 Deputy Clerk

Approved by County Attorney as
 to form and legal sufficiency.

Abbie Schwaderer-Raurell

**COOPERATION AGREEMENT
BETWEEN
THE UNITED STATES OF AMERICA
AND
MIAMI-DADE COUNTY, FLORIDA
FOR
REHABILITATION OF A FEDERAL HURRICANE/SHORE PROTECTION PROJECT**

THIS AGREEMENT, entered into this _____ day of _____, 2024, by and between the Department Of The Army (hereinafter referred to as the "Government") represented by the District Commander, Jacksonville District, U.S. Army Corps of Engineers, and Miami-Dade County, Florida (hereinafter referred to as the "Non-Federal Sponsor"), represented by the Chief Operations Officer.

WITNESSETH THAT:

WHEREAS, the Government constructed a Hurricane/Shore Protection Project (hereinafter referred to as the HSPP), authorized by Section 203 of the Flood Control Act of 1968, Public Law 90-483, as modified by Section 69 of the Water Resources Development Act of 1974, Public Law 93-251, and expanded under a separate authorization in Title I, Chapter IV of the Supplemental Appropriations Act of 1985, Public Law 98-88, and by Section 501 of the Water Resources Development Act of 1986, Public Law 99-662, and governed by the Local Cooperation Agreement dated October 12, 1972 and entitled Agreement Between the United States of America and Dade County, Florida for Local Cooperation at Dade County Beaches and the Local Cooperation Agreement dated April 29, 1976 and entitled Supplemental Agreement No. 1 to Contract No. DACW17-73-A-0006 Between the United States of America and Dade County, Florida for Local Cooperation at Dade County Beaches which remain in full effect;

WHEREAS, pursuant to 33 U.S.C. 701n, the Government is authorized to assist in the repair and restoration of any federally authorized hurricane or shore protective structure damaged or destroyed by wind, wave, or water action of other than an ordinary nature;

WHEREAS, via written correspondence, the Non-Federal Sponsor has requested the Government to repair or restore the HSPP which was damaged by wind, wave, or water action of an other than an ordinary nature, in accordance with 33 U.S.C. 701n, and established policies of the U.S. Army Corps of Engineers; and,

WHEREAS, the Non-Federal Sponsor hereby represents that it has the authority and legal capability to furnish the non-Federal cooperation hereinafter set forth and is willing to participate in the HSPP Rehabilitation Effort in accordance with the terms of this Agreement;

NOW, THEREFORE, the Government and the Non-Federal Sponsor agree as follows:

ARTICLE I - DEFINITIONS AND GENERAL PROVISIONS

For purposes of this agreement:

A. The term "Rehabilitation Effort" shall mean restoration of the HSPP to full construction template by placing approximately 122,500 cubic yards of material between Florida Department of Environmental Protection monuments R-27 and R-31.5, as generally described in a report entitled Project Information Report for the Rehabilitation Effort for the Dade County Beach Erosion Control and Hurricane Protection Project – Main Segment (Bal Harbor) prepared by the District Commander, U.S. Army Engineer District Jacksonville, dated May 3, 2023 and approved by the Director of Contingency Operations, Homeland Security and Northwestern Division on July 10, 2023;

B. The term "Rehabilitation Effort costs" shall mean all costs incurred by the Non-Federal Sponsor and the Government directly related to construction of the Rehabilitation Effort. Such term shall include, but is not necessarily be limited to: actual construction costs, including supervision and inspection costs; costs of contract dispute settlements or awards; and the cost of investigations to identify the existence of hazardous substances as identified in Article XIA. The term shall not include any costs for operation and maintenance; any costs that correct deferred or deficient maintenance; any increased costs for betterments or Non-Federal Sponsor-preferred alternatives; periodic nourishment under the project authorization; or the costs of lands, easements, rights-of-way, borrow, or relocations.

C. The term "betterment" shall mean the design and construction of a Rehabilitation Effort feature accomplished on behalf of, or at the request of, the Non-Federal Sponsor, in accordance with standards that exceed the standards that the Government would otherwise apply for accomplishing the Rehabilitation Effort.

