# RUNUP 2.0 Readme File

THIS IS A WAVE RUNUP PROGRAM FOR DETERMINING THE EXTENT OF RUNUP FOR THE 1-PERCENT ANNUAL CHANCE (100-YEAR) STORM. THIS PROGRAM WAS DEVELOPED FOR THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR EVALUATING THE 100-YEAR STORM BUT CAN ALSO BE USED FOR CALCULATING RUNUP FOR OTHER RETURN INTERVAL STORMS.

TO RUN THIS PROGRAM, INPUT FILES MUST BE CREATED IN THE FORMAT SHOWN BELOW. THESE FILES ARE CALLED AND USED WITH THIS PROGRAM BY USING THE COMMAND "**RUNUP2 FILENAME.IN FILENAME.OUT.**" THE OUTPUT FILES CAN THEN BE VIEWED USING WHATEVER VIEWING SOFTWARE IS AVAILABLE ON THE COMPUTER BEING USED.

THE INPUT DATA NEEDED TO RUN THIS PROGRAM ARE LISTED BELOW. THE MEAN WAVE HEIGHTS AND WAVE PERIODS SHOULD BE USED AND SHOULD INCLUDE VALUES 5% ABOVE AND BELOW THE MEAN. ONCE THE MEAN RUNUP ELEVATIONS ARE CALCULATED BY THE PROGRAM, THE ELEVATIONS MAY BE MANUALLY INCREASED TO REFLECT ELEVATIONS OTHER THAN THE MEAN. FOR A MORE DETAILED DESCRIPTION OF THE INPUT DATA REQUIRED TO USE THIS PROGRAM FOR FLOOD INSURANCE STUDIES, REFER TO THE GUIDELINES AND SPECIFICATIONS FOR STUDY CONTRACTORS, DATED MAY 1990, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

## NAME LINE

THIS LINE IS REQUIRED AND SHOULD BE THE FIRST INPUT LINE.

| COLUMNS | CONTENTS |
|---|---|
| 1-2 | BLANK |
| 3-28 | CLIENT'S NAME |
| 29-60 | BLANK |
| 61-70 | ENGINEER'S NAME |
| 71-80 | JOB NUMBER |

## JOB DESCRIPTION LINE

| COLUMNS | CONTENTS |
|---|---|
| 1-2 | BLANK |
| 3-76 | PROJECT DESCRIPTION OR RUN IDENTIFICATION |

| | |
|---|---|
| 77-80 | RUN NUMBER |

## LAST SLOPE LINE

THIS LINE IS REQUIRED AND INPUTS THE SLOPE OF THE BEACH PROFILE LANDWARD OF THE MOST LANDWARD POINT IN THE MODEL.

| COLUMNS | CONTENTS |
|---|---|
| 1-4 | SLOPE (COT) OF LAST PROFILE SEGMENT |
| 5-80 | BLANK |

## PROFILE LINES

THESE LINES DEFINE THE BEACH PROFILE AND SHOULD BE INPUTTED FROM THE MOST SEAWARD POINT (DEPTH TWO TO THREE TIMES THE MEAN WAVE HEIGHT) TO THE MOST LANDWARD POINT. THE NUMBER OF PROFILE LINES CANNOT EXCEED 20.

| COLUMNS | CONTENTS |
|---|---|
| 1 | LAST POINT FLAG. THE MOST LANDWARD POINT ON THE PROFILE IS INDICATED BY A 1. IF NOT THE LAST POINT, LEAVE BLANK. |
| 2 | BLANK |
| 3-7 | ELEVATION WITH RESPECT TO NGVD, IN FEET. |
| 8 | BLANK |
| 9-14 | HORIZONTAL DISTANCE IN FEET. IT IS COMMON TO ASSIGN THE SHORELINE (ELEV. 0.0) AS POINT 0 WITH SEAWARD DISTANCES BEING NEGATIVE AND LANDWARD DISTANCES POSITIVE. |
| 15 | BLANK |
| 16-20 | THE ROUGHNESS FACTOR ON THE FIRST PROFILE LINE IS THE ROUGHNESS FOR THE SLOPE BETWEEN THE FIRST TWO SETS OF PROFILE POINTS. THE ROUGHNESS FACTOR ON THE SECOND LINE IS THE ROUGHNESS FOR THE SLOPE SECTION BETWEEN THE SECOND AND THIRD SETS OF PROFILE POINTS, ETC. |
| 21-80 | BLANK |

## WATER LEVEL AND WAVE PARAMETER LINES

| COLUMNS | CONTENTS |
|---|---|
| 1 | LAST LINE, NEW TRANSECT FLAG. A 1 INDICATES THE LAST |

| | |
|---|---|
| | LINE FOR A GIVEN TRANSECT AND NOTIFIES THE USER THAT ANOTHER TRANSECT IS FOLLOWING. IF NOT THE LAST LINE OR THE LAST LINE OF THE LAST TRANSECT, LEAVE BLANK. |
| 2-6 | STILLWATER ELEVATION WITH RESPECT TO NGVD, IN FEET. |
| 7 | BLANK |
| 8-12 | MEAN DEEPWATER WAVE HEIGHT, IN FEET (VALUE MUST BE GREATER THAN 1 FOOT). |
| 13 | BLANK |
| 14-18 | MEAN WAVE PERIOD, IN SECONDS. |
| 19-80 | BLANK |

```
FEMA                                                KBN         0000000000
  RUNUP MODEL EXAMPLE TRANSECT                                          25
10.
  -30. -200.   1.
    0.    0.   1.
  8.4   544.   .9
1 15.6  699.69 .9
  13.8 5.46  5.13
  13.8 5.46  5.4
  13.8 5.46  5.67
  13.8 5.75  5.13
  13.8 5.75  5.4
  13.8 5.75  5.67
  13.8 6.04  5.13
  13.8 6.04  5.4
 113.8 6.04  5.67
  FEMA                                               KBN          0000000000
  RUNUP EXAMPLE TRANSECT2                                               26
10.
  -20.   -100.   1.
    0.   0.      1.
   10.   50.     1.
   10.75 56.75   1.
1  20.   95.     1.
   13.8 5.46   5.13
   13.8 5.46   5.4
   13.8 5.46   5.67
   13.8 5.75   5.13
   13.8 5.75   5.4
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**NOTE:** This Readme file is also available in the RUNUP, Version 2.0, WinZip archive (filename: "readme"). Download RUNUP, Version 2.0.

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|---|---|
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