FEMA Benefit-Cost Analysis Re-engineering (BCAR)

Comparison of Proposed Expected Annual Number of Flood Calculations and Log-Linear Interpolation and Extrapolation of Flood Stages

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Purpose

The purpose of this report is to outline the findings of a comparison made between the Expected Annual Number of Flood (EANF) Calculations proposed at the September 7, 2007, Benefit Cost Analysis Reengineering (BCAR) Technical Advisory Group Meeting (TAG), and a method based on piecewise log-linear interpolation and extrapolation of flood stages. The report is divided into three sections:

- Riverine Flooding EANF Methodology
- Non-Riverine Flooding EANF Methodology
- Recommendations

Riverine Flooding EANF

Comparison of the Log-linear Method with the New EANF Method

Summary

A comparison was made between the new EANF calculation method presented in the September 7, 2007, TAG meeting (new EANF method) and a simpler method based on piecewise log-linear interpolation and extrapolation of flood stages (log-linear method). The purpose of this comparison was to determine if the log-linear method, which unlike the new EANF method that does not need to use the discharge data, can produce EANF results that are accurate enough for Benefit-Cost Analysis (BCA). To conduct the required tests, 145 data sets from Flood Insurance Studies (FISs) from various parts of the country were used. The results showed that the two methods do not generally produce similar results in terms of the EANF values or in terms of benefit-cost ratios (BCRs) calculated in the existing Full Data Module (FDM) using the EANF values calculated by the two methods. The log-linear method generally overestimates the BCR compared to the new EANF method, especially when the First Floor Elevation (FFE) is at or below the 10-year flood elevation.

Background

During the BCAR TAG meeting of September 6–7, 2007, a new EANF calculation method was presented to be used in the revision of the Federal Emergency Management Agency (FEMA) BCA FDM.

The proposed new EANF method incorporates statistical and hydraulic methods to capture both the physical and probabilistic characteristic of riverine flooding. It employs a frequency band approach instead of the 1-foot elevation to ensure that for

every case, a larger number of points (a maximum of 19 frequency bands versus the maximum of 9 elevation bands) are used to construct the curve in the EANF Versus Flooding Depth graph, and would lead to a more accurate evaluation of the BCR. The approach in the new EANF method is consistent with the approach traditionally used by the U.S. Corps of Engineers, and is based on establishing a relationship between flood frequency, stage-discharge, and damage-stage. A National Research Council publication describes this approach as being "consistent with longstanding scientific understanding" (*Risk Analysis and Uncertainty in Flood Damage Reduction Studies*, National Research Council, 1990).

After the new EANF presentation at the TAG meeting, concerns were raised about the need to use discharge values of various frequencies in the calculation. These concerns revolve around previous experience with the current FDM (which also requires the use of discharge values). According to some members of the TAG, in some cases appropriate discharge values are unavailable, or the users misread or otherwise misuse the discharge values. It was suggested that perhaps a much simpler approach, not requiring discharge data, could be employed without much loss of accuracy. As an alternative, a simple approach based on log-linear interpolation of flood stages was proposed.

Subsequently, FEMA asked the team to develop the log-linear method and compare its results to the results from the new EANF method. This report describes the comparison of the results from a large number of tests of the two methods. The proposition here is that the new EANF method produces the more accurate results, and the purpose of the tests was to see how closely the results from the log-linear method match the results from the new EANF method.

The Log-linear Method

To enable the required tests, the log-linear method was developed in an Excel spreadsheet. The method is based on the piecewise linear interpolation in a flood stage versus logarithm of recurrence interval. Any flood stage between the four recurrence intervals of 10-, 50-, 100- and 500-years is simply interpolated from a linear fit to each two subsequent points. The flood stages above the 500-year level are extrapolated by extending the fit line between the 100- and 500-year points upward. The flood stages below the 10-year level are extrapolated by extending the fit line between the 50- and 10-year points downward. For extremely low stages, the partial duration series correction is employed, limiting the maximum annual probability in partial duration calculations to approximately 0.95 (or the maximum number of annual occurrences to three) consistent with both the current FDM and the new EANF method. Figure 1 shows an example of the piecewise log-linear interpolation and extrapolation.

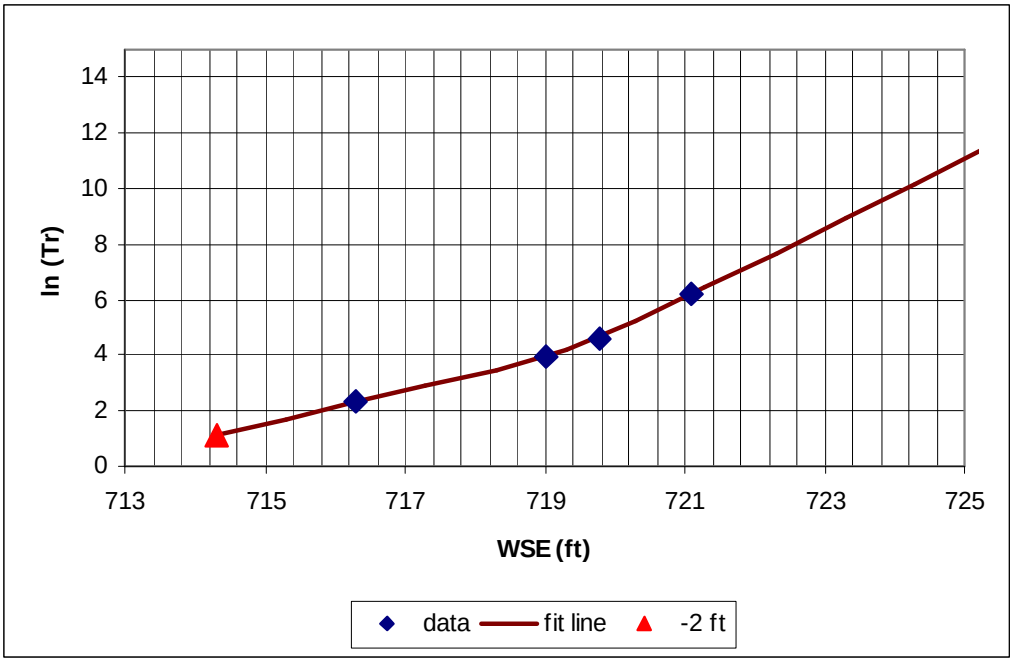


Figure 1. Example of Piecewise Log-linear Interpolation and Extrapolation.

Test Data

To conduct the required tests, 145 data sets from FISs of various parts of the country were used. Each set consists of the stage and discharge values for 10-, 50-, 100- and 500-year recurrence intervals, as well as the streambed elevation. For each data set, four cases were considered by assuming the FFE to be -2 feet below 10-year, -1 foot below 10-year, exactly at 10-year, and 1-foot above 10-year flood elevation. Altogether, 580 combinations were used in the tests. Each data combination was identified by a BCA ID from 1 to 580. Each BCA ID was used in evaluating the EANF values using the current FDM, the new EANF method, and the log-linear method. The large number of calculation runs required was facilitated by use of an MS Excel macro developed to automate repeated runs of the various spreadsheets involved in the calculations.

The EANF values in the new EANF method are calculated based on frequency bands, but in the log-linear method, they are calculated based on 1-foot elevation bands. In order to allow a one-to-one comparison of methods and also allow the calculation of BCRs in FDM, the EANF values from the new EANF method needed to be interpolated to a 1-foot band. The 1-foot band interpolation of results was achieved successfully for most cases. However, for some cases, the interpolation ran into trouble, even if the new EANF method itself produced valid results. This was because, in the new EANF calculations, the lower limit of EANF calculation is the recurrence interval corresponding to the -2 feet of flood, and the upper limit is the 500-year elevation. In several cases,

interpolation to elevations below FFE or extrapolation to flood levels above 8 feet exceeded these limits. Consequently, when the data were processed, the new EANF method produced errors for a number of cases. These cases represented problems or peculiarities with data as categorized below:

1. First group of problems arose because of errors in data sets. There were a few data sets where streambed elevation (SBE) was below the 10-year flood, or 100-year elevation was above the 500-year elevation. In all these cases, the log-linear method produced EANF values, even if some of these cases led to unreasonable BCRs in excess of 200. The 1-foot band interpolation from the new EANF method produced no results for such cases, and that was how these data problems were detected. The data errors for these cases were corrected and these cases were used for the rest of this study.

2. At some cross-sections, the FFE was very close to SBE. When calculating EANF for various elevations, two feet or one foot below the FFE (especially where FFE was assumed to be 1 or 2 feet below 10-year elevation) could take the elevation to or below SBE. For these cases the log-linear method still produced EANF values but the one-foot band interpolation from the new EANF method produced errors.

3. In a few cross-sections, elevation bands several feet above FFE would take the elevation above the 500-year level. For these cases, the log-linear method still produced EANF values, but the 1-foot band interpolation from the new EANF method produced errors because the new EANF values do not calculate any EANF beyond the 500-year flood elevation.

All cases discussed in numbers 2 and 3 were eliminated from the test. This left 444 error-free cases for comparison of results. A BCA ID was assigned to each data set to facilitate identification and use of the data during data analysis.

Data Analysis and Results

For all the 444 error-free cases explained previously, the project team calculated the EANF values by current FDM, the log-linear method, and the new EANF method. The EANF values from these methods were used in FEMA Riverine Flood FDM (Version 5.2.5) to evaluate the BCR for acquisition of a one- or two-story building with basement and typical Building Replacement Value (BRV), contents, and displacement values.

The table in Appendix I summarizes the BCR results for all three methods for all 444 BCA IDs with acceptable results. The last column in each table section shows the percent difference between the BCR calculated by the log-linear and new EANF methods.

The main focus of this study was to compare the results of the log-linear method to the new EANF method. Figure 2 plots the BCR results from the new EANF method versus

BCRs from the log-linear method. Most of the points in Figure 2 fall below the 45-degree line, meaning that the log-linear BCRs are generally larger than new EANF BCRs. Most BCR values in Figure 1 lie well above the 1.0 threshold, because the FFE values ranged from 2 feet below to 1 foot above the 10-year flood elevation, and the structure analyzed has a basement. A number of extremely large BCR values beyond 20 are produced by the log-linear method, but not by the new EANF method.

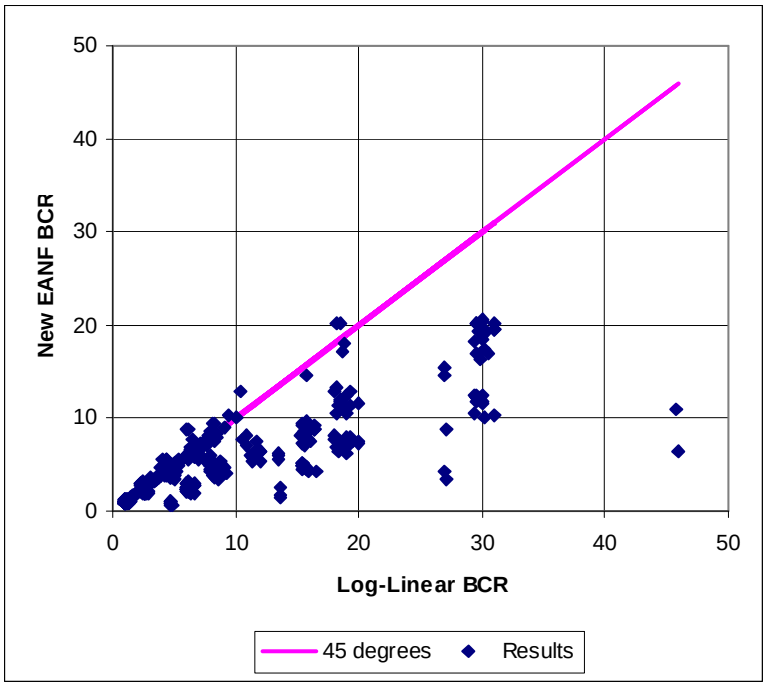


Figure 2. Comparison of BCRs from Log-linear Method to the New EANF Method.

Figure 3 shows the same information as Figure 2, but focuses on the lower BCR values less than or equal to 1.5 to examine the results close to the critical value of unity for BCR. Again, most of the points lie below the 45 degree line. All the points that lie below

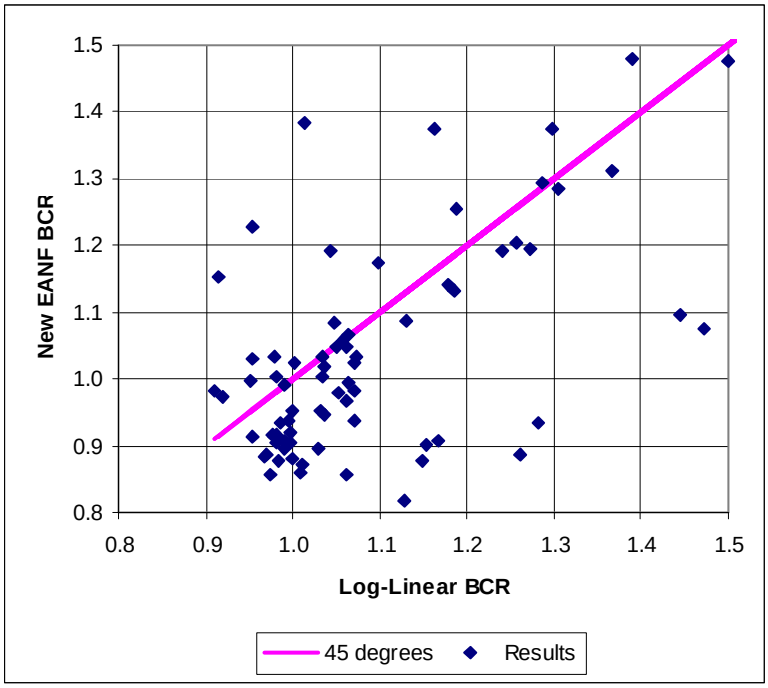


Figure 3. Comparison of Results for BCR Less than or Equal to 1.5.

The line of new EANF BCR = 1 and to the right of the line on log-linear BCR = 1 are the cases that are not cost-effective according to the new EANF method, but are cost-effective according to the log-linear method. There are only a few points on Figure 3 that represent cases that would qualify as cost-effective by the new EANF method, but not by the log-linear method. It can be seen from this analyses that the two methods in general do not produce similar conclusions for cost-effectiveness.

The percent differences between the BCR values calculated by log-linear and the new EANF method were analyzed. Figure 4 shows this percentage for all BCA IDs when they are sorted in ascending order of percentage of difference. As seen in Figure 4, there are a lot more BCA IDs with positive differences than negative differences. Also, the absolute value of the positive differences is mostly larger than the negative differences. This indicates that, for most cases tested, the log-linear method overestimated the BCR calculated by the new EANF method.

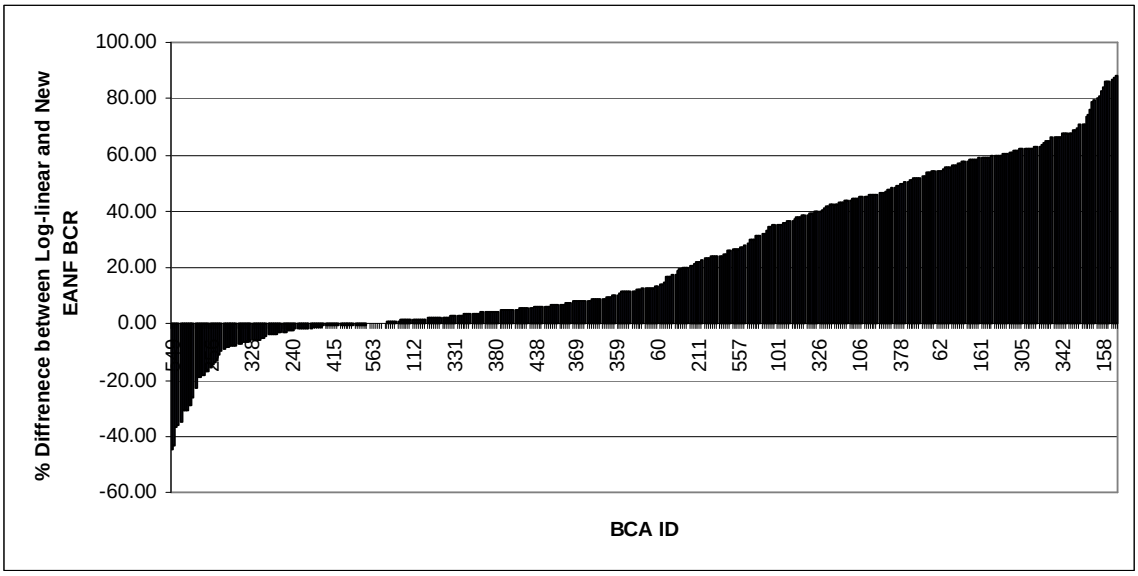


Figure 4. Percentage of Difference between BCRs Calculated by the Two Methods.

The difference between the results produced by the two methods was further analyzed by breaking down the values of percentage differences into categories based on the FFE position relative to the 10-year flood elevation. Table 1 presents the results of this analysis.

Table 1. Percentage of Differences between the BCRs by the Two Methods Categorized Based on Position of FFE.

FFE Position	# cases analyzed	# positives: BCR Log lin>BCR new EANF	% Positive	# cases -10%<diff<10%	% within 10%	Average of % differences	Max of % differences	Min of % differences
10Year - 2	108	97	89.81%	24	22.22%	32.77	85.82	-44.98
10Year - 1	112	98	87.50%	31	27.68%	30.81	87.40	-36.57
10Year	112	88	78.57%	48	42.86%	21.06	88.35	-34.79
10Year+ 1	112	66	58.93%	84	75.00%	7.49	86.37	-36.33
Total	444	349		187	42.12%	22.946		
Average			78.60%					

The fourth column of Table 1 (# positives: BCR log-lin>BCR new EANF) shows that the higher the FFE, the smaller the percentage of differences. However, for all FFE levels the percent differences are over 50 percent, indicating that the log-linear method produced larger BCRs than the new EANF method.

The sixth column of Table 1 (# cases -10%<diff<10%) shows the percentage of the cases that the BCR produced by the two methods that are within 10 percent of each other. For lower FFEs, this percentage is very low (22 to 28 percent), but when the FFE moves above the 10-year elevation, this percentage rises to 75 percent. Only 42 percent of all BCAs analyzed had BCRs within 10 percent of each other.

