FEMA Region 2 NY and NJ Coastal Restudy Newsletter

JANUARY 2021 UPDATE

WHAT IS THE NY & NJ COASTAL RESTUDY?

The NY and NJ Coastal Restudy will reexamine the flood hazards for coastal New York and New Jersey. New storm surge analysis and wave modeling will produce new flood maps for many coastal communities in the study area. FEMA is conducting the restudy in response to New York City's 2015 appeal of the 2013-2014 preliminary Flood Insurance Rate Maps (FIRMs) for the area.

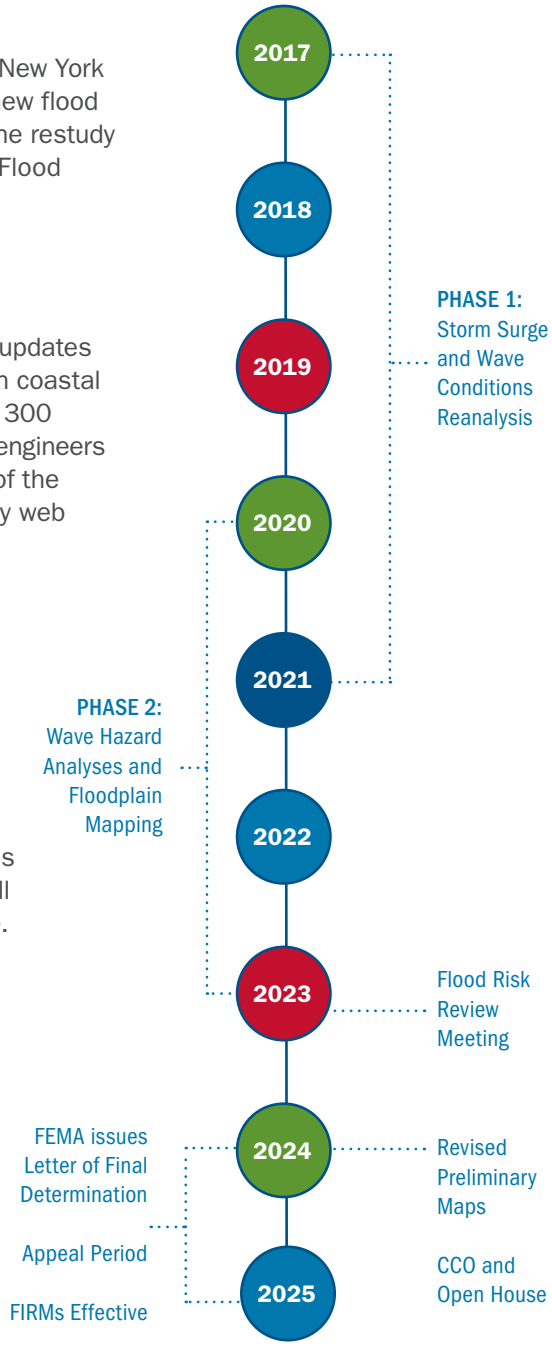
WHERE ARE WE IN THE RESTUDY PROCESS?

In mid-November 2020, FEMA Region 2 held five virtual meetings to provide updates on the NY and NJ Coastal Restudy to communities spanning eight counties in coastal New Jersey, as well as Westchester County, New York and New York City. Over 300 stakeholders, including floodplain managers, local elected officials, planners, engineers and congressional representatives participated in the meetings. Recordings of the webinar and copies of the presentation are available on our Coastal Restudy web page under *Outreach and Resources*: https://arcg.is/0PrG1K.

During the meetings, FEMA summarized the findings from the Intermediate Data Submittal (IDS) 2 report including how tropical storms were selected and how the storm surge model was validated to verify it works.

The study team also shared a preview of IDS 3 and IDS 4. IDS 3 is expected to be complete in late 2021 and will document the results of the storm surge model, as well as methods for determining the stillwater level and wave condition recurrence frequencies. IDS 4 is expected to be complete in 2022 and will document the team's analysis of how storm surge and waves interact with the coast and how floodwater moves over land. This analysis will consider erosion, the effects of coastal flood protection structures and more.

Over the next year, the study team will work towards completing the storm surge analysis, or Phase 1 of the restudy (which includes IDS 1, 2, and 3), and continue preparing for the next phase. Phase 2 of the study, wave hazard analyses and mapping, will be documented in IDS 4 and 5. To support Phase 2, the study team conducts field reconnaissance, or site visits. Originally planned for spring 2020, the field reconnaissance was delayed by COVID-19-related travel restrictions and safety concerns. In October 2020, the study team safely started field work in the study area. The following sections give an overview of how wave hazards will be evaluated in Phase 2 and how information collected during field reconnaissance is used to fine-tune these analyses.



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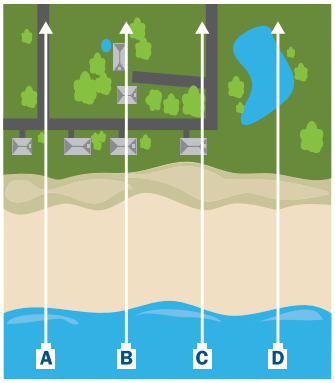
OVERVIEW OF PHASE 2: WAVE HAZARD ANALYSES AND MAPPING



In Phase 2, wave hazards and base flood elevations will be analyzed along transects, or cross sections, generally placed perpendicular to the shoreline. Transects are strategically placed to represent segments of the coast with similar characteristics.

Along each transect, the team evaluates how waves interact with the coast and how water moves over land. The ways that wave hazards affect the coast during a flood depends on the natural features of the coastline and how the land is developed. Field reconnaissance, or site visits, are one way that the study team collects data to inform their assessment of wave hazards. In addition to field reconnaissance, the study team is monitoring the release of new data that may be incorporated into Phase 2 of the modeling. This includes new topographic datasets and aerial imagery.

During site visits, the team visits transect locations throughout the study area where the coastline has changed. Information collected during these field visits will be used to fine-tune the wave hazard analyses and account for site-specific considerations, like beach nourishment or the presence of a coastal flood protection structure. These details help create more precise flood maps.

If recent changes have occurred to the coastline in your community, you can contact Mike Foley, FEMA Risk Analysis Branch Chief, at michael.foley3@fema.dhs.gov to submit additional information. **Information shared before July 15, 2021 will be evaluated for inclusion in Phase 2 of the study.**

PRELIMINARY OBSERVATIONS FROM THE FIELD

The study team recently visited sites in Atlantic, Essex, Hudson, Middlesex, Monmouth, Ocean and Union counties. During their field visits they collected information about ongoing U.S. Army Corps of Engineers (USACE) beach nourishment projects and the construction of new buildings and coastal flood protection structures. Throughout these seven counties the team collected information at 1,059 points, including the following:

- **Location and height of dunes.**
- **Location, type and height of coastal structures.**
- **Types of vegetation.**
- **Characteristics of new construction.**

Field reconnaissance is expected to continue in early 2021 for New York City and Westchester County, New York. However, the schedule is subject to change depending on COVID-19 restrictions and the team's ability to travel safely. Information collected during field reconnaissance will directly inform the wave hazard analyses by incorporating site-specific and up-to-date information about the coastline. A full summary of the field reconnaissance efforts and data collection will be included as an appendix to IDS 1.

Restudy team member documenting shoreline protection features near the Goethals Bridge in Elizabeth, N.J.

WHO MAY I CONTACT FOR MORE INFORMATION?

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