

# MIAMI-DADE COUNTY, FL CSRM STUDY

U.S. ARMY CORPS OF ENGINEERS | JACKSONVILLE DISTRICT



# COASTAL STORM RISK MANAGEMENT (CSRM)

## PHYSICAL CONDITIONS & ENGINEERING CONSIDERATIONS



\* Lines depict shoreline lengths where sand was placed as part of both Federal and non-Federal projects.

### Study Authority

The Miami-Dade, Florida Coastal Storm Risk Management Study is authorized under Section 216 of the Flood Control Act of 1970, Public Law 91-611, and funding for the study was appropriated as part of the Bipartisan Budget Act of 2018 (PL 115-123). This study will evaluate alternatives to potentially reduce hurricane and storm damages to public infrastructure, residential and commercial buildings.

### Beach Placement History

The Dade County Beach Erosion Control and Hurricane Protection Project (BEC&HP) included beach fill along 1.4 miles of Haulover Beach Park, and 9.3 miles from Bakers Haulover Inlet to Government Cut (Miami Main Segment). The 2.4-mile Sunny Isles segment was added in 1985. Federal participation ends for the Miami Main segment in 2025 and for the Sunny Isles segment in 2038.



### Alternatives Formulation



Alternatives will be assessed and modeled to determine the one that best addresses the primary study objective to reduce coastal storm damages. Alternatives could include stand alone or combinations of soft structures (beach and dune), hard structures (breakwaters, groins, reefs, rock revetment), and non-structural alternatives (flood proofing).

## ECONOMICS KEY FORMULAS

Plans recommending Federal action should represent an alternative that achieves the greatest net benefits consistent with protecting the environment

### BENEFITS

Primary: Storm damage reduction

Incidental: Recreation

### COSTS

Cost of alternatives over a 50-year period, including associated costs

$$\text{CSRM BENEFITS} = \text{ESTIMATED \$ DAMAGES WITHOUT PROJECT} - \text{ESTIMATED \$ DAMAGES WITH PROJECT}$$

$$\frac{\text{BENEFITS}}{\text{COSTS}} > 1$$

Plans must have a positive benefit to cost ratio.