We also compared the results by the two methods to the results from the current FDM. Figure 5 shows that the log-linear method overestimated the BCRs compared to the FDM, because most of the points lie to the right of the 45-degree line. Figure 6 compares the results from the new EANF method with the FDM results. This figure shows that the points are scattered on both sides of the 45-degree line, meaning that implementing the new EANF method in the existing FDM could increase the BCR in some cases, and decrease the BCR for other cases. Figure 7 shows the same comparison, showing only all BCRs less than or equal to 1.5, to focus closer around the critical BCR of unity. This figure shows that implementing the new EANF method could change the conclusion from the existing FDM, regarding the cost-effectiveness of a project.

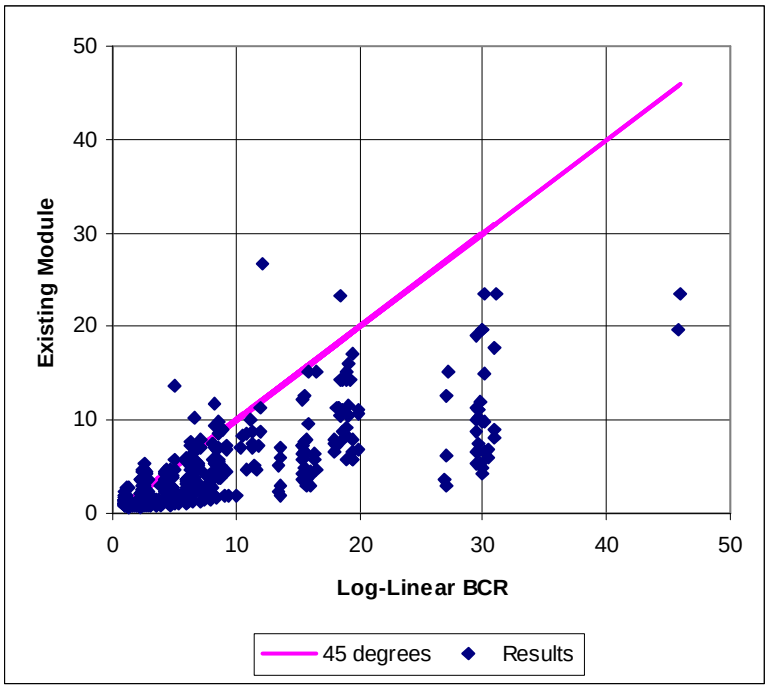


Figure 5. Comparison of BCRs from Log-Linear Method to the Existing FDM Method.

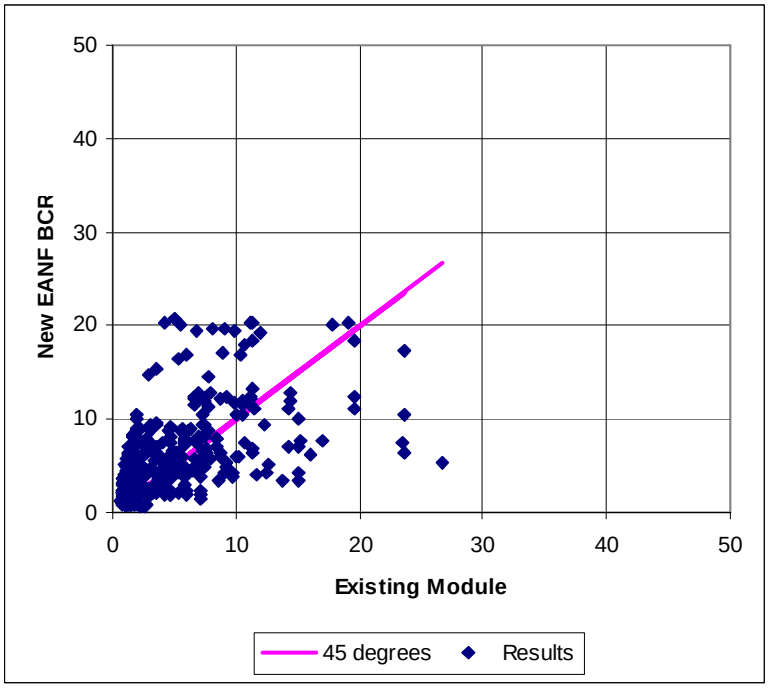


Figure 6. Comparison of BCRs from Existing FDM Method to the New EANF Method.

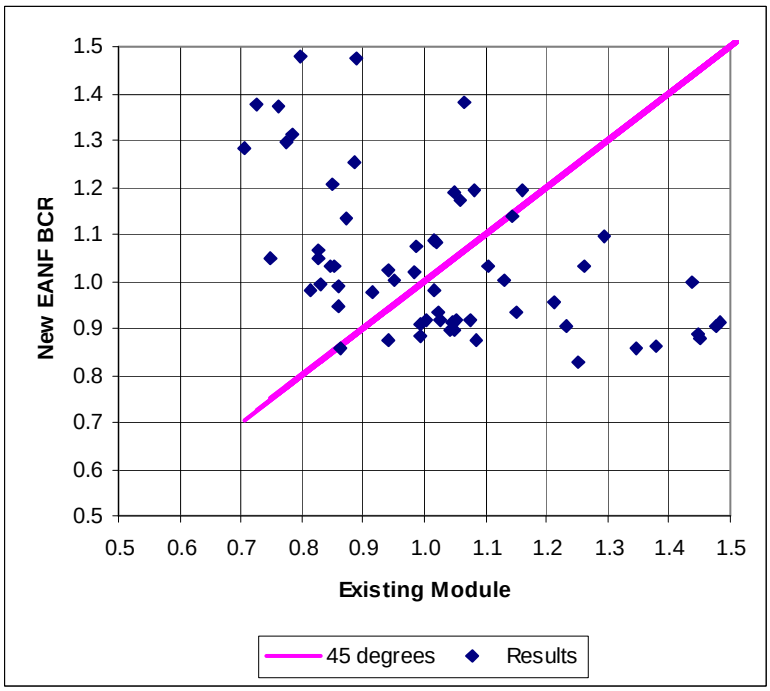


Figure 7. Comparison of BCRs from Existing FDM Method to the New EANF Method for BCRs Less Than or Equal to 1.5.

The results of the three methods can also be compared at the level of the EANF values rather than the BCR. Figure 8 shows the EANF values calculated by the three methods for a sample case (BCA ID 278) for FFE 1 foot below the 10-year flood elevation. This example represents a case where the existing FDM EANF values are unacceptable for low-flood depths. Both the log-linear and the new EANF method avoided the error in FDM calculations for this case, but they yielded different EANFs for low-flood depths.

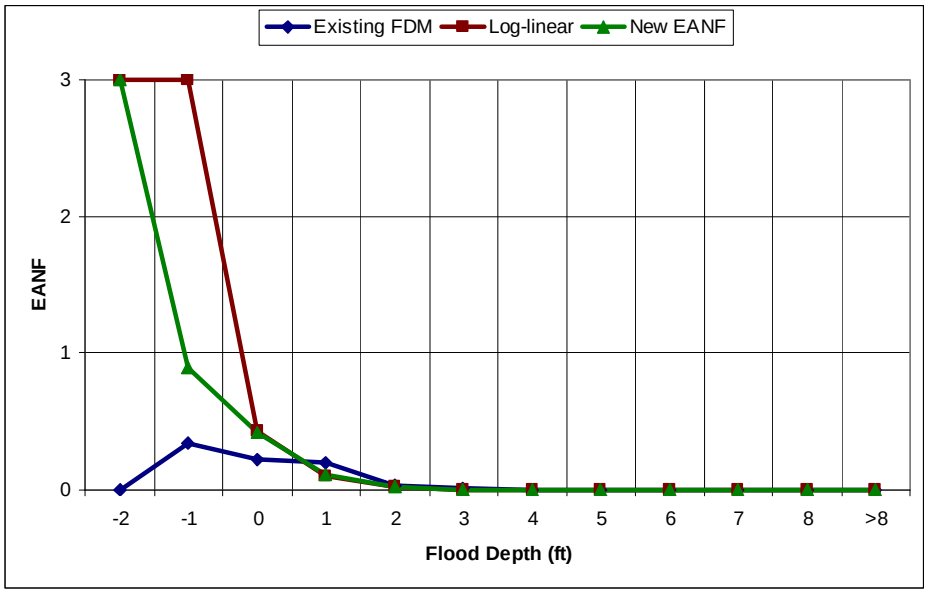


Figure 8. EANF Calculated by Three Methods for BCA ID 278.

Figure 9 shows another example (BCA ID 108) of when the FFE is 1 foot above the 10-year flood. The FFE actually falls on the 50-year flood elevation, and the building would not be cost-effective to acquire. As shown in Figure 8, the EANF values for the two methods look very close, but these values, when used in the existing FDM, produced different conclusions. The 1-foot band interpolation of the EANF values from the new EANF method resulted in a BCR of 0.88 (not cost-effective), while the log-linear method resulted in a BCR of 1.15 (cost-effective). The existing module gave a BCR of 0.94 for this case.

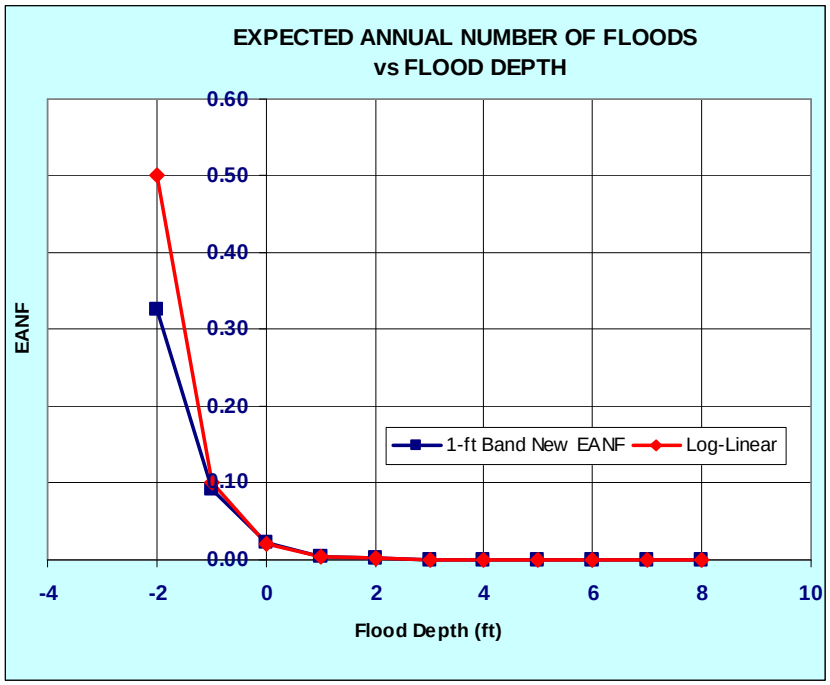


Figure 9. EANF Calculated by Two Methods for BCA ID 108.

Coastal Flooding EANF

Comparison of the Log-linear Method with the Existing EANF Method

Summary

A comparison was made between the existing Coastal A and V Zone Flood Full Data Modules (existing EANF method) and a simpler method based on piecewise log-linear interpolation (log-linear method) and extrapolation of flood stages. The purpose of this comparison was to determine if the log-linear method, which unlike the existing EANF method does not need to use a 1-year stillwater elevation, can produce EANF results that are accurate enough for BCA. To conduct the required tests, 45 data sets from FIS studies from various parts of the country were used. The results of the analysis illustrated the existing EANF calculations and the log-liner interpolation do not produce similar results in terms of the EANF values or the BCRs. Generally, the log-linear method results in higher BCRs compared to the existing EANF method, especially when the FFE is at or below the 10-year flood elevation.

Background

During the BCAR TAG meeting of September 6–7, 2007, no changes were recommended to the Coastal A and V Zone Flood FDM EANF calculations. The TAG recommended removing the need for the applicant to provide a 1-year stillwater elevation, and to instead complete the EANF calculations based on a piecewise linear

regression. In many cases, identifying a 1-year elevation is not straightforward for the average applicant (i.e., ensuring the National Oceanic and Atmospheric Administration (NOAA) data is in the same datum as the FIS stillwater elevations and/or calibrating the tide station data). It was suggested that perhaps a much simpler approach, not requiring the 1-year elevation, could be employed without much loss of accuracy. As an alternative, a simple approach based on piecewise log-linear interpolation of flood stages was proposed. Subsequently, FEMA asked the team to develop the log-linear method and compare its results to results obtained with the existing EANF method. This report describes the comparison of the results from a large number of tests using the two methods. It must be noted that the proposition here is that the existing EANF method produces the more accurate results. The purpose of the tests was to see how closely the results from the log-linear method match those from the results with the existing EANF method.

The Existing Coastal Module EANF Calculations

For coastal flooding the EANFs are determined by using the Stillwater Elevations provided by the analyst; the module requires the analyst to provide elevations for the 1- and 100-year events along with three other return periods. A linear relationship is established between *x* and *y*, as defined below:

$$x \text{ is the Adjusted Elevation} = El_{RP} - El_1$$

Where:

El_1 is the 1-year flood elevation.

El_{RP} is the stillwater elevation for a given return period.

and

$$y = \ln\left(\frac{ExcP}{CDF}\right) = \ln\left(\frac{\frac{1}{RP}}{1-\frac{1}{RP}}\right) = \ln\left(\frac{1}{RP-1}\right)$$

Where:

ExcP is the probability of exceedance.

CDF is the cumulative probability or probability of non-exceedance of a flood depth with return period RP.

RP is the return period.

The linear equation is:

$$y = C + i\,x \rightarrow \ \ln\left(\frac{1}{RP-1}\right) = C + i\,(El_{RP} - El_1)$$

Where:

C is the constant found by linear intercept.

i is the slope of the line.

Taking the exponential of both sides of the linear equation:

$$\left(\frac{1}{RP-1}\right) = Exp(C + i\,(El_{RP} - El_1))$$

Let the right-hand side of the equation be K:

$$\left(\frac{1}{RP-1}\right) = K \rightarrow RP - 1 = \frac{1}{K} \rightarrow RP = \frac{1}{K} + 1 = \frac{1+K}{K}$$

This equation can be used to calculate the exceedance probability at various depths of flooding. For Z = minus 2.5 to 16.5:

$$ExcP(Z) = \frac{1}{RP} = \frac{1}{1+\frac{1}{K}} = \frac{1}{1+\frac{1}{Exp(C + i\,(Z \ \ - El_1))}}$$

Where:

Z is the Depth of Flooding in half-foot increments.

The EANF can be calculated by subtracting the exceedance probabilities of two consequent flood elevations. To ensure reasonability, the calculation is conditional for flooding depths that are close to the 1-year elevation. If the two consequently calculated values of flood elevation are both greater than the 1-year elevation, then their corresponding exceedance probabilities are simply subtracted from each other to find the EANF of that elevation band. If the higher elevation is higher than the 1-year flood, but the lower elevation is lower than the 1-year flood, then the EANF of that

elevation band is set equal to one minus the exceedance probability of the higher elevation. If the higher elevation of an elevation band is equal to or smaller than the 1-year elevation, then the EANF of that elevation band is set to one.

$$If\,(d+0.5+FFE) > El_1\ AND\,(d-0.5+FFE) > El_1 \rightarrow EANF(d) = ExcP(d+0.5) - ExcP(d+0.5)$$
$$If\,(d+0.5+FFE) > El_1\ AND\,(d-0.5+FFE) \leq El_1 \rightarrow EANF(d) = 1 - ExcP(d+0.5)$$
$$If\,(d+0.5+FFE) \leq El_1 \rightarrow EANF(d) = 1$$

Where:

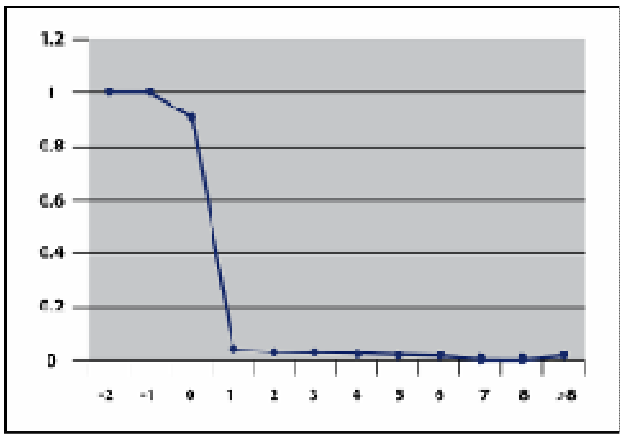
EANF(d) is the Expected Annual Number of Floods at depth d.

d is the Depth of Flooding (which typically ranges from minus 2 feet to 16 feet, but the actual range depends on the Depth Damage Function associated with the building type).

FFE is the First Floor Elevation of the building.

The following figure illustrates the results of the coastal EANF calculations.