ARTICLE II - OBLIGATIONS OF THE GOVERNMENT AND NON-FEDERAL SPONSOR

A. The Government, subject to receiving funds appropriated by the Congress of the United States and using funds provided by the Non-Federal Sponsor, shall expeditiously construct the Rehabilitation Effort, applying those procedures usually followed or applied in Federal projects, pursuant to Federal laws, regulations, and policies. The Non-Federal Sponsor shall be afforded the opportunity to review and comment on all solicitations for all contracts, including relevant plans and specifications, prior to the issuance of such solicitations. The Contracting Officer will, in good faith, consider the comments of the Non-Federal Sponsor, but award of contracts, modifications or change orders, and performance of all work on the Rehabilitation Effort (whether the work is performed under contract or by Government personnel), shall be exclusively within the control of the Contracting Officer.

B. As further specified in Article III, the Non-Federal Sponsor shall provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform all relocations determined by the Government to be necessary for construction, operation, and maintenance of the Rehabilitation Effort and the HSPP.

C. As further specified in Article IV, the Non-Federal Sponsor shall contribute, in cash, in-kind services, or a combination thereof, a contribution toward construction of the Rehabilitation Effort in an amount equal to 0 percent of Rehabilitation Effort costs.

D. The Non-Federal Sponsor shall not use Federal funds to meet its share of Rehabilitation Effort costs under this Agreement unless the expenditure of such funds is expressly authorized by statute as verified in writing by the Federal granting agency.

E. The Non-Federal Sponsor shall hold and save the Government free from all damages arising from the construction, operation, and maintenance of the Rehabilitation Effort, the HSPP, and any related betterments, except for damages due to the fault or negligence of the Government or the Government's contractors.

F. The Non-Federal Sponsor agrees to continue participate in and comply with the policies and procedures of the U.S. Army Corps of Engineers Rehabilitation and Inspection Program and the Local Cooperation Agreement cited above.

G. The Non-Federal Sponsor may request the Government to accomplish betterments. The Non-Federal Sponsor shall be solely responsible for any increase in costs resulting from the betterments and all such increased costs will be paid in advance by the Public Sponsor in accordance with Article IV.

ARTICLE III - LANDS, RELOCATIONS, AND PUBLIC LAW 91-646

A. The Government shall provide the Non-Federal Sponsor with a description of the anticipated real estate requirements and relocations for the Rehabilitation Effort. Thereafter, the Non-Federal Sponsor shall furnish all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform any relocations, as may be determined by the Government in that description, or in any subsequent description, to be necessary for the construction, operation, and maintenance of the Project and the Rehabilitation Effort. The necessary lands, easements, and rights-of-way may be provided incrementally for each construction contract. All lands, easements, and rights-of-way determined by the Government to be necessary for work to be performed under a construction contract must be furnished prior to the advertisement of that construction contract.

B. The Non-Federal Sponsor shall comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, Public Law 91-646, as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights of way, required for construction, operation, and maintenance of the Project and the Rehabilitation Effort, including those necessary for relocations, borrow materials, and dredged or excavated material disposal, and shall inform all affected persons of applicable benefits, policies, and procedures in connection with said Act.

ARTICLE IV - METHOD OF PAYMENT

A. The Non-Federal Sponsor shall provide, during the period of construction, cash payments, in-kind services, or a combination thereof, required to meet the Non-Federal Sponsor's obligations under Article II of the Agreement. Rehabilitation Effort costs are currently estimated to be \$11,300,000 and the Non-Federal Sponsor's share (cash and services in kind) of Rehabilitation Effort costs is currently estimated to be \$0. In order to meet the Non-Federal Sponsor's cash payment requirements, the Non-Federal Sponsor must provide a cash contribution estimated to be \$0. The dollar amounts set forth in this paragraph are based upon the Government's best estimates that reflect projections of costs, price level changes, and anticipated inflation. Such cost estimates are subject to adjustments based upon costs actually incurred and are not to be construed as the total financial responsibilities of the Government and the Non-Federal Sponsor.

