# U.S. DEPARTMENT OF HOMELAND SECURITY - FEDERAL EMERGENCY MANAGEMENT AGENCY COASTAL ANALYSIS FORM

O.M.B No. 1660-0016 Expires: 12/31/20130

### PAPERWORK REDUCTION ACT

Public reporting burden for this form is estimated to average 1 hour per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, U.S. Department of Homeland Security, Federal Emergency Management Agency, 500 C Street, SW, Washington DC 20472, Paperwork Reduction Project (1660-0016). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. Please do not send your completed survey to the above address.

Flooding Source:  Note: Fill out one form for each flooding source studied						
A. COASTLINE TO BE REVISED						
Describe limits of study area:  B. EFFECTIVE FIS  The area being revised in the effective FIS was studied by detailed methods using (check all that apply):						
					Storm surge modeling	☐ Wave setup computations
					Wave height computations	☐ Wave runup computations
Wave overtopping computations	☐ Dune erosion computations					
Primary Frontal Dune Assessment	☐ N/A (area not studied by detailed methods)					
C. REVISED A	NALYSIS					
Number of transects in revised analysis:						
2. Information used to prepare the revision (check all that apply):						
Wave setup analyses (complete Items 3, 4, and 5 below)						
Stillwater elevation determinations (complete Item 3)						
Erosion considerations (complete Item 4)						
Wave runup analysis (complete Items 4 and 5)						
Wave height analysis (complete Items 4 and 5)						
Wave overtopping assessment (complete Items 4 and 5)						
More detailed topographic information (complete Section E)						
Shore protection structures (attach completed Coastal Structures Form - Form 5)						
Primary frontal dune assessment (complete Item 5)						
Other, attach basis of revision request with explanation						
3. <u>Stillwater Elevation Determination</u>						
a. How were stillwater elevations determined?						
Gage analysis (If revised gage analysis was used, provide copies of gage data and revised analysis.)						
Storm surge analysis						
Other (Describe):						
b. Specify what datum was used in the calculations:						
If not the FIS datum, have the calculations been adjusted to the FIS d	latum? Yes No Conversion factor:					
c. Was thelf revised storm surge analysis; was FEMA's storm surge mod	lel utilizedrevised?					
<ul> <li>d. If FEMA'sa new storm surge model was used, attach a detailed description and why the revised analysis should replace the current analysis.</li> </ul>	ption of the differences between the current and the revised analyses,					


## C. REVISED ANALYSIS (CONTINUED) 4. Revised Analysis (i.e., erosion, wave height, wave runup, primary frontal dune, and wave overtopping) If DHS-FEMA procedures were utilized to perform the revision, attach a detailed description of differences between the current and the revised analyses, and why the revised analysis should replace the current analysis. If DHS-FEMA procedures were not utilized to perform the revision, provide full documentation on methodology and/or models used; including operational program, detailed differences between methodology and/or models utilized and DHS-FEMA's methodology and/or models. Also, attach an explanation of why new methodology and/or models should replace current methodology and/or models. If revision reflects more detailed topographic information and fill has been/will be placed in a V Zone, and is not protected from erosion by a shore protection structure, provide a detailed description of how the fill has been treated in the revised analysis. 5. Wave Runup, Wave Height, And Wave Overtopping Analysis Wave height analyses along a transect are greatly affected by starting wave conditions that propagate inland. Wave runup and overtopping analyses are typically considered when wave heights and/or wave runup are close to or greater than the crest of shore protection structures or natural land forms. a. Was an analysis performed to determine starting wave height and period for input into WHAFIS? Yes If Yes, attach an explanation of the method utilized. If No, explain why these analyses were not performed. b. Was wave setup included in wave height analysis and removed for erosion and wave runup analyses? Yes No c. Was an overtopping analysis performed for any coastal shore protection structures or natural land forms that may be overtopped? Yes No If Yes, attach an explanation of the methodology utilized and describe in detail the results of the analysis.

#### D. RESULTS

If overtopping was not analyzed, attach an explanation for why these analyses were not performed.

1. 2.	Stillwater storm surge elevation: feet Datum  Wave setup: feet	9. As a result of the revised analyses, the V Zone location has shifted a maximum of feet seaward and feet landward of its existing position.			
3.	Starting deep-water significant wave condition: height: period:	Does this revision reflect the location of the primary frontal dune?      No      No  119. The Base Flood Elevations have:			
4.	Maximum wave height elevation: feet	increased decreased			
5.	Maximum wave runup elevation: feet	a. What was the greatest increase? feet			
6.	Estimated amount of maximum overtopping: cfs/feet	b. What was the greatest decrease? feet			
<u>7.                                    </u>	Has this revision changed the Limit of Moderate Wave Action (LiMWA)? Yes No N/A	1 <u>2</u> . The special flood hazard area has: ☐ increased ☐ decreased ☐ both			
8.	_The areas designated as coastal high hazard areas (V Zones) have:  ☐ increased ☐ decreased ☐ both	Attach a description where it has increased or decreased.			
Atta	ach a description where they have increased and/or decreased.				

### E. MAPPING REQUIREMENTS

A certified topographic map must be submitted showing the following information (where applicable): effective, existing conditions, and proposed conditions 1%-annual-chance floodplain boundaries, revised shoreline due to either erosion or accretion, location and alignment of all transects, correct location and alignment of any structures, current community easements and boundaries, boundary of the requester's property, certification of a professional engineer registered in the subject State, location and description of reference marks, and the referenced vertical datum (NGVD, NAVD, etc.).

Note that the existing or proposed conditions floodplain boundaries to be shown on the revised FIRM must tie-in with the effective floodplain boundaries. Please attach a copy of the current FIRM annotated to show the revised 1%-annual-chance floodplain boundaries that tie-in with effective 1%-annual-chance floodplain boundaries along the entire extent of the area of revision.