	FFE	d	EANF
		-8	1
Elevation	3	-7	1
Frequency A	10	-6	1
Frequency B	50	-5	1
Frequency C	100	-4	1
Frequency D	500	-3	1
BFE	10.8	-2	1
1 Year	2.5	-1	1
10 Year	4.2	0	0.895001016
50 Year	8.9	1	0.025566275
100 Year	10.8	2	0.019756203
500 Year	17.2	3	0.015080554
		4	0.011404141
1 Year	2.5	5	0.008563035
10 Year	4.2	6	0.006395551
50 Year	8.9	7	0.004757712
100 Year	10.8	8	0.00352883
500 Year	17.2	>8	0.009946683



The Log-linear Method

To enable the required tests, the log-linear method was developed in an Excel spreadsheet. The method is based on the piecewise linear interpolation of the stillwater elevation versus the logarithm of recurrence interval. Any flood stage between the four recurrence intervals of 10-, 50-, 100- and 500-years is simply interpolated from a linear fit between two subsequent points. For example, the flood stages above the 100-year level are extrapolated by extending the fit line between the 100- and 500-year points upward; whereas the flood stages below the 10-year level are estimated by extending the fit line between the 10- and 50-year points downward. The EANF values were calculated based on 1-foot elevation bands in order to allow a one-to-one comparison with the existing module. The maximum expected annual number of floods was limited to one, and the 1-year flood elevation was limited as to be no higher than the FFE (if the regression calculated it to be higher than the FFE). Example results follow:

FFE		7.2		
BFE		11.5		
		Frequency	Stillwater Elevation	Adjusted SWEL
Must be >=2 AND <=10	A	10	10.8	10.8
Must be > Frequency A AND < 50	B	50	11.5	11.5
Must be 100	C	100	11.7	11.7
Must be >100 AND <500	D	500	12.2	12.2
1year is OPTIONAL		1		C

Green Cells Illustrate User Entered Data

Note, if adopted the final calculations will be built to allow for more frequencies to be inputted and integrate them into the Regression
Recommend Four Points MUST be provided, this does NOT justify applicant using 100 and 500 to determine the 10 and 50 via a Log Linear Regression
IF 1 year is NULL, 1 Year is Estimated based on Log Linear Regression of SWEL Associated with A & B, or two lowest Frequency Events
When ESTIMATED using a Log Linear Regression, the 1 Year can be no less than the FFE
IF BFE is greater than 100 year SWEL then, each SWEL is adjusted based on ratio of BFE to the 100 Year SWEL

1 year 7.2 *If 1-year is not provided, then Estimated based on Log Linear Regression of SWEL Associated with the two lowest Frequency Events*

	1	7.2	Slope	Intercept		1	7.2	Slope	Intercept
A	10	10.8	-3.6	7.2		10	10.8	-0.277778	2
B	50	11.5	-1.001473591	9.798526409		50	11.5	-0.998529	9.784109
C	100	11.7	-0.664385619	10.37122876		100	11.7	-1.50515	15.61025
D	500	12.2	-0.715338279	10.26932344		500	12.2	-1.39794	14.3559

	Frequency	SWEL	Flood Depths		Flood Depth	EANF
	2	8.283708	1.1		-2	5.2	1
A	5	9.716292	2.5		-1	6.2	1
	8	10.45112	3.3		0	7.2	1
	10	10.8	3.6		1	8.2	0.3075
B	20	11.10147	3.9		2	9.2	0.076925
	30	11.27782	4.1		3	10.2	0.14675
	40	11.40295	4.2		4	11.2	0.053875
	50	11.5	4.3		5	12.2	0.002
	60	11.55261	4.4		6	13.2	0.00003
C	70	11.59709	4.4		7	14.2	3.3E-05
	80	11.63561	4.4		8	15.2	1.2E-07
	90	11.6696	4.5		>8	16.2	5.12E-09
	100	11.7	4.5			
	200	11.91534	4.7			
	300	12.0413	4.9			
D	400	12.13068	4.9			
	500	12.2	5			

Note if adopted, a flood depth check would be implemented to ensure flood depths are greater than or at least equal to the previous frequency

Figure 10. Spreadsheet Developed to Calculate Expected Annual Number of Floods Based on a Piecewise Log-linear Regression.

Test Data

To conduct the required tests, 45 data sets from FISs of various parts of the country were used. Each set consisted of the stillwater elevation data values for the 10-, 50-, 100- and 500-year recurrence intervals. For each data set, 24 cases were considered by assuming the FFE to be -2 feet below 10-year, -1 foot below 10-year, exactly at 10-year, and 1-foot above 10-year flood elevation. Wave Height Factors of between 0 to 5 feet were also used. Altogether, 1,080 scenarios were established for testing. However, tidal data collected from numerous NOAA tide stations around the country did not have a geodetic vertical datum associated with them. Therefore, it was not possible to properly associate a 1-year stillwater elevation (based on the NOAA tide station data) with the FIS stillwater elevation. As a result, only 216 of the 1,080 scenarios were used. Each scenario was used in evaluating the EANF values using the current modules, and a piecewise linear regression. A macro in *MS Excel* was developed to help automate the repeated analyses involved in these calculations. A BCA was conducted for a One- or Two-Story with Basement 2,000-square foot (sf) residence at each location, with a BRV of $100/sf, FEMA Standard Values for Contents and Displacement, a Project Useful Life of 30 years, an assumption that the structure was being elevated 5 feet, and a Project Cost of $100,000.

Data Analysis and Results

The main focus of this study was to compare the results of the log-linear method to the existing EANF method. Figure 11 plots the BCR results from the existing coastal flood full data module versus BCRs based on the piecewise log-linear method. Almost all of the points in Figure 11 fall above the 45-degree line, meaning that the log-linear BCRs are larger than the existing module BCRs. A number of extremely large BCR values beyond 10 are produced by the log-linear method, but not by the existing EANF method.

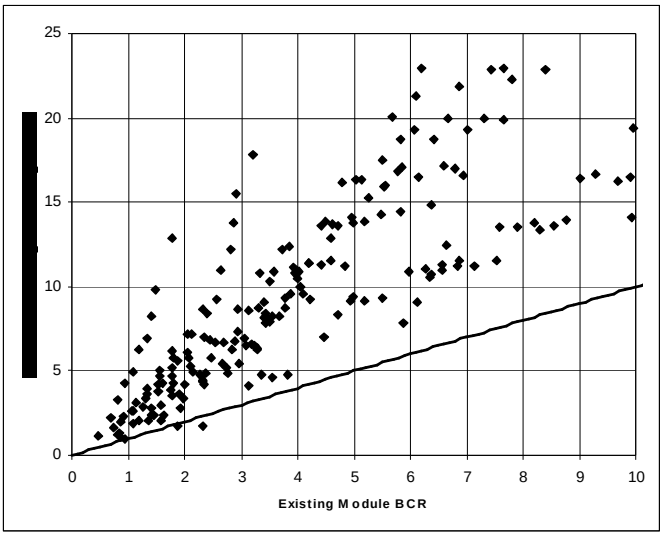


Figure 11. Comparison of BCRs from Piecewise Log-Linear Method to the Existing Coastal FDM EANF Method.

Figure 12 is a similar plot; however the comparison is of BCR results with the existing EANF method versus an analysis that estimates the 1-year flood elevation based on a log-linear regression of the 10- and 50-year flood events.

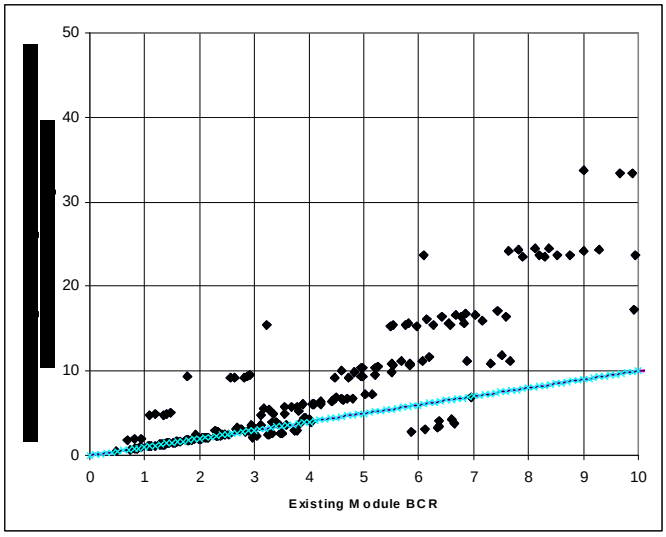


Figure 12. Comparison of BCRs from Existing Module Using a Log-Linear Regression of the 10- and 50-Year Stillwater Elevation to Determine the 1-Year Stillwater Elevation to the Existing EANF Method (1-year based on NOAA tide data).

Figure 13 and 14 show similar plots to the ones illustrated in Figures 11 and 12, but focus on the lower BCR values.

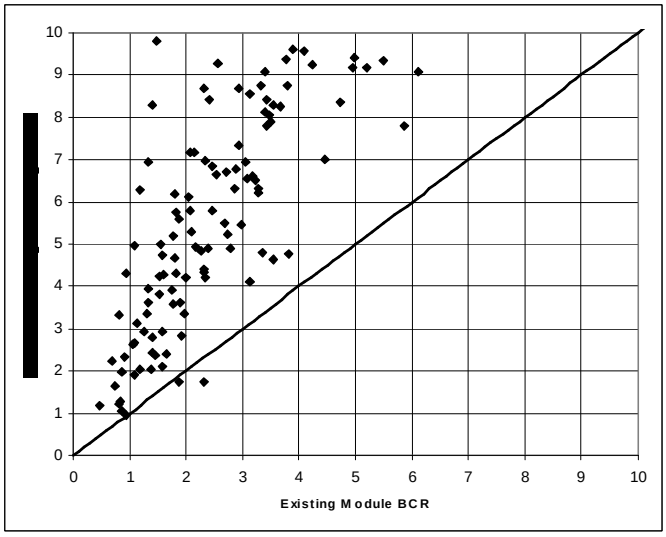


Figure 13. Comparison of BCRs from Piecewise Log-Linear Method to the Existing Coastal FDM EANF Method.

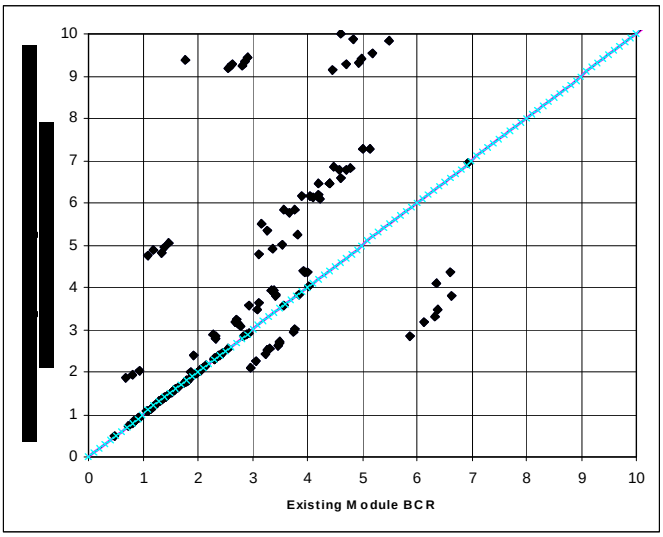


Figure 14. Comparison of BCRs from Existing Module Using a Log-Linear Regression of the 10- and 50-Year Stillwater Elevation to Determine the 1-Year Stillwater Elevation to the Existing Coastal FDM EANF Method (1-year based on NOAA tide data).

The percentage differences between the BCR values determined by the existing EANF method and the log-linear method were calculated. Figure 15 shows this percentage for all scenarios when they are sorted in ascending order of percentage of difference. As seen in Figure 15, almost all of the scenarios have a positive difference, and the absolute value of the positive differences is larger than the negative differences. This indicates that, for most cases tested, the log-linear method results in larger BCRs than the existing EANF method.

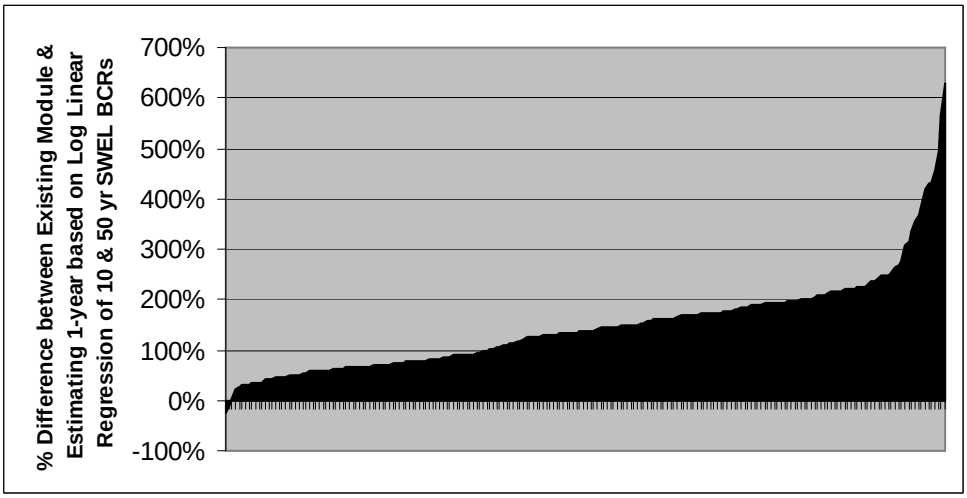


Figure 15. Percent of Difference between BCRs from Log-Linear Method to the Existing EANF Method.

The difference between the results produced by the existing EANF method versus using a piecewise log-linear regression was further analyzed by breaking down the values of percentage difference into categories based on the FFE position relative to the 10-year flood elevation. Table 2 presents the results of this analysis.

Table 2. Percentage of Differences between BCRs Based on Position of FFE (existing module versus a log-linear regression).

FFE Position	# Cases	BCR Log Linear Reqression Equal to Existing Module	# Positive BCR Log Linear Regression versus Existing Module	% Equal or Positive	Cases w/in 10%	% within 10%	Average of % Difference	Max of % Difference	Min of % Difference
10Year Plus -2	54	0	54	100%	0	0%	136%	334%	29%
10Year Plus -1	54	0	54	100%	0	0%	156%	420%	52%
10Year Plus 0	54	0	54	100%	0	0%	159%	493%	25%
10Year Plus 1	54	0	52	96%	2	4%	139%	627%	-25%
	216	0	214	99%	2	1%	147%		

Figure 16 is similar to Figure 15, however the percentage difference is based on the existing EANF method versus using a log-linear regression of the 10- and 50-year stillwater elevation to determine the 1-year stillwater elevation before using the existing module.

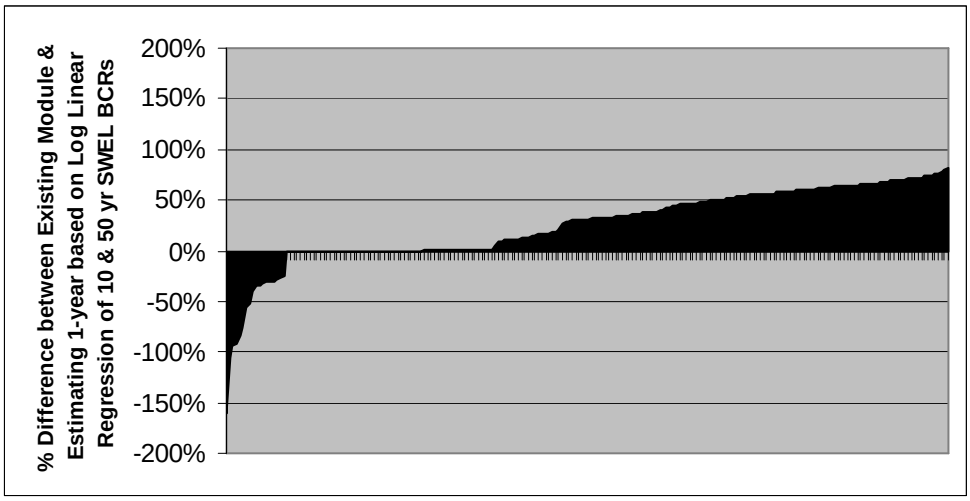


Figure 16. Percentage of Difference between BCRs from Existing Module Using a Log-Linear Regression of the 10- and 50-year Stillwater Elevation to Determine the 1-Year Stillwater Elevation to the Existing EANF Method (one-year based on NOAA tide data).

The difference between the results produced by the existing module versus using a log-linear regression of the 10- and 50-year stillwater elevation to determine the 1-year stillwater elevation before using the existing module was further analyzed by breaking down the values of percentage differences into categories based on the FFE position relative to the 10-year flood elevation. Table 3 presents the results of this analysis.

Table 3. Percentage of Differences between BCRs Based on Position of FFE Existing Module Using a Log-Linear Regression of the 10- and 50-Year Stillwater Elevation to Determine the 1-Year Stillwater Elevation Versus the Existing EANF Method (1-year based on NOAA tide data).

FFE Position	# Cases	BCR Log Linear Reqression Equal to Existing Module	# Positive BCR Log Linear Regression versus Existing Module	% Equal or Positive	Cases w/in 10%	% within 10%	Average of % Difference	Max of % Difference	Min of % Difference
10Year Plus -2	54	3	40	80%	4	7%	23%	73%	-161%
10Year Plus -1	54	8	37	83%	9	17%	30%	74%	-92%
10Year Plus 0	54	20	28	89%	21	39%	28%	79%	-33%
10Year Plus 1	54	31	11	78%	32	59%	20%	81%	0%
	216	62	116	82%	66	31%	25%		

Recommendations

Riverine EANF

The project team recommends adopting the EANF calculations presented at the September 6–7, 2007, BCAR TAG meeting. These calculations require the same hazard data as the current Riverine Flood Full Data Module, in addition to a stream bed elevation. The proposed Riverine EANF calculations incorporate statistical and hydraulic methods to capture both the physical and probabilistic characteristic of riverine flooding. The proposed method employs a frequency band approach instead of the 1-foot elevation to ensure that for every case, a larger number of points (a maximum of 19 frequency bands versus a maximum of 9 elevation bands) are used to construct the curve in the EANF versus flooding depth graph, and would lead to a more accurate evaluation of the BCR. The following figure illustrates the data required for these calculations, which is very similar to the existing module.

First Floor Elevation (ft) =		860.00	
Tr (Year)	Discharge (cfs)	Elevation (ft)	Stream Bed El. (ft)
10	1,046	861.00	853.50
50	1,686	863.00	SOLVE
100	1,997	863.50	
500	2,819	865.40	

Non-Riverine EANF

The project team recommends maintaining the existing calculations/approach as they provide more reasonable and accurate results. However, if removing the 1-year flood elevation from the input data is necessary, it is recommended that the module maintain the existing EANF calculations (based on a probability of exceedance), and

use a log-linear regression to estimate the 1-year flood elevation. Although the BCR results using these calculations do not compare well to the existing coastal flood FDM EANF calculations, this approach would increase the usability of the modules without sacrificing as much accuracy as calculating the entire analysis on a piece-wise log-linear regression. Considering the 1-year elevation impacts of the existing EANF calculations when the FFE is within certain depths of the 1-year flood event (2.5 feet for structures with basements, 0.5 feet without), which does not occur that often, sacrificing this level of accuracy for usability may be acceptable. Using this approach would remove the need for the applicant to provide a 1-year flood elevation. In addition, this would allow for applications to use this module for interior drainage projects and/or riverine flooding projects where discharge data is not available. If adopted, the calculations would be based on the following:

- Analyst provides at LEAST four stillwater elevations:
    - 2–10-year frequency
    - 25–50-year frequency
    - 100-year event
    - 250–500-year event
- The 1-year stillwater elevation is optional, if it is provided, then the expected annual number of floods at certain depths may reach one.
- If a 1-year stillwater elevation is not provided, the 1-year will be estimated based on a log-linear regression of the two lowest frequency elevations provided by the user (typically the 10- and 50-year flood events).
- If additional elevations are provided for frequencies between the 2–50-year event, the log-linear regression used to estimate the 1-year elevation will incorporate these values into the calculations.
- If estimated, the 1-year frequency will be no higher than the FFE.