B. The required cash contribution shall be provided as follows: At least ten calendar days prior to the award of the first construction contract, the Government shall notify the Non-Federal Sponsor of the Non-Federal Sponsor's estimated share of the Rehabilitation Effort costs including the Non-Federal Sponsor's estimated share of the costs attributable to the Rehabilitation Effort incurred prior to the initiation of construction. Within five calendar days thereafter, the Non-Federal Sponsor shall provide the Government the full amount of the required contribution by delivering a check payable to "FAO, USAED Jacksonville (K3)" to the Contracting Officer representing the Government. The Government shall draw on the funds provided by the Non-Federal Sponsor such sums as the Government deems necessary to cover contractual and in-house fiscal obligations attributable to the Rehabilitation Effort as they are incurred, as well as Rehabilitation Effort costs incurred by the Government. In the event that total Rehabilitation Effort costs are expected to exceed the estimate given at the outset of construction, the Government shall immediately notify the Non-Federal Sponsor of the additional contribution the Non-Federal Sponsor will be required to make to meet the Non-Federal Sponsor's share of the revised estimate. Within ten calendar days thereafter, the Non-Federal Sponsor shall provide the Government the full amount of the additional required contribution.

C. During the period of construction, the Government will provide periodic financial reports on the status of the total Rehabilitation Effort costs and status of contributions made by the Non-Federal Sponsor. Upon completion of the Rehabilitation Effort and resolution of all relevant contract claims and appeals, the Government shall compute the total Rehabilitation Effort costs and tender to the Non-Federal Sponsor a final accounting of the Non-Federal Sponsor's share of total Rehabilitation Effort costs.

1. In the event the total contribution by the Non-Federal Sponsor is less than the Non-Federal Sponsor's required share of total Rehabilitation Effort costs, the Non-Federal Sponsor shall, no later than 90 calendar days after receipt of written notice, make a cash payment to the Government of whatever sum is required to meet the Non-Federal Sponsor's required share of the total project costs.

2. In the event total contribution by the Non-Federal Sponsor is more than the Non-Federal Sponsor's required share of total Rehabilitation Effort costs, the Government shall, no later than 90 calendar days after the final accounting is complete, subject to the availability of funds, return the

excess to the Non-Federal Sponsor; however, the Non-Federal Sponsor shall not be entitled to any refund for in-kind services. In the event the existing funds are not available to repay the Non-Federal Sponsor for excess contributions provided, the Government shall seek such appropriations as are necessary to repay the Non-Federal Sponsor for excess contributions provided.

ARTICLE V - CREDITING OF IN-KIND SERVICES

The Government has approved a credit for In-Kind Services, compatible with the Rehabilitation Effort, in the estimated amount of \$0 for implementation of such services by the Non-Federal Sponsor. The affording of such credit shall be subject to an onsite inspection by the Government to verify that the work was accomplished in a satisfactory manner and is suitable for inclusion in the Rehabilitation Effort. The actual amount of such credit shall be subject to an audit conducted to determine reasonableness, allocability, and allowability of costs. The Government shall apply the credit amount toward any additional cash contribution required under this Agreement. The Non-Federal Sponsor shall not receive credit for any amount in excess of such additional cash contribution, nor shall the Non-Federal Sponsor be entitled to any reimbursement for any excess credit amount.

ARTICLE VI- OPERATION AND MAINTENANCE

A. The Non-Federal Sponsor maintains responsibility for operating and maintaining the HSPP at all times. After the Contracting Officer has determined that construction of the Rehabilitation Effort is complete and provided the Non-Federal Sponsor with written notice of such determination, the Non-Federal Sponsor shall operate and maintain the HSPP, to include those areas restored by the Rehabilitation Effort, at no cost to the Government, in accordance with specific directions prescribed by the Government in Engineer Regulation 500-1-1 and any subsequent amendments thereto and other applicable authorities.