APPENDIX A

Summary of Riverine Results Table

Table 1. Riverine Results Summary Table

BCA ID	Existing Module BCR	Log Linear Regression BCR	New Riverine EANF BCR	% difference Log-lin vs. New EANF
405	10.60	19.90	7.40	62.80
406	6.90	9.15	4.08	55.38
409	7.60	18.41	6.39	65.28
410	4.15	8.22	3.68	55.25
411	2.16	2.46	1.97	19.80
412	1.02	1.05	0.98	6.84
413	10.62	18.89	17.95	4.97
414	6.91	8.49	8.02	5.47
415	3.42	2.53	2.55	-0.67
416	1.44	0.95	1.00	-4.97
429	6.97	7.04	5.63	19.97
430	3.77	4.33	3.83	11.64
431	1.94	2.67	2.54	4.74
432	0.92	1.65	1.65	-0.33
433	10.16	6.58	5.94	9.76
434	4.66	4.37	4.14	5.12
435	1.72	2.89	2.84	1.82
436	0.93	1.90	1.91	-0.38
437	6.63	6.65	5.88	11.62
438	3.62	4.27	4.01	6.18
439	1.90	2.73	2.67	2.24
440	0.94	1.74	1.74	-0.35
442	12.58	15.47	5.22	66.22
443	6.02	6.04	2.43	59.75
444	2.32	1.00	0.94	5.64
453	4.92	6.96	6.73	3.31
454	2.33	5.09	5.03	1.20
455	1.40	3.72	3.73	-0.19
456	0.92	2.72	2.74	-0.92
457	4.85	6.92	6.11	11.70
458	2.67	4.77	4.46	6.64
459	1.45	3.30	3.22	2.49
460	0.89	2.30	2.31	-0.48
461	4.84	6.78	6.20	8.55
462	2.66	4.59	4.39	4.37
463	1.43	3.12	3.08	1.25
464	0.87	2.12	2.13	-0.71
470	4.69	16.44	9.25	43.72
471	2.35	6.66	2.90	56.39
472	1.02	1.28	0.94	26.97
473	7.01	10.39	12.81	-23.30
474	3.39	4.13	5.65	-36.57
475	1.43	2.22	2.91	-30.88
476	0.76	1.16	1.37	-18.31
477	5.96	6.45	7.69	-19.18
478	3.01	3.96	4.68	-18.02
479	1.41	2.39	2.70	-13.05
480	0.80	1.39	1.48	-6.37
481	6.61	29.60	12.13	59.00
482	4.35	15.47	4.99	67.76
483	2.21	6.05	2.29	62.19
484	0.99	1.00	0.88	11.85
485	6.63	19.38	7.77	59.91
486	4.38	8.82	4.24	51.89
487	2.24	2.72	2.08	23.66
488	1.02	1.00	0.92	7.79
489	23.59	30.13	17.36	42.39
490	15.13	15.86	7.65	51.79
491	7.18	6.32	2.39	62.21
492	2.70	1.15	0.90	21.71
493	23.58	31.08	10.40	66.52
494	15.11	16.52	4.22	74.47
495	7.16	6.73	1.94	71.20
496	2.68	1.35	0.76	43.19
497	23.56	45.92	6.51	85.82
498	15.08	27.12	3.42	87.40
499	7.13	13.65	1.59	88.36
500	2.66	4.81	0.66	86.38
501	10.50	19.05	10.55	44.60
502	5.34	8.64	4.29	50.27
503	2.39	2.67	2.12	20.62
504	0.81	1.07	0.98	8.29
505	10.51	18.43	11.95	35.17
506	5.35	8.24	4.96	39.80
507	2.41	2.47	2.39	3.23
508	0.83	1.06	1.07	-0.27
509	10.50	18.41	11.45	37.80
510	5.35	8.22	4.67	43.21
511	2.40	2.46	2.30	6.33
512	0.83	1.05	1.05	0.40
513	2.19	8.02	5.94	25.95
514	1.53	5.13	4.40	14.23
515	1.06	3.37	3.24	3.75
516	0.73	2.29	2.38	-3.82
517	2.32	7.61	7.75	-1.77
518	1.65	5.94	5.97	-0.52
519	1.21	4.64	4.59	1.18
520	0.91	3.63	3.52	2.89
521	1.98	7.70	7.22	6.27
522	1.50	5.89	5.73	2.82
523	1.14	4.54	4.54	-0.02
524	0.87	3.53	3.60	-2.12
525	9.96	29.44	10.53	64.23
526	6.48	15.36	4.46	70.97
527	3.20	5.98	2.11	64.78
528	1.35	0.97	0.86	12.00
529	9.93	30.03	11.83	60.60
530	6.45	15.76	4.77	69.72
531	3.17	6.22	2.17	65.20
533	7.31	11.89	6.53	45.07

BCA ID	Existing Module BCR	Log Linear Regression BCR	New Riverine EANF BCR	% difference Log-lin vs. New EANF
534	4.01	4.93	3.81	22.63
535	2.11	2.36	2.09	11.37
536	1.02	1.13	1.09	3.77
537	7.84	19.37	11.33	41.49
538	5.15	8.81	4.60	47.73
539	2.60	2.71	2.20	18.73
540	1.15	0.98	0.93	5.14
541	8.45	10.90	7.06	35.18
542	3.92	4.46	4.17	6.58
543	1.48	2.40	2.36	1.75
544	0.77	1.29	1.29	-0.51
545	17.74	30.93	20.07	35.09
549	2.23	6.13	8.89	-44.98
550	1.51	4.33	5.67	-30.75
551	1.07	3.03	3.51	-15.75
552	0.78	2.09	2.14	-2.09
553	6.58	18.02	7.77	56.86
554	3.50	7.97	4.33	45.69
555	1.73	2.34	2.21	5.41
556	0.75	1.06	1.05	1.18
557	4.32	7.52	5.52	26.55
558	2.39	4.56	3.79	16.95
559	1.29	2.80	2.57	8.42
560	0.78	1.75	1.72	1.74
561	2.37	7.33	7.17	2.18
562	1.66	5.52	5.47	0.95
563	1.20	4.17	4.17	0.04
564	0.88	3.15	3.17	-0.57
565	1.95	8.01	8.66	-8.07
566	1.53	6.33	6.67	-5.47
567	1.21	4.97	5.12	-3.00
568	0.96	3.89	3.92	-0.91
569	7.48	18.00	8.22	54.33
570	4.10	7.96	4.59	42.33
571	2.14	2.32	2.33	-0.24
572	1.02	1.05	1.08	-3.42
573	10.33	29.59	16.92	42.82
574	6.72	15.47	7.38	52.29
575	3.31	6.05	2.29	62.15
576	1.38	1.01	0.86	14.64
577	4.24	29.97	20.40	31.93
578	3.04	15.71	9.46	39.80
579	1.96	6.18	3.04	50.84
580	0.95	1.03	1.00	2.91

APPENDIX B

Summary of Non-Riverine Results Tables

Table 2. Benefit-Cost Ratio Comparisons

	BCR		
	Existing Coastal A Module	PW Log Linear Regression No 1 Year	% Difference Existing to Log Linear
109	15.12	20.20	34%
110	10.99	16.69	52%
111	7.89	13.51	71%
112	5.97	10.86	82%
113	3.84	12.34	221%
114	2.40	8.43	250%
115	1.81	5.76	218%
116	1.34	3.95	194%
117	6.94	16.62	139%
118	4.03	10.87	170%
119	2.55	6.65	161%
120	1.75	3.91	124%
121	9.94	19.37	95%
122	5.54	16.04	189%
123	2.65	11.00	316%
124	1.19	6.30	429%
125	7.65	19.90	160%
126	6.14	16.49	168%
127	4.60	11.52	150%
128	3.18	6.60	108%
129	6.67	19.93	199%
130	5.26	15.30	191%
131	3.89	9.61	147%
132	2.67	5.48	105%
133	6.38	10.74	68%
134	3.50	7.89	125%
135	2.06	5.78	181%
136	1.54	4.23	175%
137	5.14	16.35	218%
138	3.95	10.82	174%
139	2.88	6.78	135%
140	2.00	4.20	110%
141	12.65	20.42	61%
142	10.12	16.90	67%
143	8.54	13.66	60%
144	6.57	10.96	67%
145	14.85	23.79	60%
146	12.05	20.20	68%
147	9.28	16.69	80%
148	7.58	13.51	78%
149	6.37	14.84	133%
150	3.50	10.31	195%
151	2.06	7.17	248%
152	1.56	5.00	220%
153	7.30	19.94	173%
154	4.41	13.59	208%
155	2.94	8.70	196%
156	2.10	5.29	152%
157	10.20	22.25	118%
158	5.82	18.77	223%
159	2.92	15.48	429%
160	1.47	9.81	566%
161	8.39	22.88	173%
162	7.02	19.32	175%

	BCR		
	Existing Coastal A Module	PW Log Linear Regression No 1 Year	% Difference Existing to Log Linear
163	5.53	15.96	189%
164	4.06	10.02	147%
165	7.43	22.87	208%
166	6.08	19.31	218%
167	4.71	13.64	190%
168	3.42	8.42	146%
169	6.64	12.49	88%
170	3.77	9.36	148%
171	2.34	6.99	199%
172	1.78	5.20	191%
173	5.68	20.04	253%
174	4.49	13.85	208%
175	3.40	9.09	168%
176	2.46	5.79	136%
177	14.47	23.64	63%
178	12.61	20.05	59%
179	9.89	16.53	67%
180	8.31	13.35	61%
181	18.99	27.22	43%
182	14.92	23.49	57%
183	11.84	19.90	68%
184	9.01	16.42	82%
185	6.60	17.13	160%
186	3.74	12.23	227%
187	2.31	8.70	276%
188	1.79	6.19	246%
189	7.66	22.95	200%
190	4.79	16.13	237%
191	3.33	10.77	223%
192	2.46	6.83	178%
193	10.47	24.84	137%
194	6.10	21.27	249%
195	3.21	17.85	455%
196	1.77	12.85	627%
197	9.01	25.93	188%
198	7.81	22.25	185%
199	6.42	18.72	192%
200	4.96	14.11	185%
201	8.12	25.51	214%
202	6.86	21.90	220%
203	5.52	17.46	217%
204	4.20	11.38	171%
205	10.69	13.80	29%
206	6.34	10.55	66%
207	3.47	8.06	132%
208	2.04	6.13	200%
209	6.20	22.94	270%
210	5.02	16.33	225%
211	3.92	11.14	184%
212	2.93	7.35	151%
213	14.51	27.05	86%
214	11.74	23.33	99%
215	11.05	19.75	79%
216	9.68	16.25	68%

	BCR		
	Existing Coastal A Module	1 Year based on Log Linear Regression of 10 & 50 Year	% Difference Existing to Log Linear
1	6.87	11.19	39%
2	4.98	9.42	47%
3	3.36	4.91	32%
4	1.88	1.99	5%
5	3.06	2.26	-35%
6	1.60	1.60	0%
7	1.09	1.09	0%
8	0.73	0.73	0%
9	3.78	5.84	35%
10	2.27	2.89	21%
11	1.40	1.40	0%
12	0.80	0.80	0%
13	2.81	9.26	70%
14	1.33	4.83	72%
15	0.81	1.93	58%
16	0.48	0.48	0%
17	4.83	9.88	51%
18	3.27	5.36	39%
19	1.93	2.40	19%
20	0.93	0.93	0%
21	4.09	6.14	33%
22	2.74	3.14	13%
23	1.64	1.64	0%
24	0.87	0.87	0%
25	3.27	2.53	-30%
26	1.81	1.81	0%
27	1.26	1.26	0%
28	0.86	0.86	0%
29	3.42	3.82	10%
30	2.31	2.31	0%
31	1.44	1.44	0%
32	0.84	0.84	0%
33	7.52	11.84	36%
34	5.50	9.82	44%
35	3.82	5.26	27%
36	2.32	2.32	0%
37	9.92	17.23	42%
38	6.56	15.55	58%
39	4.72	9.27	49%
40	3.13	4.78	35%
41	3.32	2.55	-30%
42	1.87	1.87	0%
43	1.33	1.33	0%
44	0.92	0.92	0%
45	4.21	6.21	32%
46	2.70	3.26	17%
47	1.77	1.77	0%
48	1.09	1.09	0%
49	5.47	15.33	64%
50	2.56	9.18	72%
51	1.09	4.76	77%
52	0.69	1.87	63%
53	5.83	10.64	45%
54	4.22	6.09	31%
109	15.12	25.73	41%

	BCR		
	Existing Coastal A Module	1 Year based on Log Linear Regression of 10 & 50 Year	% Difference Existing to Log Linear
55	2.77	3.08	10%
56	1.57	1.57	0%
57	4.98	10.31	52%
58	3.56	5.83	39%
59	2.33	2.86	19%
60	1.37	1.37	0%
61	5.87	2.85	-106%
62	2.97	2.11	-41%
63	1.52	1.52	0%
64	1.07	1.07	0%
65	4.01	4.35	8%
66	2.85	2.85	0%
67	1.90	1.90	0%
68	1.18	1.18	0%
69	10.41	17.70	41%
70	7.15	15.91	55%
71	5.19	9.54	46%
72	3.55	5.01	29%
73	11.25	18.54	39%
74	8.19	23.64	65%
75	6.26	15.42	59%
76	4.47	9.16	51%
77	3.58	3.58	0%
78	2.13	2.13	0%
79	1.57	1.57	0%
80	1.13	1.13	0%
81	4.62	6.58	30%
82	3.12	3.65	14%
83	2.16	2.16	0%
84	1.41	1.41	0%
85	5.77	15.49	63%
86	2.86	9.36	69%
87	1.40	4.94	72%
88	0.93	2.05	55%
89	6.79	16.41	59%
90	5.19	10.28	49%
91	3.67	5.76	36%
92	2.34	2.78	16%
93	5.85	10.93	47%
94	4.41	6.47	32%
95	3.09	3.49	12%
96	1.98	1.98	0%
97	6.12	3.17	-93%
98	3.24	2.41	-34%
99	1.79	1.79	0%
100	1.30	1.30	0%
101	4.58	6.80	33%
102	3.40	3.87	12%
103	2.38	2.38	0%
104	1.57	1.57	0%
105	11.80	19.09	38%
106	8.75	23.76	63%
107	6.84	15.65	56%
108	4.94	9.33	47%
163	5.53	10.64	48%

	BCR		
	Existing Coastal A Module	1 Year based on Log Linear Regression of 10 & 50 Year	% Difference Existing to Log Linear
110	10.99	24.56	55%
111	7.89	23.58	67%
112	5.97	15.33	61%
113	3.84	3.84	0%
114	2.40	2.40	0%
115	1.81	1.81	0%
116	1.34	1.34	0%
117	6.94	6.94	0%
118	4.03	4.03	0%
119	2.55	2.55	0%
120	1.75	1.75	0%
121	9.94	23.66	58%
122	5.54	15.42	64%
123	2.65	9.28	72%
124	1.19	4.87	76%
125	7.65	24.10	68%
126	6.14	16.14	62%
127	4.60	10.01	54%
128	3.18	5.51	42%
129	6.67	16.62	60%
130	5.26	10.60	50%
131	3.89	6.15	37%
132	2.67	3.19	16%
133	6.38	3.48	-83%
134	3.50	2.71	-29%
135	2.06	2.06	0%
136	1.54	1.54	0%
137	5.14	7.28	29%
138	3.95	4.37	10%
139	2.88	2.88	0%
140	2.00	2.00	0%
141	12.65	26.12	52%
142	10.12	25.04	60%
143	8.54	23.66	64%
144	6.57	15.47	57%
145	14.85	33.86	56%
146	12.05	34.05	65%
147	9.28	24.38	62%
148	7.58	16.46	54%
149	6.37	4.10	-55%
150	3.50	2.67	-31%
151	2.06	2.06	0%
152	1.56	1.56	0%
153	7.30	10.85	33%
154	4.41	6.47	32%
155	2.94	3.57	18%
156	2.10	2.10	0%
157	10.20	23.78	57%
158	5.82	15.58	63%
159	2.92	9.46	69%
160	1.47	5.05	71%
161	8.39	24.43	66%
162	7.02	16.69	58%

	BCR		
	Existing Coastal A Module	1 Year based on Log Linear Regression of 10 & 50 Year	% Difference Existing to Log Linear
164	4.06	6.16	34%
165	7.43	17.11	57%
166	6.08	11.20	46%
167	4.71	6.79	31%
168	3.42	3.83	11%
169	6.64	3.79	-75%
170	3.77	3.01	-25%
171	2.34	2.34	0%
172	1.78	1.78	0%
173	5.68	11.19	49%
174	4.49	6.84	34%
175	3.40	3.93	14%
176	2.46	2.46	0%
177	14.47	33.47	57%
178	12.61	34.49	63%
179	9.89	33.43	70%
180	8.31	23.58	65%
181	18.99	43.34	56%
182	14.92	43.92	66%
183	11.84	33.91	65%
184	9.01	24.22	63%
185	6.60	4.36	-51%
186	3.74	2.94	-27%
187	2.31	2.31	0%
188	1.79	1.79	0%
189	7.66	11.16	31%
190	4.79	6.81	30%
191	3.33	3.92	15%
192	2.46	2.46	0%
193	10.47	33.39	69%
194	6.10	23.74	74%
195	3.21	15.51	79%
196	1.77	9.38	81%
197	9.01	33.68	73%
198	7.81	24.27	68%
199	6.42	16.42	61%
200	4.96	10.35	52%
201	8.12	24.57	67%
202	6.86	16.84	59%
203	5.52	10.88	49%
204	4.20	6.46	35%
205	10.69	4.10	-161%
206	6.34	3.31	-92%
207	3.47	2.62	-33%
208	2.04	2.04	0%
209	6.20	11.60	47%
210	5.02	7.28	31%
211	3.92	4.40	11%
212	2.93	2.93	0%
213	14.51	33.50	57%
214	11.74	43.38	73%
215	11.05	44.65	75%
216	9.68	33.35	71%

Table 3.EANF Values from Existing Module (1-year based on NOAA tide data)

	1 yr Elevation (ft)	10 yr Elevation (ft)	50 yr Elevation (ft)	100 yr Elevation (ft)	500 yr Elevation (ft)	Wave Heigh Factor	FFE	-2 EANF	-1 EANF	0 EANF	1 EANF	2 EANF	3 EANF	4 EANF	5 EANF	6 EANF	7 EANF	8 EANF	>8 EANF
1	4.9	8.6	9.2	9.4	9.9	9.4	6.6	0.000169	0.003542	0.072093	0.567829	0.33183924	0.023387438	0.001088765	4.95014E-05	2.24817E-06	1.02E-07	4.64E-09	2.21E-10
2	4.9	8.6	9.2	9.4	9.9	9.4	7.6	0.003542	0.072093	0.567829	0.331839	0.023387438	0.001088765	4.95014E-05	2.24817E-06	1.02098E-07	4.64E-09	2.11E-10	1E-11
3	4.9	8.6	9.2	9.4	9.9	9.4	8.6	0.072093	0.567829	0.331839	0.023387	0.001088765	4.95014E-05	2.24817E-06	1.02098E-07	4.63668E-09	2.11E-10	9.56E-12	4.55E-13
4	4.9	8.6	9.2	9.4	9.9	9.4	9.6	0.567829	0.331839	0.023387	0.001089	4.95014E-05	2.24817E-06	1.02098E-07	4.63668E-09	2.1057E-10	9.56E-12	4.34E-13	2.07E-14
5	2.5	6.7	10	11.6	15.4	11.6	4.7	0.661938	0.094229	0.074676	0.055251	0.038835113	0.026322988	0.017405716	0.011321605	0.007285614	0.004656	0.002962	0.005116
6	2.5	6.7	10	11.6	15.4	11.6	5.7	0.094229	0.074676	0.055251	0.038835	0.026322988	0.017405716	0.011321605	0.007285614	0.004656088	0.002962	0.00188	0.003236
7	2.5	6.7	10	11.6	15.4	11.6	6.7	0.074676	0.055251	0.038835	0.026323	0.017405716	0.011321605	0.007285614	0.004656088	0.002962473	0.00188	0.00119	0.002046
8	2.5	6.7	10	11.6	15.4	11.6	7.7	0.055251	0.038835	0.026323	0.017406	0.011321605	0.007285614	0.004656088	0.002962473	0.001879594	0.00119	0.000753	0.001293
9	1.9	5.8	8.1	9.7	11.3	9.7	3.8	0.42741	0.17381	0.151566	0.10736	0.065350269	0.03617455	0.018977689	0.009676001	0.004861702	0.002425	0.001205	0.001184
10	1.9	5.8	8.1	9.7	11.3	9.7	4.8	0.17381	0.151566	0.10736	0.06535	0.03617455	0.018977689	0.009676001	0.004861702	0.002424787	0.001205	0.000598	0.000587
11	1.9	5.8	8.1	9.7	11.3	9.7	5.8	0.151566	0.10736	0.06535	0.036175	0.018977689	0.009676001	0.004861702	0.002424787	0.001204914	0.000598	0.000296	0.000291
12	1.9	5.8	8.1	9.7	11.3	9.7	6.8	0.10736	0.06535	0.036175	0.018978	0.009676001	0.004861702	0.002424787	0.001204914	0.000597643	0.000296	0.000147	0.000144
13	3.3	6.8	8.2	9.1	13	9.1	4.8	0.654349	0.120932	0.087495	0.056955	0.034567995	0.020095569	0.011390696	0.006364211	0.003527221	0.001946	0.001071	0.001306
14	3.3	6.8	8.2	9.1	13	9.1	5.8	0.120932	0.087495	0.056955	0.034568	0.020095569	0.011390696	0.006364211	0.003527221	0.00194614	0.001071	0.000589	0.000717
15	3.3	6.8	8.2	9.1	13	9.1	6.8	0.087495	0.056955	0.034568	0.020096	0.011390696	0.006364211	0.003527221	0.00194614	0.001071125	0.000589	0.000323	0.000393
16	3.3	6.8	8.2	9.1	13	9.1	7.8	0.056955	0.034568	0.020096	0.011391	0.006364211	0.003527221	0.00194614	0.001071125	0.000588728	0.000323	0.000178	0.000216
17	1.4	7.4	8.9	9.2	10.8	9.2	5.4	0.084453	0.196108	0.287422	0.226914	0.106878002	0.038180805	0.012246338	0.003789673	0.001159633	0.000354	0.000108	4.72E-05
18	1.4	7.4	8.9	9.2	10.8	9.2	6.4	0.196108	0.287422	0.226914	0.106878	0.038180805	0.012246338	0.003789673	0.001159633	0.000353624	0.000108	3.28E-05	1.44E-05
19	1.4	7.4	8.9	9.2	10.8	9.2	7.4	0.287422	0.226914	0.106878	0.038181	0.012246338	0.003789673	0.001159633	0.000353624	0.000107722	3.28E-05	9.99E-06	4.37E-06
20	1.4	7.4	8.9	9.2	10.8	9.2	8.4	0.226914	0.106878	0.038181	0.012246	0.003789673	0.001159633	0.000353624	0.000107722	3.28041E-05	9.99E-06	3.04E-06	1.33E-06
21	3.6	10	12	13	14.5	13	8	0.141298	0.203853	0.209113	0.151392	0.084191516	0.040090959	0.017677834	0.007529545	0.003159638	0.001318	0.000548	0.000389
22	3.6	10	12	13	14.5	13	9	0.203853	0.209113	0.151392	0.084192	0.040090959	0.017677834	0.007529545	0.003159638	0.001317585	0.000548	0.000228	0.000162
23	3.6	10	12	13	14.5	13	10	0.209113	0.151392	0.084192	0.040091	0.017677834	0.007529545	0.003159638	0.001317585	0.000548	0.000228	9.45E-05	6.71E-05
24	3.6	10	12	13	14.5	13	11	0.151392	0.084192	0.040091	0.017678	0.007529545	0.003159638	0.001317585	0.000548	0.000227671	9.45E-05	3.93E-05	2.79E-05
25	3.6	7.3	11.6	12.9	16.2	12.9	5.3	0.629057	0.097834	0.079954	0.060809	0.043766661	0.030265782	0.020355213	0.013434915	0.008757664	0.005663	0.003642	0.006461
26	3.6	7.3	11.6	12.9	16.2	12.9	6.3	0.097834	0.079954	0.060809	0.043767	0.030265782	0.020355213	0.013434915	0.008757664	0.005662524	0.003642	0.002335	0.004126
27	3.6	7.3	11.6	12.9	16.2	12.9	7.3	0.079954	0.060809	0.043767	0.030266	0.020355213	0.013434915	0.008757664	0.005662524	0.003642044	0.002335	0.001493	0.002633
28	3.6	7.3	11.6	12.9	16.2	12.9	8.3	0.060809	0.043767	0.030266	0.020355	0.013434915	0.008757664	0.005662524	0.003642044	0.002334577	0.001493	0.000954	0.001679
29	1.2	7.9	10.6	11.8	13.7	11.8	5.9	0.154052	0.168863	0.148214	0.106769	0.066456436	0.037674853	0.020234795	0.010553211	0.005419611	0.002761	0.001401	0.001435
30	1.2	7.9	10.6	11.8	13.7	11.8	6.9	0.168863	0.148214	0.106769	0.066456	0.037674853	0.020234795	0.010553211	0.005419611	0.002761192	0.001401	0.000709	0.000726
31	1.2	7.9	10.6	11.8	13.7	11.8	7.9	0.148214	0.106769	0.066456	0.037675	0.020234795	0.010553211	0.005419611	0.002761192	0.001401076	0.000709	0.000359	0.000367
32	1.2	7.9	10.6	11.8	13.7	11.8	8.9	0.106769	0.066456	0.037675	0.020235	0.010553211	0.005419611	0.002761192	0.001401076	0.000709465	0.000359	0.000181	0.000185
33	2.5	6.2	6.6	6.7	7	6.7	4.2	1.91E-07	2.87E-05	0.004315	0.392882	0.592826629	0.009880281	6.60723E-05	4.37479E-07	2.89645E-09	1.92E-11	1.27E-13	8.46E-16
34	2.5	6.2	6.6	6.7	7	6.7	5.2	2.87E-05	0.004315	0.392882	0.592827	0.009880281	6.60723E-05	4.37479E-07	2.89645E-09	1.91767E-11	1.27E-13	8.41E-16	5.6E-18
35	2.5	6.2	6.6	6.7	7	6.7	6.2	0.004315	0.392882	0.592827	0.00988	6.60723E-05	4.37479E-07	2.89645E-09	1.91767E-11	1.26965E-13	8.41E-16	5.57E-18	3.71E-20
36	2.5	6.2	6.6	6.7	7	6.7	7.2	0.392882	0.592827	0.00988	6.61E-05	4.37479E-07	2.89645E-09	1.91767E-11	1.26965E-13	8.40606E-16	5.57E-18	3.68E-20	2.46E-22
37	4.9	8.6	9.2	9.4	9.9	10.4	6.6	1	0.000607	0.009231	0.129959	0.586846381	0.250874478	0.021078033	0.001318175	8.07024E-05	4.93E-06	3.02E-07	1.96E-08
38	4.9	8.6	9.2	9.4	9.9	10.4	7.6	0.000607	0.009231	0.129959	0.586846	0.250874478	0.021078033	0.001318175	8.07024E-05	4.93433E-06	3.02E-07	1.84E-08	1.2E-09
39	4.9	8.6	9.2	9.4	9.9	10.4	8.6	0.009231	0.129959	0.586846	0.250874	0.021078033	0.001318175	8.07024E-05	4.93433E-06	3.01673E-07	1.84E-08	1.13E-09	7.34E-11
40	4.9	8.6	9.2	9.4	9.9	10.4	9.6	0.129959	0.586846	0.250874	0.021078	0.001318175	8.07024E-05	4.93433E-06	3.01673E-07	1.84434E-08	1.13E-09	6.89E-11	4.49E-12
41	2.5	6.7	10	11.6	15.4	12.6	4.7	0.635331	0.091479	0.075666	0.058711	0.043336293	0.030822722	0.021348579	0.014516255	0.009747115	0.00649	0.004296	0.008255
42	2.5	6.7	10	11.6	15.4	12.6	5.7	0.091479	0.075666	0.058711	0.043336	0.030822722	0.021348579	0.014516255	0.009747115	0.006489646	0.004296	0.002834	0.005422
43	2.5	6.7	10	11.6	15.4	12.6	6.7	0.075666	0.058711	0.043336	0.030823	0.021348579	0.014516255	0.009747115	0.006489646	0.004296499	0.002834	0.001865	0.003557
44	2.5	6.7	10	11.6	15.4	12.6	7.7	0.058711	0.043336	0.030823	0.021349	0.014516255	0.009747115	0.006489646	0.004296499	0.002833896	0.001865	0.001225	0.002332
45	1.9	5.8	8.1	9.7	11.3	10.7	3.8	0.390899	0.157386	0.148286	0.116228	0.078645348	0.048064548	0.027569336	0.015240952	0.008254127	0.004421	0.002353	0.002653
46	1.9	5.8	8.1	9.7	11.3	10.7	4.8	0.157386	0.148286	0.116228	0.078645	0.048064548	0.027569336	0.015240952	0.008254127	0.004420516	0.002353	0.001249	0.001405
47	1.9	5.8	8.1	9.7	11.3	10.7	5.8	0.148286	0.116228	0.078645	0.048065	0.027569336	0.015240952	0.008254127	0.004420516	0.002353243	0.001249	0.000662	0.000743
48	1.9	5.8	8.1	9.7	11.3	10.7	6.8	0.116228	0.078645	0.048065	0.027569	0.015240952	0.008254127	0.004420516	0.002353243	0.001248735	0.000662	0.00035	0.000393
49	3.3	6.8	8.2	9.1	13	10.1	4.8	1	0.727676	0.093393	0.066321	0.043799137	0.027555796	0.016810706	0.010063542	0.005956395	0.003502	0.002051	0.002873
50	3.3	6.8	8.2	9.1	13	10.1	5.8	0.727676	0.093393	0.066321	0.043799	0.027555796	0.016810706	0.010063542	0.005956395	0.003501789	0.002051	0.001198	0.001675
51	3.3	6.8	8.2	9.1	13	10.1	6.8	0.093393	0.066321	0.043799	0.027556	0.016810706	0.010063542	0.005956395	0.003501789	0.002050567	0.001198	0.000699	0.000976
52	3.3	6.8	8.2	9.1	13	10.1	7.8	0.066321	0.043799	0.027556	0.016811	0.010063542	0.005956395	0.003501789	0.002050567	0.001197976	0.000699	0.000407	0.000569
53	1.4	7.4	8.9	9.2	10.8	10.2	5.4	0.053814	0.12782	0.228294	0.25658	0.173491622	0.081030105	0.031300155	0.011186921	0.003886101	0.001337	0.000458	0.000238
54	1.4	7.4	8.9	9.2	10.8	10.2	6.4	0.12782	0.228294	0.25658	0.173492	0.081030105	0.031300155	0.011186921	0.003886101	0.001336545	0.000458	0.000157	8.16E-05
55	1.4	7.4	8.9	9.2	10.8	10.2	7.4	0.228294	0.25658	0.173492	0.08103	0.031300155	0.011186921	0.003886101	0.001336545	0.000458098	0.000157	5.37E-05	2.79E-05
56	1.4	7.4	8.9	9.2	10.8	10.2	8.4	0.25658	0.173492	0.08103	0.0313	0.011186921	0.003886101	0.001336545	0.000458098	0.000156826	5.37E-05	1.84E-05	9.55E-06
57	3.6	10	12	13	14.5	14	8	0.10313	0.163867	0.200555	0.179815	0.121465181	0.067193816	0.03312041	0.015397113	0.00696272	0.003109	0.001381	0.001096
58	3.6	10	12	13	14.5	14	9	0.163867	0.200555	0.179815	0.121465	0.067193816	0.03312041	0.015397113	0.00696272	0.003109203	0.001381	0.000612	0.000485
59	3.6	10	12	13	14.5	14	10	0.200555	0.179815	0.121465	0.067194	0.03312041	0.015397113	0.00696272	0.003109203	0.001380602	0.000612	0.000271	0.000214
60	3.6	10	12	13	14.5	14	11	0.179815	0.121465	0.067194	0.03312	0.015397113	0.00696272	0.003109203	0.001380602	0.000611502	0.000271	0.00012	9.48E-05
61	3.6	7.3	11.6	12.9	16.2	13.9	5.3	1	0.694928	0.080909	0.064384	0.04854326	0.035130933	0.024677742	0.016974138	0.011507136	0.007724	0.005151	0.010071
62	3.6	7.3	11.6	12.9	16.2	13.9	6.3	0.694928	0.080909	0.064384	0.048543	0.035130933	0.024677742	0.016974138	0.011507136	0.007724386	0.005151	0.00342	0.006651
63	3.6	7.3	11.6	12.9	16.2	13.9	7.3	0.080909	0.064384	0.048543	0.035131	0.024677742	0.016974138	0.011507136	0.007724386	0.005150876	0.00342	0.002264	0.004387
64	3.6	7.3	11.6	12.9	16.2	13.9	8.3	0.064384	0.048543	0.035131	0.024678	0.016974138	0.011507136	0.007724386	0.005150876	0.003419605	0.002264	0.001495	0.002892
65	1.2	7.9	10.6	11.8	13.7	12.8	5.9	0.132454	0.154505	0.149252	0.120099	0.083215681	0.051862322	0.030216981	0.016918849	0.009262561	0.005009	0.00269	0.003088