B. The Non-Federal Sponsor hereby gives the Government a right to enter, at reasonable times and in a reasonable manner, upon land that the Non-Federal Sponsor owns or controls for access to the HSPP for the purposes of inspection, and, if necessary, for the purpose of completing, operating, and maintaining the HSPP. If an inspection shows the Non-Federal Sponsor for any reason is failing to fulfill the Non-Federal Sponsor's obligations under this Agreement without receiving prior written approval from the Government, the Government will send a written notice to the Non-Federal Sponsor. If, after 30 calendar days from receipt of such notice, the Non-Federal Sponsor continues to fail to perform, then the Government shall have the right to enter, at reasonable times and in a reasonable manner, upon lands the Non-Federal Sponsor owns or controls for access to the Project for the purposes of completing, operating, and maintaining the project, or to deny further assistance under Public Law 84-99. No action by the Government shall operate to relieve the Non-Federal Sponsor of responsibility to meet the Non-Federal Sponsor obligations as set forth in this Agreement, or to preclude the Government from pursuing any other remedy at law or equity to assure faithful performance pursuant to this Agreement.

ARTICLE VII -FEDERAL AND STATE LAWS

In the exercise of the Non-Federal Sponsor's rights and obligations hereunder, the Non-Federal Sponsor agrees to comply with all applicable Federal and state laws and regulations.

ARTICLE VIII- RELATIONSHIP OF PARTIES

The Government and the Non-Federal Sponsor act in an independent capacity in the performance of their respective functions under this Agreement, and neither party is to be considered the officer, agent, nor employee of the other.

ARTICLE IX -OFFICIALS NOT TO BENEFIT

No member of or delegate to the Congress, or resident commissioner, shall be admitted to any share or part of this Agreement, or to any benefit that may arise therefrom.

ARTICLE X -COVENANT AGAINST CONTINGENT FEES

The Non-Federal Sponsor warrants that no person or selling agency has been employed or retained to solicit or secure this Agreement upon agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Non-Federal Sponsor for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this Agreement without liability, or, in the Government's discretion, to add to the Agreement or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

ARTICLE XI- TERMINATION OR SUSPENSION

If at any time the Non-Federal Sponsor fails to carry out its obligations under this Agreement, the District Commander shall terminate or suspend work on the Rehabilitation Effort, unless the District Commander determines that continuation of work on the Rehabilitation Effort is in the interest of the United States or is necessary in order to satisfy agreements with any other non-Federal interests in connection with this Rehabilitation Effort and the HSPP. However, deferral of future performance under this agreement shall not affect existing obligations or relieve the parties of liability for any obligation previously incurred. In the event that either party elects to terminate this Agreement pursuant to this Article, both parties shall conclude their activities relating to the rehabilitation Effort and proceed to a final accounting in accordance with Article IV of this Agreement. In the event that either party elects to defer future performance under this Agreement pursuant to this Article, such deferral shall remain in effect until such time as either the Government or Non-Federal Sponsor elects to proceed with further construction or terminates this Agreement.

ARTICLE XII -HAZARDOUS SUBSTANCES

A. After execution of this Agreement and upon direction by the Contracting Officer, the Non-Federal Sponsor shall perform, or cause to be performed, such investigations for hazardous substances as are determined necessary by the Government of the Non-Federal Sponsor to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 42 U.S.C. Sections, 9601-9675, on lands necessary to Rehabilitation Effort construction, operation, and maintenance. All actual costs incurred by the Non-Federal Sponsor that are properly allowable and allocable to performance of any such investigations for hazardous substances shall be included in total Rehabilitation Effort costs and cost shared as a construction cost.

B. In the event it is discovered through an investigation for hazardous substances or other means that any lands, easements, rights-of-way, or disposal areas to be acquired or provided for the HSPP or the Rehabilitation Effort contain any hazardous substances regulated under CERCLA, the Non-Federal Sponsor and the Government shall provide prompt notice to each other, and the Non-Federal Sponsor shall not proceed with the acquisition of lands, easements, rights-of-way, or disposal areas until mutually agreed.