	1 yr Elevation (ft)	10 yr Elevation (ft)	50 yr Elevation (ft)	100 yr Elevation (ft)	500 yr Elevation (ft)	Wave Heigh Factor	FFE	-2 EANF	-1 EANF	0 EANF	1 EANF	2 EANF	3 EANF	4 EANF	5 EANF	6 EANF	7 EANF	8 EANF	>8 EANF
66	1.2	7.9	10.6	11.8	13.7	12.8	6.9	0.154505	0.149252	0.120099	0.083216	0.051862322	0.030216981	0.016918849	0.009262561	0.005008655	0.00269	0.00144	0.001648
67	1.2	7.9	10.6	11.8	13.7	12.8	7.9	0.149252	0.120099	0.083216	0.051862	0.030216981	0.016918849	0.009262561	0.005008655	0.00269029	0.00144	0.000769	0.000879
68	1.2	7.9	10.6	11.8	13.7	12.8	8.9	0.120099	0.083216	0.051862	0.030217	0.016918849	0.009262561	0.005008655	0.00269029	0.001439827	0.000769	0.00041	0.000469
69	2.5	6.2	6.6	6.7	7	7.7	4.2	1	2.59E-06	0.000201	0.015604	0.542573331	0.431672104	0.009819186	0.000125986	1.60062E-06	2.03E-08	2.58E-10	3.32E-12
70	2.5	6.2	6.6	6.7	7	7.7	5.2	2.59E-06	0.000201	0.015604	0.542573	0.431672104	0.009819186	0.000125986	1.60062E-06	2.03327E-08	2.58E-10	3.28E-12	4.22E-14
71	2.5	6.2	6.6	6.7	7	7.7	6.2	0.000201	0.015604	0.542573	0.431672	0.009819186	0.000125986	1.60062E-06	2.03327E-08	2.58287E-10	3.28E-12	4.17E-14	5.36E-16
72	2.5	6.2	6.6	6.7	7	7.7	7.2	0.015604	0.542573	0.431672	0.009819	0.000125986	1.60062E-06	2.03327E-08	2.58287E-10	3.28103E-12	4.17E-14	5.29E-16	6.81E-18
73	4.9	8.6	9.2	9.4	9.9	11.4	6.6	1	0.000136	0.001604	0.020085	0.200330961	0.563063395	0.193859349	0.01925489	0.00153616	0.00012	9.39E-06	7.96E-07
74	4.9	8.6	9.2	9.4	9.9	11.4	7.6	0.000136	0.001604	0.020085	0.200331	0.563063395	0.193859349	0.01925489	0.00153616	0.000120206	9.39E-06	7.34E-07	6.22E-08
75	4.9	8.6	9.2	9.4	9.9	11.4	8.6	0.001604	0.020085	0.200331	0.563063	0.193859349	0.01925489	0.00153616	0.000120206	9.39187E-06	7.34E-07	5.73E-08	4.86E-09
76	4.9	8.6	9.2	9.4	9.9	11.4	9.6	0.020085	0.200331	0.563063	0.193859	0.01925489	0.00153616	0.000120206	9.39187E-06	7.33712E-07	5.73E-08	4.48E-09	3.79E-10
77	2.5	6.7	10	11.6	15.4	13.6	4.7	0.611957	0.08814	0.075463	0.06091	0.046866203	0.034750105	0.025065413	0.017722339	0.01235428	0.008527	0.005846	0.012399
78	2.5	6.7	10	11.6	15.4	13.6	5.7	0.08814	0.075463	0.06091	0.046866	0.034750105	0.025065413	0.017722339	0.01235428	0.00852742	0.005846	0.003989	0.00841
79	2.5	6.7	10	11.6	15.4	13.6	6.7	0.075463	0.06091	0.046866	0.03475	0.025065413	0.017722339	0.01235428	0.00852742	0.005845853	0.003989	0.002713	0.005697
80	2.5	6.7	10	11.6	15.4	13.6	7.7	0.06091	0.046866	0.03475	0.025065	0.017722339	0.01235428	0.00852742	0.005845853	0.003988779	0.002713	0.001841	0.003856
81	1.9	5.8	8.1	9.7	11.3	11.7	3.8	0.361511	0.141988	0.141426	0.119953	0.088634341	0.059041522	0.036660752	0.021779541	0.012600557	0.007179	0.004054	0.005172
82	1.9	5.8	8.1	9.7	11.3	11.7	4.8	0.141988	0.141426	0.119953	0.088634	0.059041522	0.036660752	0.021779541	0.012600557	0.007178549	0.004054	0.002278	0.002894
83	1.9	5.8	8.1	9.7	11.3	11.7	5.8	0.141426	0.119953	0.088634	0.059042	0.036660752	0.021779541	0.012600557	0.007178549	0.004053753	0.002278	0.001276	0.001618
84	1.9	5.8	8.1	9.7	11.3	11.7	6.8	0.119953	0.088634	0.059042	0.036661	0.021779541	0.012600557	0.007178549	0.004053753	0.002277787	0.001276	0.000714	0.000904
85	3.3	6.8	8.2	9.1	13	11.1	4.8	1	0.684253	0.095704	0.072932	0.051715833	0.034826661	0.022645316	0.014390863	0.009012403	0.005592	0.003451	0.005477
86	3.3	6.8	8.2	9.1	13	11.1	5.8	0.684253	0.095704	0.072932	0.051716	0.034826661	0.022645316	0.014390863	0.009012403	0.005592473	0.003451	0.002121	0.003356
87	3.3	6.8	8.2	9.1	13	11.1	6.8	0.095704	0.072932	0.051716	0.034827	0.022645316	0.014390863	0.009012403	0.005592473	0.003450536	0.002121	0.001302	0.002054
88	3.3	6.8	8.2	9.1	13	11.1	7.8	0.072932	0.051716	0.034827	0.022645	0.014390863	0.009012403	0.005592473	0.003450536	0.002121471	0.001302	0.000797	0.001257
89	1.4	7.4	8.9	9.2	10.8	11.2	5.4	0.036323	0.084534	0.16495	0.233915	0.216355598	0.134020492	0.06359185	0.026353873	0.010302731	0.003935	0.00149	0.000902
90	1.4	7.4	8.9	9.2	10.8	11.2	6.4	0.084534	0.16495	0.233915	0.216356	0.134020492	0.06359185	0.026353873	0.010302731	0.003935312	0.00149	0.000562	0.00034
91	1.4	7.4	8.9	9.2	10.8	11.2	7.4	0.16495	0.233915	0.216356	0.13402	0.06359185	0.026353873	0.010302731	0.003935312	0.001489799	0.000562	0.000212	0.000128
92	1.4	7.4	8.9	9.2	10.8	11.2	8.4	0.233915	0.216356	0.13402	0.063592	0.026353873	0.010302731	0.003935312	0.001489799	0.000562087	0.000212	7.98E-05	4.82E-05
93	3.6	10	12	13	14.5	15	8	0.075736	0.126629	0.174662	0.18637	0.151538304	0.098264979	0.054711325	0.027903699	0.013595671	0.006477	0.003052	0.002687
94	3.6	10	12	13	14.5	15	9	0.126629	0.174662	0.18637	0.151538	0.098264979	0.054711325	0.027903699	0.013595671	0.006476743	0.003052	0.001431	0.001256
95	3.6	10	12	13	14.5	15	10	0.174662	0.18637	0.151538	0.098265	0.054711325	0.027903699	0.013595671	0.006476743	0.003052283	0.001431	0.000669	0.000587
96	3.6	10	12	13	14.5	15	11	0.18637	0.151538	0.098265	0.054711	0.027903699	0.013595671	0.006476743	0.003052283	0.001431125	0.000669	0.000313	0.000274
97	3.6	7.3	11.6	12.9	16.2	14.9	5.3	1	0.665634	0.080621	0.066646	0.05230327	0.039397886	0.028769545	0.020535516	0.014421077	0.010012	0.006895	0.014765
98	3.6	7.3	11.6	12.9	16.2	14.9	6.3	0.665634	0.080621	0.066646	0.052303	0.039397886	0.028769545	0.020535516	0.014421077	0.010011645	0.006895	0.004723	0.010043
99	3.6	7.3	11.6	12.9	16.2	14.9	7.3	0.080621	0.066646	0.052303	0.039398	0.028769545	0.020535516	0.014421077	0.010011645	0.006895199	0.004723	0.003223	0.00682
100	3.6	7.3	11.6	12.9	16.2	14.9	8.3	0.066646	0.052303	0.039398	0.02877	0.020535516	0.014421077	0.010011645	0.006895199	0.004722782	0.003223	0.002193	0.004627
101	1.2	7.9	10.6	11.8	13.7	13.8	5.9	0.114041	0.138685	0.143995	0.126939	0.096740404	0.065858931	0.041463616	0.024833347	0.014430672	0.008239	0.004656	0.005938
102	1.2	7.9	10.6	11.8	13.7	13.8	6.9	0.138685	0.143995	0.126939	0.09674	0.065858931	0.041463616	0.024833347	0.014430672	0.008238867	0.004656	0.002617	0.003321
103	1.2	7.9	10.6	11.8	13.7	13.8	7.9	0.143995	0.126939	0.09674	0.065859	0.041463616	0.024833347	0.014430672	0.008238867	0.004656426	0.002617	0.001466	0.001855
104	1.2	7.9	10.6	11.8	13.7	13.8	8.9	0.126939	0.09674	0.065859	0.041464	0.024833347	0.014430672	0.008238867	0.004656426	0.002616664	0.001466	0.00082	0.001036
105	2.5	6.2	6.6	6.7	7	8.7	4.2	1	4.05E-07	1.89E-05	0.000899	0.041061974	0.634232736	0.313839901	0.009736037	0.000206334	4.33E-06	9.09E-08	1.95E-09
106	2.5	6.2	6.6	6.7	7	8.7	5.2	4.05E-07	1.89E-05	0.000899	0.041062	0.634232736	0.313839901	0.009736037	0.000206334	4.33024E-06	9.09E-08	1.91E-09	4.09E-11
107	2.5	6.2	6.6	6.7	7	8.7	6.2	1.89E-05	0.000899	0.041062	0.634233	0.313839901	0.009736037	0.000206334	4.33024E-06	9.0858E-08	1.91E-09	4E-11	8.57E-13
108	2.5	6.2	6.6	6.7	7	8.7	7.2	0.000899	0.041062	0.634233	0.31384	0.009736037	0.000206334	4.33024E-06	9.0858E-08	1.90639E-09	4E-11	8.39E-13	1.8E-14
109	4.9	8.6	9.2	9.4	9.9	12.4	6.6	1	1	0.000405	0.003797	0.037920397	0.272142191	0.512609303	0.153431694	0.017770591	0.001739	0.000167	1.77E-05
110	4.9	8.6	9.2	9.4	9.9	12.4	7.6	1	0.000405	0.003797	0.03792	0.272142191	0.512609303	0.153431694	0.017770591	0.001739092	0.000167	1.6E-05	1.7E-06
111	4.9	8.6	9.2	9.4	9.9	12.4	8.6	0.000405	0.003797	0.03792	0.272142	0.512609303	0.153431694	0.017770591	0.001739092	0.000167191	1.6E-05	1.54E-06	1.63E-07
112	4.9	8.6	9.2	9.4	9.9	12.4	9.6	0.003797	0.03792	0.272142	0.512609	0.153431694	0.017770591	0.001739092	0.000167191	1.60456E-05	1.54E-06	1.48E-07	1.57E-08
113	2.5	6.7	10	11.6	15.4	14.6	4.7	0.591358	0.084529	0.074426	0.06208	0.04948609	0.038040917	0.028434702	0.020812175	0.01499981	0.010691	0.007559	0.017583
114	2.5	6.7	10	11.6	15.4	14.6	5.7	0.084529	0.074426	0.06208	0.049486	0.038040917	0.028434702	0.020812175	0.01499981	0.010690905	0.007559	0.005315	0.012268
115	2.5	6.7	10	11.6	15.4	14.6	6.7	0.074426	0.06208	0.049486	0.038041	0.028434702	0.020812175	0.01499981	0.010690905	0.007559417	0.005315	0.003722	0.008545
116	2.5	6.7	10	11.6	15.4	14.6	7.7	0.06208	0.049486	0.038041	0.028435	0.020812175	0.01499981	0.010690905	0.007559417	0.005315161	0.003722	0.0026	0.005946
117	1.9	5.8	8.1	9.7	11.3	12.7	3.8	1	0.465694	0.132868	0.119809	0.09519952	0.068306606	0.045514585	0.028848903	0.017710163	0.01066	0.00634	0.00906
118	1.9	5.8	8.1	9.7	11.3	12.7	4.8	0.465694	0.132868	0.119809	0.09519	0.068306606	0.045514585	0.028848903	0.017710163	0.010659556	0.00634	0.003744	0.005316
119	1.9	5.8	8.1	9.7	11.3	12.7	5.8	0.132868	0.119809	0.09519	0.068307	0.045514585	0.028848903	0.017710163	0.010659556	0.006339766	0.003744	0.002202	0.003114
120	1.9	5.8	8.1	9.7	11.3	12.7	6.8	0.119809	0.09519	0.068307	0.045515	0.028848903	0.017710163	0.010659556	0.006339766	0.003743843	0.002202	0.001291	0.001823
121	3.3	6.8	8.2	9.1	13	12.1	4.8	1	1	0.740755	0.077007	0.057970097	0.041398422	0.028463802	0.019063857	0.012544873	0.00816	0.005267	0.00937
122	3.3	6.8	8.2	9.1	13	12.1	5.8	1	0.740755	0.077007	0.05797	0.041398422	0.028463802	0.019063857	0.012544873	0.008159516	0.005267	0.003383	0.005987
123	3.3	6.8	8.2	9.1	13	12.1	6.8	0.740755	0.077007	0.05797	0.041398	0.028463802	0.019063857	0.012544873	0.008159516	0.005267038	0.003383	0.002166	0.003821
124	3.3	6.8	8.2	9.1	13	12.1	7.8	0.077007	0.05797	0.041398	0.028464	0.019063857	0.012544873	0.008159516	0.005267038	0.00338328	0.002166	0.001384	0.002436
125	1.4	7.4	8.9	9.2	10.8	12.2	5.4	0.025778	0.057814	0.115962	0.188032	0.220254409	0.177914983	0.105393462	0.051368798	0.022658461	0.009552	0.00395	0.002739
126	1.4	7.4	8.9	9.2	10.8	12.2	6.4	0.057814	0.115962	0.188032	0.220254	0.177914983	0.105393462	0.051368798	0.022658461	0.009552181	0.00395	0.00162	0.001119
127	1.4	7.4	8.9	9.2	10.8	12.2	7.4	0.115962	0.188032	0.220254	0.177915	0.105393462	0.051368798	0.022658461	0.009552181	0.003949829	0.00162	0.000662	0.000457
128	1.4	7.4	8.9	9.2	10.8	12.2	8.4	0.188032	0.220254	0.177915	0.105393	0.051368798	0.022658461	0.009552181	0.003949829	0.001620177	0.000662	0.00027	0.000186
129	3.6	10	12	13	14.5	16	8	0.056498	0.096588	0.143584	0.174525	0.166891934	0.126739021	0.080416159	0.045358656	0.023900635	0.012143	0.006055	0.005877
130	3.6	10	12	13	14.5	16	9	0.096588	0.143584	0.174525	0.166892	0.126739021	0.080416159	0.045358656	0.023900635	0.012143063	0.006055	0.002991	0.002886

	1 yr Elevation (ft)	10 yr Elevation (ft)	50 yr Elevation (ft)	100 yr Elevation (ft)	500 yr Elevation (ft)	Wave Heigh Factor	FFE	-2 EANF	-1 EANF	0 EANF	1 EANF	2 EANF	3 EANF	4 EANF	5 EANF	6 EANF	7 EANF	8 EANF	>8 EANF
131	3.6	10	12	13	14.5	16	10	0.143584	0.174525	0.166892	0.126739	0.080416159	0.045358656	0.023900635	0.012143063	0.00605525	0.002991	0.001471	0.001415
132	3.6	10	12	13	14.5	16	11	0.174525	0.166892	0.126739	0.080416	0.045358656	0.023900635	0.012143063	0.00605525	0.002991371	0.001471	0.000722	0.000693
133	3.6	7.3	11.6	12.9	16.2	15.9	5.3	1	0.638924	0.079445	0.067815	0.055093539	0.042987466	0.032496909	0.02398362	0.017388714	0.012445	0.008825	0.020595
134	3.6	7.3	11.6	12.9	16.2	15.9	6.3	0.638924	0.079445	0.067815	0.055094	0.042987466	0.032496909	0.02398362	0.017388714	0.012445417	0.008825	0.006217	0.014378
135	3.6	7.3	11.6	12.9	16.2	15.9	7.3	0.079445	0.067815	0.055094	0.042987	0.032496909	0.02398362	0.017388714	0.012445417	0.008825277	0.006217	0.00436	0.010018
136	3.6	7.3	11.6	12.9	16.2	15.9	8.3	0.067815	0.055094	0.042987	0.032497	0.02398362	0.017388714	0.012445417	0.008825277	0.006217138	0.00436	0.003047	0.006971
137	1.2	7.9	10.6	11.8	13.7	14.8	5.9	0.098682	0.123308	0.135047	0.128125	0.106030346	0.078261134	0.053021707	0.033869441	0.020828924	0.012511	0.007409	0.01043
138	1.2	7.9	10.6	11.8	13.7	14.8	6.9	0.123308	0.135047	0.128125	0.10603	0.078261134	0.053021707	0.033869441	0.020828924	0.012511441	0.007409	0.004351	0.006079
139	1.2	7.9	10.6	11.8	13.7	14.8	7.9	0.135047	0.128125	0.10603	0.078261	0.053021707	0.033869441	0.020828924	0.012511441	0.007409367	0.004351	0.002542	0.003537
140	1.2	7.9	10.6	11.8	13.7	14.8	8.9	0.128125	0.10603	0.078261	0.053022	0.033869441	0.020828924	0.012511441	0.007409367	0.004351033	0.002542	0.001481	0.002055
141	2.5	6.2	6.6	6.7	7	9.7	4.2	1	9.27E-08	2.87E-06	9.2E-05	0.00293354	0.085564059	0.668127963	0.233332725	0.009632929	0.000304	9.5E-06	3.07E-07
142	2.5	6.2	6.6	6.7	7	9.7	5.2	9.27E-08	2.87E-06	9.2E-05	0.002934	0.085564059	0.668127963	0.233332725	0.009632929	0.000304054	9.5E-06	2.97E-07	9.58E-09
143	2.5	6.2	6.6	6.7	7	9.7	6.2	2.87E-06	9.2E-05	0.002934	0.085564	0.668127963	0.233332725	0.009632929	0.000304054	9.50475E-06	2.97E-07	9.28E-09	2.99E-10
144	2.5	6.2	6.6	6.7	7	9.7	7.2	9.2E-05	0.002934	0.085564	0.668128	0.233332725	0.009632929	0.000304054	9.50475E-06	2.97029E-07	9.28E-09	2.9E-10	9.36E-12
145	4.9	8.6	9.2	9.4	9.9	13.4	6.6	1	1	0.000117	0.000905	0.007850354	0.063761248	0.333988094	0.450430793	0.12424077	0.016533	0.001925	0.000249
146	4.9	8.6	9.2	9.4	9.9	13.4	7.6	1	0.000117	0.000905	0.00785	0.063761248	0.333988094	0.450430793	0.12424077	0.016532529	0.001925	0.000221	2.85E-05
147	4.9	8.6	9.2	9.4	9.9	13.4	8.6	0.000117	0.000905	0.00785	0.063761	0.333988094	0.450430793	0.12424077	0.016532529	0.00192513	0.000221	2.52E-05	3.25E-06
148	4.9	8.6	9.2	9.4	9.9	13.4	9.6	0.000905	0.00785	0.063761	0.333988	0.450430793	0.12424077	0.016532529	0.00192513	0.000220506	2.52E-05	2.88E-06	3.72E-07
149	2.5	6.7	10	11.6	15.4	15.6	4.7	1	0.653978	0.072833	0.062443	0.051301374	0.040692224	0.031386513	0.023690422	0.017590866	0.012903	0.009381	0.023801
150	2.5	6.7	10	11.6	15.4	15.6	5.7	0.653978	0.072833	0.062443	0.051301	0.040692224	0.031386513	0.023690422	0.017590866	0.012903491	0.009381	0.006775	0.017025
151	2.5	6.7	10	11.6	15.4	15.6	6.7	0.072833	0.062443	0.051301	0.040692	0.031386513	0.023690422	0.017590866	0.012903491	0.009380743	0.006775	0.004871	0.012155
152	2.5	6.7	10	11.6	15.4	15.6	7.7	0.062443	0.051301	0.040692	0.031387	0.023690422	0.017590866	0.012903491	0.009380743	0.006775415	0.004871	0.00349	0.008665
153	1.9	5.8	8.1	9.7	11.3	13.7	3.8	1	0.4337	0.123784	0.117033	0.098673456	0.07547131	0.053534822	0.035976978	0.023307956	0.014744	0.009186	0.014589
154	1.9	5.8	8.1	9.7	11.3	13.7	4.8	0.4337	0.123784	0.117033	0.098673	0.07547131	0.053534822	0.035976978	0.023307956	0.014743848	0.009186	0.005669	0.00892
155	1.9	5.8	8.1	9.7	11.3	13.7	5.8	0.123784	0.117033	0.098673	0.075471	0.053534822	0.035976978	0.023307956	0.014743848	0.009186016	0.005669	0.003478	0.005442
156	1.9	5.8	8.1	9.7	11.3	13.7	6.8	0.117033	0.098673	0.075471	0.053535	0.035976978	0.023307956	0.014743848	0.009186016	0.005669253	0.003478	0.002127	0.003315
157	3.3	6.8	8.2	9.1	13	13.1	4.8	1	1	0.70418	0.078982	0.062515856	0.046962855	0.033912445	0.023796049	0.016363308	0.011096	0.007454	0.014737
158	3.3	6.8	8.2	9.1	13	13.1	5.8	1	0.70418	0.078982	0.062516	0.046962855	0.033912445	0.023796049	0.016363308	0.011096375	0.007454	0.004975	0.009762
159	3.3	6.8	8.2	9.1	13	13.1	6.8	0.70418	0.078982	0.062516	0.046963	0.033912445	0.023796049	0.016363308	0.011096375	0.007453753	0.004975	0.003307	0.006455
160	3.3	6.8	8.2	9.1	13	13.1	7.8	0.078982	0.062516	0.046963	0.033912	0.023796049	0.016363308	0.011096375	0.007453753	0.004975076	0.003307	0.002191	0.004264
161	1.4	7.4	8.9	9.2	10.8	13.2	5.4	0.01908	0.041036	0.082017	0.142288	0.195323363	0.196844274	0.145336945	0.084530411	0.042503286	0.01981	0.008906	0.007013
162	1.4	7.4	8.9	9.2	10.8	13.2	6.4	0.041036	0.082017	0.142288	0.195323	0.196844274	0.145336945	0.084530411	0.042503286	0.019810297	0.008906	0.003939	0.003074
163	1.4	7.4	8.9	9.2	10.8	13.2	7.4	0.082017	0.142288	0.195323	0.196844	0.145336945	0.084530411	0.042503286	0.019810297	0.008906245	0.003939	0.001729	0.001344
164	1.4	7.4	8.9	9.2	10.8	13.2	8.4	0.142288	0.195323	0.196844	0.145337	0.084530411	0.042503286	0.019810297	0.008906245	0.003938998	0.001729	0.000757	0.000587
165	3.6	10	12	13	14.5	17	8	0.042966	0.073819	0.114578	0.152534	0.16632256	0.14615419	0.105996499	0.066642833	0.038212239	0.020762	0.010951	0.011687
166	3.6	10	12	13	14.5	17	9	0.073819	0.114578	0.152534	0.166323	0.14615419	0.105996499	0.066642833	0.038212239	0.020761555	0.010951	0.005686	0.006001
167	3.6	10	12	13	14.5	17	10	0.114578	0.152534	0.166323	0.146154	0.105996499	0.066642833	0.038212239	0.020761555	0.010950956	0.005686	0.002928	0.003073
168	3.6	10	12	13	14.5	17	11	0.152534	0.166323	0.146154	0.105996	0.066642833	0.038212239	0.020761555	0.010950956	0.005686051	0.002928	0.001502	0.001571
169	3.6	7.3	11.6	12.9	16.2	16.9	5.3	1	0.614634	0.077664	0.068113	0.057012085	0.045884331	0.035776525	0.027212154	0.020310117	0.014946	0.010884	0.027564
170	3.6	7.3	11.6	12.9	16.2	16.9	6.3	0.614634	0.077664	0.068113	0.057012	0.045884331	0.035776525	0.027212154	0.020310117	0.014945682	0.010884	0.007866	0.019698
171	3.6	7.3	11.6	12.9	16.2	16.9	7.3	0.077664	0.068113	0.057012	0.045884	0.035776525	0.027212154	0.020310117	0.014945682	0.010883981	0.007866	0.005654	0.014044
172	3.6	7.3	11.6	12.9	16.2	16.9	8.3	0.068113	0.057012	0.045884	0.035777	0.027212154	0.020310117	0.014945682	0.010883981	0.007866024	0.005654	0.004048	0.009997
173	1.2	7.9	10.6	11.8	13.7	15.8	5.9	0.085969	0.109264	0.124405	0.125082	0.110986937	0.088076372	0.063904634	0.043413818	0.028190733	0.017772	0.010996	0.017014
174	1.2	7.9	10.6	11.8	13.7	15.8	6.9	0.109264	0.124405	0.125082	0.110987	0.088076372	0.063904634	0.043413818	0.028190733	0.017772391	0.010996	0.006725	0.010289
175	1.2	7.9	10.6	11.8	13.7	15.8	7.9	0.124405	0.125082	0.110987	0.088076	0.063904634	0.043413818	0.028190733	0.017772391	0.010996316	0.006725	0.004084	0.006205
176	1.2	7.9	10.6	11.8	13.7	15.8	8.9	0.125082	0.110987	0.088076	0.063905	0.043413818	0.028190733	0.017772391	0.010996316	0.006725046	0.004084	0.002469	0.003736
177	2.5	6.2	6.6	6.7	7	10.7	4.2	1	1	6.47E-07	1.43E-05	0.000331686	0.007616214	0.148716783	0.654651412	0.178722129	0.009513	0.000415	1.88E-05
178	2.5	6.2	6.6	6.7	7	10.7	5.2	1	6.47E-07	1.43E-05	0.000332	0.007616214	0.148716783	0.654651412	0.178722129	0.009512925	0.000415	1.79E-05	8.1E-07
179	2.5	6.2	6.6	6.7	7	10.7	6.2	6.47E-07	1.43E-05	0.000332	0.007616	0.148716783	0.654651412	0.178722129	0.009512925	0.000415116	1.79E-05	7.75E-07	3.5E-08
180	2.5	6.2	6.6	6.7	7	10.7	7.2	1.43E-05	0.000332	0.007616	0.148717	0.654651412	0.178722129	0.009512925	0.000415116	1.79424E-05	7.75E-07	3.35E-08	1.51E-09
181	4.9	8.6	9.2	9.4	9.9	14.4	6.6	1	1	1	0.000302	0.001966099	0.014552138	0.09724597	0.378055596	0.38728586	0.102697	0.01548	0.002415
182	4.9	8.6	9.2	9.4	9.9	14.4	7.6	1	1	0.000302	0.001966	0.014552138	0.09724597	0.378055596	0.38728586	0.102697439	0.01548	0.002094	0.000322
183	4.9	8.6	9.2	9.4	9.9	14.4	8.6	1	0.000302	0.001966	0.014552	0.09724597	0.378055596	0.38728586	0.102697439	0.015479673	0.002094	0.000279	4.27E-05
184	4.9	8.6	9.2	9.4	9.9	14.4	9.6	0.000302	0.001966	0.014552	0.097246	0.378055596	0.38728586	0.102697439	0.015479673	0.002093663	0.000279	3.71E-05	5.68E-06
185	2.5	6.7	10	11.6	15.4	16.6	4.7	1	0.634149	0.070886	0.062193	0.052433771	0.042740907	0.033892782	0.026293747	0.020053744	0.015097	0.011254	0.031007
186	2.5	6.7	10	11.6	15.4	16.6	5.7	0.634149	0.070886	0.062193	0.052434	0.042740907	0.033892782	0.026293747	0.020053744	0.015096683	0.011254	0.008328	0.022679
187	2.5	6.7	10	11.6	15.4	16.6	6.7	0.070886	0.062193	0.052434	0.042741	0.033892782	0.026293747	0.020053744	0.015096683	0.011253877	0.008328	0.006129	0.016549
188	2.5	6.7	10	11.6	15.4	16.6	7.7	0.062193	0.052434	0.042741	0.033893	0.026293747	0.020053744	0.015096683	0.011253877	0.008327969	0.006129	0.004493	0.012056
189	1.9	5.8	8.1	9.7	11.3	14.7	3.8	1	0.406487	0.11484	0.112629	0.099669105	0.080487873	0.060329826	0.042741365	0.029085488	0.019254	0.012514	0.02196
190	1.9	5.8	8.1	9.7	11.3	14.7	4.8	0.406487	0.11484	0.112629	0.099669	0.080487873	0.060329826	0.042741365	0.029085488	0.019254282	0.012514	0.008037	0.013923
191	1.9	5.8	8.1	9.7	11.3	14.7	5.8	0.11484	0.112629	0.099669	0.080488	0.060329826	0.042741365	0.029085488	0.019254282	0.012514481	0.008037	0.005122	0.008801
192	1.9	5.8	8.1	9.7	11.3	14.7	6.8	0.112629	0.099669	0.080488	0.06033	0.042741365	0.029085488	0.019254282	0.012514481	0.008037195	0.005122	0.003248	0.005553
193	3.3	6.8	8.2	9.1	13	14.1	4.8	1	1	0.670528	0.079341	0.065495822	0.051393307	0.038745869	0.028338816	0.020270846	0.01427	0.009933	0.021683
194	3.3	6.8	8.2	9.1	13	14.1	5.8	1	0.670528	0.079341	0.065496	0.051393307	0.038745869	0.028338816	0.020270846	0.014270067	0.009933	0.00686	0.014823
195	3.3	6.8	8.2	9.1	13	14.1	6.8	0.670528	0.079341	0.065496	0.051393	0.038745869	0.028338816	0.020270846	0.014270067	0.009933124	0.00686	0.004712	0.010111

	1 yr Elevation (ft)	10 yr Elevation (ft)	50 yr Elevation (ft)	100 yr Elevation (ft)	500 yr Elevation (ft)	Wave Heigh Factor	FFE	-2 EANF	-1 EANF	0 EANF	1 EANF	2 EANF	3 EANF	4 EANF	5 EANF	6 EANF	7 EANF	8 EANF	>8 EANF
196	3.3	6.8	8.2	9.1	13	14.1	7.8	0.079341	0.065496	0.051393	0.038746	0.028338816	0.020270846	0.014270067	0.009933124	0.006860142	0.004712	0.003225	0.006886
197	1.4	7.4	8.9	9.2	10.8	14.2	5.4	0.014625	0.030167	0.059191	0.105535	0.159571513	0.18984148	0.17079995	0.119122961	0.069104471	0.035879	0.017558	0.015647
198	1.4	7.4	8.9	9.2	10.8	14.2	6.4	0.030167	0.059191	0.105535	0.159572	0.18984148	0.17079995	0.119122961	0.069104471	0.035878557	0.017558	0.008344	0.007303
199	1.4	7.4	8.9	9.2	10.8	14.2	7.4	0.059191	0.105535	0.159572	0.189841	0.17079995	0.119122961	0.069104471	0.035878557	0.01755829	0.008344	0.00391	0.003393
200	1.4	7.4	8.9	9.2	10.8	14.2	8.4	0.105535	0.159572	0.189841	0.1708	0.119122961	0.069104471	0.035878557	0.01755829	0.008343948	0.00391	0.00182	0.001573
201	3.6	10	12	13	14.5	18	8	0.033329	0.056971	0.090393	0.127753	0.153878024	0.153330279	0.1264709	0.089036654	0.055925787	0.03265	0.018253	0.021431
202	3.6	10	12	13	14.5	18	9	0.056971	0.090393	0.127753	0.153878	0.153330279	0.1264709	0.089036654	0.055925787	0.032650382	0.018253	0.009958	0.011473
203	3.6	10	12	13	14.5	18	10	0.090393	0.127753	0.153878	0.15333	0.1264709	0.089036654	0.055925787	0.032650382	0.018253124	0.009958	0.00536	0.006113
204	3.6	10	12	13	14.5	18	11	0.127753	0.153878	0.15333	0.126471	0.089036654	0.055925787	0.032650382	0.018253124	0.009957732	0.00536	0.002864	0.003249
205	3.6	7.3	11.6	12.9	16.2	17.9	5.3	1	1	0.668055	0.067741	0.058180152	0.048117806	0.038568773	0.030146044	0.023102239	0.017438	0.013012	0.035638
206	3.6	7.3	11.6	12.9	16.2	17.9	6.3	1	0.668055	0.067741	0.05818	0.048117806	0.038568773	0.030146044	0.023102239	0.017437915	0.013012	0.009627	0.026011
207	3.6	7.3	11.6	12.9	16.2	17.9	7.3	0.668055	0.067741	0.05818	0.048118	0.038568773	0.030146044	0.023102239	0.017437915	0.013012379	0.009627	0.007078	0.018933
208	3.6	7.3	11.6	12.9	16.2	17.9	8.3	0.067741	0.05818	0.048118	0.038569	0.030146044	0.023102239	0.017437915	0.013012379	0.009627168	0.007078	0.005179	0.013754
209	1.2	7.9	10.6	11.8	13.7	16.8	5.9	0.07545	0.096853	0.113387	0.119274	0.11214322	0.094844697	0.073290754	0.052781908	0.036113416	0.023851	0.015387	0.026094
210	1.2	7.9	10.6	11.8	13.7	16.8	6.9	0.096853	0.113387	0.119274	0.112143	0.094844697	0.073290754	0.052781908	0.036113416	0.023850888	0.015387	0.009776	0.016318
211	1.2	7.9	10.6	11.8	13.7	16.8	7.9	0.113387	0.119274	0.112143	0.094845	0.073290754	0.052781908	0.036113416	0.023850888	0.01538664	0.009776	0.006152	0.010166
212	1.2	7.9	10.6	11.8	13.7	16.8	8.9	0.119274	0.112143	0.094845	0.073291	0.052781908	0.036113416	0.023850888	0.01538664	0.009776369	0.006152	0.003847	0.006318
213	2.5	6.2	6.6	6.7	7	11.7	4.2	1	1	1.83E-07	3.06E-06	5.41261E-05	0.000956805	0.016633032	0.223558749	0.607849835	0.140997	0.009379	0.000567
214	2.5	6.2	6.6	6.7	7	11.7	5.2	1	1.83E-07	3.06E-06	5.41E-05	0.000956805	0.016633032	0.223558749	0.607849835	0.140997417	0.009379	0.000535	3.21E-05
215	2.5	6.2	6.6	6.7	7	11.7	6.2	1.83E-07	3.06E-06	5.41E-05	0.000957	0.016633032	0.223558749	0.607849835	0.140997417	0.00937935	0.000535	3.03E-05	1.81E-06
216	2.5	6.2	6.6	6.7	7	11.7	7.2	3.06E-06	5.41E-05	0.000957	0.016633	0.223558749	0.607849835	0.140997417	0.00937935	0.000535358	3.03E-05	1.71E-06	1.02E-07

Table 4. EANF Values for Use in Existing Module (Based on Piece Wise Log-Linear Regression of 10-, 50-, 100-, and 500-Year SWEL – No 1-Year Provided)