C. The Government and the Non-Federal Sponsor shall determine whether to initiate construction of the Rehabilitation Effort, or, if already in construction, to continue with construction of the Rehabilitation Effort, or to terminate construction of the Rehabilitation Effort for the convenience of the Government in any case where hazardous substances regulated under CERCLA are found to exist on any lands necessary for the Rehabilitation Effort. Should the Government and the Non-Federal Sponsor determine to proceed or continue with the construction after considering any liability that may arise under CERCLA, the Non-Federal Sponsor shall be responsible, as between the Government and the Non-Federal Sponsor, for any and all necessary clean up and response costs, to include the costs of any studies and investigations necessary to determine an appropriate response to the contamination. Such costs shall not be considered a part of the total Rehabilitation Effort costs as defined in this Agreement. In the event the Non-Federal Sponsor fails to provide any funds necessary to pay for clean up and response costs or to otherwise discharge the Non-Federal Sponsor's responsibilities under this paragraph upon direction by the Government, the Government may either terminate or suspend work on the Rehabilitation Effort or proceed with further work as provided in Article X of this Agreement.

D. The Non-Federal Sponsor and Government shall consult with each other to assure that responsible parties bear any necessary clean up and response costs as defined in CERCLA. Any decision made pursuant to paragraph C of this Article shall not relieve any party from any liability that may arise under CERCLA.

E. As between the Government and the Non-Federal Sponsor, the Non-Federal Sponsor shall be considered the operator of the HSPP (which the Rehabilitation Effort is repairing and restoring) for purposes of CERCLA liability. To the maximum extent practicable, the Non-Federal Sponsor shall operate and maintain the HSPP in a manner that will not cause liability to arise under CERCLA.

ARTICLE XIII -NOTICES

A. All notices, requests, demands, and other communications required or permitted to be given under this Agreement shall be deemed to have been duly given if in writing and delivered personally, given by prepaid telegram, or mailed by first-class (postage prepaid), registered, or certified mail, as follows:

If to the Non-Federal Sponsor:

Chief Operations Officer
Stephen P. Clark Center
111 N.W. 1st Street, 29th Floor
Miami, Florida 33128

If to the Government:

District Commander
U.S. Army Corps of Engineers, Jacksonville District
P.O. Box 4970
Jacksonville, Florida 32232-0019

B. A party may change the address to which such communications are to be directed by giving written notice to the other party in the manner provided in this Article.

C. Any notice, request, demand, or other communication made pursuant to this Article shall be deemed to have been received by the addressee at such time as it is either personally delivered, or, seven calendar days after it is mailed, as the case may be.

IN WITNESS HEREOF, the parties hereto have executed this Agreement, which shall become effective upon the date it is signed by the District Commander.

THE DEPARTMENT OF THE ARMY

MIAMI-DADE COUNTY, FLORIDA

BY: _____
James L. Booth
District Commander
Jacksonville District

BY _____
Jimmy Morales
Chief Operations Officer
Office of the Mayor

DATE: _____

DATE: _____

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Jimmy Morales
Chief Operations Officer, Office of the Mayor
Miami-Dade County, Florida

DATE: _____

CERTIFICATE OF AUTHORITY

I, Geri Bonzon-Keenan, do hereby certify that I am the principal legal officer for Miami-Dade County, Florida, that Miami-Dade County, Florida is a legally constituted public body with full authority and legal capability to perform the terms of the Agreement between the Department of the Army and Miami-Dade County, Florida in connection with the Dade County Beach Erosion Control and Hurricane Protection Project, and to pay damages, if necessary, in the event of the failure to perform in accordance with the terms of this Agreement, as required by Section 221 of Public Law 91-611, as amended (42 U.S.C. 1962d-5b), and that the person who executed this Agreement on behalf of the Miami-Dade County, Florida acted within his statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this _____
day of _____ 2024.

Geri Bonzon-Keenan
County Attorney
Miami-Dade County, Florida