	1 yr Elevation (ft)	10 yr Elevation (ft)	50 yr Elevation (ft)	100 yr Elevation (ft)	500 yr Elevation (ft)	Wave Heigh Factor	FFE	FFE Comments	-2 EANF	-1 EANF	0 EANF	1 EANF	2 EANF	3 EANF	4 EANF	5 EANF	6 EANF	7 EANF	8 EANF	>8 EANF
1	6.6	8.6	9.2	9.4	9.9	9.4	6.6	10Year Plus -2	1	1	1	0.316228	0.099999996	0.005253055	0.000210122	8.4E-06	3.36E-07	1.34E-08	5.38E-10	2.15E-11
2	7.6	8.6	9.2	9.4	9.9	9.4	7.6	10Year Plus -1	1	1	1	0.1	0.005253055	0.000210122	8.40489E-06	3.36E-07	1.34E-08	5.38E-10	2.15E-11	8.61E-13
3	7.741594	8.6	9.2	9.4	9.9	9.4	8.6	10Year Plus 0	1	1	0.1	0.005253	0.000210122	8.40489E-06	3.36196E-07	1.34E-08	5.38E-10	2.15E-11	8.61E-13	3.44E-14
4	7.741594	8.6	9.2	9.4	9.9	9.4	9.6	10Year Plus 1	1	0.1	0.005253	0.00021	8.40489E-06	3.36196E-07	1.34478E-08	5.38E-10	2.15E-11	8.61E-13	3.44E-14	1.38E-15
5	1.978767	6.7	10	11.6	15.4	11.6	4.7	10Year Plus -2	0.703455	0.431944	0.265227	0.162858	0.1	0.061403186	0.037703513	0.023151	0.014768	0.009585	0.006276	0.004109
6	1.978767	6.7	10	11.6	15.4	11.6	5.7	10Year Plus -1	0.431944	0.265227	0.162858	0.1	0.061403186	0.037703513	0.023151158	0.014768	0.009585	0.006276	0.004109	0.00269
7	1.978767	6.7	10	11.6	15.4	11.6	6.7	10Year Plus 0	0.265227	0.162858	0.1	0.061403	0.037703513	0.023151158	0.014768261	0.009585	0.006276	0.004109	0.00269	0.001761
8	1.978767	6.7	10	11.6	15.4	11.6	7.7	10Year Plus 1	0.162858	0.1	0.061403	0.037704	0.023151158	0.014768261	0.009585308	0.006276	0.004109	0.00269	0.001761	0.001153
9	2.509444	5.8	8.1	9.7	11.3	9.7	3.8	10Year Plus -2	1	0.816018	0.405322	0.201326	0.099999999	0.049670667	0.024671752	0.014768	0.009043	0.003307	0.001209	0.000442
10	2.509444	5.8	8.1	9.7	11.3	9.7	4.8	10Year Plus -1	0.816018	0.405322	0.201326	0.1	0.049670667	0.024671752	0.014768261	0.009043	0.003307	0.001209	0.000442	0.000162
11	2.509444	5.8	8.1	9.7	11.3	9.7	5.8	10Year Plus 0	0.405322	0.201326	0.1	0.049671	0.024671752	0.014768261	0.009043038	0.003307	0.001209	0.000442	0.000162	5.92E-05
12	2.509444	5.8	8.1	9.7	11.3	9.7	6.8	10Year Plus 1	0.201326	0.1	0.049671	0.024672	0.014768261	0.009043038	0.003307182	0.001209	0.000442	0.000162	5.92E-05	2.16E-05
13	4.797053	6.8	8.2	9.1	13	9.1	4.8	10Year Plus -2	1	1	0.996618	0.315693	0.099999999	0.031676392	0.01259921	0.007491	0.004958	0.003282	0.002172	0.001438
14	4.797053	6.8	8.2	9.1	13	9.1	5.8	10Year Plus -1	1	0.996618	0.315693	0.1	0.031676392	0.01259921	0.00749107	0.004958	0.003282	0.002172	0.001438	0.000952
15	4.797053	6.8	8.2	9.1	13	9.1	6.8	10Year Plus 0	0.996618	0.315693	0.1	0.031676	0.01259921	0.00749107	0.004958163	0.003282	0.002172	0.001438	0.000952	0.00063
16	4.797053	6.8	8.2	9.1	13	9.1	7.8	10Year Plus 1	0.315693	0.1	0.031676	0.012599	0.00749107	0.004958163	0.003281691	0.002172	0.001438	0.000952	0.00063	0.000417
17	5.253985	7.4	8.9	9.2	10.8	9.2	5.4	10Year Plus -2	1	1	0.854988	0.292402	0.1	0.034199519	0.008177654	0.002991	0.001094	0.0004	0.000146	5.35E-05
18	5.253985	7.4	8.9	9.2	10.8	9.2	6.4	10Year Plus -1	1	0.854988	0.292402	0.1	0.034199519	0.008177654	0.002990698	0.001094	0.0004	0.000146	5.35E-05	1.96E-05
19	5.253985	7.4	8.9	9.2	10.8	9.2	7.4	10Year Plus 0	0.854988	0.292402	0.1	0.0342	0.008177654	0.002990698	0.001093745	0.0004	0.000146	5.35E-05	1.96E-05	7.16E-06
20	5.253985	7.4	8.9	9.2	10.8	9.2	8.4	10Year Plus 1	0.292402	0.1	0.0342	0.008178	0.002990698	0.001093745	0.0004	0.000146	5.35E-05	1.96E-05	7.16E-06	2.62E-06
21	7.138647	10	12	13	14.5	13	8	10Year Plus -2	1	1	0.5	0.223607	0.099999999	0.044721359	0.02	0.01	0.00342	0.00117	0.0004	0.000137
22	7.138647	10	12	13	14.5	13	9	10Year Plus -1	1	0.5	0.223607	0.1	0.044721359	0.02	0.01	0.00342	0.00117	0.0004	0.000137	4.68E-05
23	7.138647	10	12	13	14.5	13	10	10Year Plus 0	0.5	0.223607	0.1	0.044721	0.02	0.01	0.003419952	0.00117	0.0004	0.000137	4.68E-05	1.6E-05
24	7.138647	10	12	13	14.5	13	11	10Year Plus 1	0.223607	0.1	0.044721	0.02	0.01	0.003419952	0.001169607	0.0004	0.000137	4.68E-05	1.6E-05	5.47E-06
25	1.148091	7.3	11.6	12.9	16.2	12.9	5.3	10Year Plus -2	0.446894	0.307364	0.211399	0.145396	0.1	0.068777888	0.047303979	0.032535	0.022377	0.01377	0.008228	0.005052
26	1.148091	7.3	11.6	12.9	16.2	12.9	6.3	10Year Plus -1	0.307364	0.211399	0.145396	0.1	0.068777888	0.047303979	0.032534678	0.022377	0.01377	0.008228	0.005052	0.003102
27	1.148091	7.3	11.6	12.9	16.2	12.9	7.3	10Year Plus 0	0.211399	0.145396	0.1	0.068778	0.047303979	0.032534678	0.022376664	0.01377	0.008228	0.005052	0.003102	0.001905
28	1.148091	7.3	11.6	12.9	16.2	12.9	8.3	10Year Plus 1	0.145396	0.1	0.068778	0.047304	0.032534678	0.022376664	0.013770095	0.008228	0.005052	0.003102	0.001905	0.00117
29	4.037173	7.9	10.6	11.8	13.7	11.8	5.9	10Year Plus -2	1	0.597907	0.329424	0.1815	0.099999999	0.055096272	0.030355993	0.016818	0.009188	0.003939	0.001688	0.000724
30	4.037173	7.9	10.6	11.8	13.7	11.8	6.9	10Year Plus -1	0.597907	0.329424	0.1815	0.1	0.055096272	0.030355993	0.016817928	0.009188	0.003939	0.001688	0.000724	0.00031
31	4.037173	7.9	10.6	11.8	13.7	11.8	7.9	10Year Plus 0	0.329424	0.1815	0.1	0.055096	0.030355993	0.016817928	0.009187812	0.003939	0.001688	0.000724	0.00031	0.000133
32	4.037173	7.9	10.6	11.8	13.7	11.8	8.9	10Year Plus 1	0.1815	0.1	0.055096	0.030356	0.016817928	0.009187812	0.003938521	0.001688	0.000724	0.00031	0.000133	5.7E-05
33	4.2	6.2	6.6	6.7	7	6.7	4.2	10Year Plus -2	1	1	1	0.316228	0.099999996	0.00068399	3.2E-06	1.5E-08	7E-11	3.28E-13	1.53E-15	7.17E-18
34	5.2	6.2	6.6	6.7	7	6.7	5.2	10Year Plus -1	1	1	1	0.1	0.00068399	3.2E-06	1.4971E-08	7E-11	3.28E-13	1.53E-15	7.17E-18	3.36E-20
35	5.627729	6.2	6.6	6.7	7	6.7	6.2	10Year Plus 0	1	1	0.1	0.000684	3.2E-06	1.4971E-08	7.00406E-11	3.28E-13	1.53E-15	7.17E-18	3.36E-20	1.57E-22
36	5.627729	6.2	6.6	6.7	7	6.7	7.2	10Year Plus 1	1	0.1	0.000684	3.2E-06	1.4971E-08	7.00406E-11	3.2768E-13	1.53E-15	7.17E-18	3.36E-20	1.57E-22	7.34E-25
37	6.6	8.6	9.2	9.4	9.9	10.4	6.6	10Year Plus -2	1	1	1	0.452035	0.204433597	0.079459738	0.005848035	0.0004	2.74E-05	1.87E-06	1.28E-07	8.76E-09
38	7.6	8.6	9.2	9.4	9.9	10.4	7.6	10Year Plus -1	1	1	1	0.297635	0.079459738	0.005848035	0.0004	2.74E-05	1.87E-06	1.28E-07	8.76E-09	5.99E-10
39	8.498526	8.6	9.2	9.4	9.9	10.4	8.6	10Year Plus 0	1	1	0.79191	0.07946	0.005848035	0.0004	2.73596E-05	1.87E-06	1.28E-07	8.76E-09	5.99E-10	4.1E-11
40	8.498526	8.6	9.2	9.4	9.9	10.4	9.6	10Year Plus 1	1	0.79191	0.07946	0.005848	0.0004	2.73596E-05	1.87137E-06	1.28E-07	8.76E-09	5.99E-10	4.1E-11	2.8E-12
41	2.149564	6.7	10	11.6	15.4	12.6	4.7	10Year Plus -2	0.781859	0.5	0.319751	0.204481	0.130766048	0.083625103	0.053478391	0.0342	0.021871	0.014433	0.009615	0.006493
42	2.149564	6.7	10	11.6	15.4	12.6	5.7	10Year Plus -1	0.5	0.319751	0.204481	0.130766	0.083625103	0.053478391	0.034199519	0.021871	0.014433	0.009615	0.006493	0.004385
43	2.149564	6.7	10	11.6	15.4	12.6	6.7	10Year Plus 0	0.319751	0.204481	0.130766	0.083625	0.053478391	0.034199519	0.021870648	0.014433	0.009615	0.006493	0.004385	0.002961
44	2.149564	6.7	10	11.6	15.4	12.6	7.7	10Year Plus 1	0.204481	0.130766	0.083625	0.053478	0.034199519	0.021870648	0.014433406	0.009615	0.006493	0.004385	0.002961	0.002
45	2.823309	5.8	8.1	9.7	11.3	10.7	3.8	10Year Plus -2	1	1	0.533247	0.280118	0.14714747	0.077297384	0.040604746	0.02133	0.014142	0.009145	0.00374	0.001529
46	2.823309	5.8	8.1	9.7	11.3	10.7	4.8	10Year Plus -1	1	0.533247	0.280118	0.147147	0.077297384	0.040604746	0.021329899	0.014142	0.009145	0.00374	0.001529	0.000625
47	2.823309	5.8	8.1	9.7	11.3	10.7	5.8	10Year Plus 0	0.533247	0.280118	0.147147	0.077297	0.040604746	0.021329899	0.014142136	0.009145	0.00374	0.001529	0.000625	0.000256
48	2.823309	5.8	8.1	9.7	11.3	10.7	6.8	10Year Plus 1	0.280118	0.147147	0.077297	0.040605	0.021329899	0.014142136	0.009144676	0.00374	0.001529	0.000625	0.000256	0.000105
49	4.8	6.8	8.2	9.1	13	10.1	4.8	10Year Plus -2	1	1	1	0.426216	0.181659978	0.073950841	0.027044993	0.012311	0.007695	0.005293	0.00364	0.002504
50	5.210918	6.8	8.2	9.1	13	10.1	5.8	10Year Plus -1	1	1	0.552912	0.202208	0.073950841	0.027044993	0.012311444	0.007695	0.005293	0.00364	0.002504	0.001722
51	5.210918	6.8	8.2	9.1	13	10.1	6.8	10Year Plus 0	1	0.552912	0.202208	0.073951	0.027044993	0.012311444	0.007695039	0.005293	0.00364	0.002504	0.001722	0.001184
52	5.210918	6.8	8.2	9.1	13	10.1	7.8	10Year Plus 1	0.552912	0.202208	0.073951	0.027045	0.012311444	0.007695039	0.005292526	0.00364	0.002504	0.001722	0.001184	0.000815
53	5.4	7.4	8.9	9.2	10.8	10.2	5.4	10Year Plus -2	1	1	1	0.439397	0.193069773	0.082750044	0.032107716	0.008363	0.00342	0.001399	0.000572	0.000234
54	5.76785	7.4	8.9	9.2	10.8	10.2	6.4	10Year Plus -1	1	1	0.54965	0.213269	0.082750044	0.032107716	0.00836251	0.00342	0.001399	0.000572	0.000234	9.57E-05
55	5.76785	7.4	8.9	9.2	10.8	10.2	7.4	10Year Plus 0	1	0.54965	0.213269	0.08275	0.032107716	0.00836251	0.003419952	0.001399	0.000572	0.000234	9.57E-05	3.91E-05
56	5.76785	7.4	8.9	9.2	10.8	10.2	8.4	10Year Plus 1	0.54965	0.213269	0.08275	0.032108	0.00836251	0.003419952	0.001398632	0.000572	0.000234	9.57E-05	3.91E-05	1.6E-05
57	7.795579	10	12	13	14.5	14	8	10Year Plus -2	1	1	0.854988	0.397299	0.184618102	0.085788964	0.039864706	0.018779	0.01	0.003657	0.001337	0.000489
58	7.795579	10	12	13	14.5	14	9	10Year Plus -1	1	0.854988	0.397299	0.184618	0.085788964	0.039864706	0.018778618	0.01	0.003657	0.001337	0.000489	0.000179
59	7.795579	10	12	13	14.5	14	10	10Year Plus 0	0.854988	0.397299	0.184618	0.085789	0.039864706	0.018778618	0.01	0.003657	0.001337	0.000489	0.000179	6.54E-05
60	7.795579	10	12	13	14.5	14	11	10Year Plus 1	0.397299	0.184618	0.085789	0.039865	0.018778618	0.01	0.003657158	0.001337	0.000489	0.000179	6.54E-05	2.39E-05
61	1.318888	7.3	11.6	12.9	16.2	13.9	5.3	10Year Plus -2	0.5	0.352387	0.248353	0.175033	0.123358762	0.086940073	0.061273121	0.043184	0.030435	0.02145	0.013459	0.008363
62	1.318888	7.3	11.6	12.9	16.2	13.9	6.3	10Year Plus -1	0.352387	0.248353	0.175033	0.123359	0.086940073	0.061273121	0.043183715	0.030435	0.02145	0.013459	0.008363	0.005348
63	1.318888	7.3	11.6	12.9	16.2	13.9	7.3	10Year Plus 0	0.248353	0.175033	0.123359	0.08694	0.061273121	0.043183715	0.030434768	0.02145	0.013459	0.008363	0.005348	0.00342
64	1.318888	7.3	11.6	12.9	16.2	13.9	8.3	10Year Plus 1	0.175033	0.123359	0.08694	0.061273	0.043183715	0.030434768	0.021449639	0.013459	0.008363	0.005348	0.00342	0.002187
65	4.451038	7.9	10.6	11.8	13.7	12.8	5.9	10Year Plus -2	1	0.779452	0.447471	0.256886	0.147474487	0.084662825	0.04860362	0.027903	0.016159	0.009262	0.004304	0.002
66	4.451038	7.9	10.6	11.8	13.7	12.8	6.9	10Year Plus -1	0.779452	0.447471	0.256886	0.147474	0.084662825	0.04860362	0.027902587	0.016159	0.009262	0.004304	0.002	0.000929

	1 yr Elevation (ft)	10 yr Elevation (ft)	50 yr Elevation (ft)	100 yr Elevation (ft)	500 yr Elevation (ft)	Wave Heigh Factor	FFE	FFE Comments	-2 EANF	-1 EANF	0 EANF	1 EANF	2 EANF	3 EANF	4 EANF	5 EANF	6 EANF	7 EANF	8 EANF	>8 EANF
67	4.451038	7.9	10.6	11.8	13.7	12.8	7.9	10Year Plus 0	0.447471	0.256886	0.147474	0.084663	0.04860362	0.027902587	0.016158661	0.009262	0.004304	0.002	0.000929	0.000432
68	4.451038	7.9	10.6	11.8	13.7	12.8	8.9	10Year Plus 1	0.256886	0.147474	0.084663	0.048604	0.027902587	0.016158661	0.009262233	0.004304	0.002	0.000929	0.000432	0.000201
69	4.2	6.2	6.6	6.7	7	7.7	4.2	10Year Plus -2	1	1	1	0.452035	0.204335971	0.072477964	0.00068399	3.2E-06	1.5E-08	7E-11	3.28E-13	1.53E-15
70	5.2	6.2	6.6	6.7	7	7.7	5.2	10Year Plus -1	1	1	1	0.297635	0.072477964	0.00068399	3.2E-06	1.5E-08	7E-11	3.28E-13	1.53E-15	7.17E-18
71	6.2	6.2	6.6	6.7	7	7.7	6.2	10Year Plus 0	1	1	1	0.072478	0.00068399	3.2E-06	1.4971E-08	7E-11	3.28E-13	1.53E-15	7.17E-18	3.36E-20
72	6.384662	6.2	6.6	6.7	7	7.7	7.2	10Year Plus 1	1	1	0.072478	0.000684	3.2E-06	1.4971E-08	7.00406E-11	3.28E-13	1.53E-15	7.17E-18	3.36E-20	1.57E-22
73	6.6	8.6	9.2	9.4	9.9	11.4	6.6	10Year Plus -2	1	1	1	0.545559	0.297635143	0.162377673	0.066874029	0.005848	0.0004	2.74E-05	1.87E-06	1.28E-07
74	7.6	8.6	9.2	9.4	9.9	11.4	7.6	10Year Plus -1	1	1	1	0.439397	0.193069771	0.066874029	0.005848035	0.0004	2.74E-05	1.87E-06	1.28E-07	8.76E-09
75	8.6	8.6	9.2	9.4	9.9	11.4	8.6	10Year Plus 0	1	1	1	0.278256	0.066874029	0.005848035	0.0004	2.74E-05	1.87E-06	1.28E-07	8.76E-09	5.99E-10
76	9.255459	8.6	9.2	9.4	9.9	11.4	9.6	10Year Plus 1	1	1	0.5	0.066874	0.005848035	0.0004	2.73596E-05	1.87E-06	1.28E-07	8.76E-09	5.99E-10	4.1E-11
77	2.463429	6.7	10	11.6	15.4	13.6	4.7	10Year Plus -2	0.90466	0.592306	0.387799	0.253902	0.166236876	0.10883984	0.071260427	0.046656	0.030547	0.02	0.013887	0.009649
78	2.463429	6.7	10	11.6	15.4	13.6	5.7	10Year Plus -1	0.592306	0.387799	0.253902	0.166237	0.10883984	0.071260427	0.046656155	0.030547	0.02	0.013887	0.009649	0.006747
79	2.463429	6.7	10	11.6	15.4	13.6	6.7	10Year Plus 0	0.387799	0.253902	0.166237	0.10884	0.071260427	0.046656155	0.030547064	0.02	0.013887	0.009649	0.006747	0.004719
80	2.463429	6.7	10	11.6	15.4	13.6	7.7	10Year Plus 1	0.253902	0.166237	0.10884	0.07126	0.046656155	0.030547064	0.02	0.013887	0.009649	0.006747	0.004719	0.0033
81	2.994106	5.8	8.1	9.7	11.3	11.7	3.8	10Year Plus -2	1	1	0.629249	0.354153	0.199323531	0.112182839	0.063138503	0.035535	0.02	0.013887	0.009188	0.003939
82	2.994106	5.8	8.1	9.7	11.3	11.7	4.8	10Year Plus -1	1	0.629249	0.354153	0.199324	0.112182839	0.063138503	0.035535476	0.02	0.013887	0.009188	0.003939	0.001688
83	2.994106	5.8	8.1	9.7	11.3	11.7	5.8	10Year Plus 0	0.629249	0.354153	0.199324	0.112183	0.063138503	0.035535476	0.02	0.013887	0.009188	0.003939	0.001688	0.000724
84	2.994106	5.8	8.1	9.7	11.3	11.7	6.8	10Year Plus 1	0.354153	0.199324	0.112183	0.063139	0.035535476	0.02	0.013886511	0.009188	0.003939	0.001688	0.000724	0.00031
85	4.8	6.8	8.2	9.1	13	11.1	4.8	10Year Plus -2	1	1	1	0.517947	0.268269578	0.138949549	0.062290323	0.024169	0.012081	0.007908	0.005655	0.004044
86	5.8	6.8	8.2	9.1	13	11.1	5.8	10Year Plus -1	1	1	1	0.398107	0.158489318	0.062290323	0.024169171	0.012081	0.007908	0.005655	0.004044	0.002892
87	5.86785	6.8	8.2	9.1	13	11.1	6.8	10Year Plus 0	1	1	0.41375	0.160539	0.062290323	0.024169171	0.012080894	0.007908	0.005655	0.004044	0.002892	0.002068
88	5.86785	6.8	8.2	9.1	13	11.1	7.8	10Year Plus 1	1	0.41375	0.160539	0.06229	0.024169171	0.012080894	0.007908004	0.005655	0.004044	0.002892	0.002068	0.001479
89	5.4	7.4	8.9	9.2	10.8	11.2	5.4	10Year Plus -2	1	1	1	0.5275	0.27825594	0.146779927	0.069931579	0.028599	0.008442	0.003619	0.001551	0.000665
90	6.4	7.4	8.9	9.2	10.8	11.2	6.4	10Year Plus -1	1	1	1	0.412463	0.170125428	0.069931579	0.028599383	0.008442	0.003619	0.001551	0.000665	0.000285
91	6.424782	7.4	8.9	9.2	10.8	11.2	7.4	10Year Plus 0	1	1	0.418126	0.170998	0.069931579	0.028599383	0.008441589	0.003619	0.001551	0.000665	0.000285	0.000122
92	6.424782	7.4	8.9	9.2	10.8	11.2	8.4	10Year Plus 1	1	0.418126	0.170998	0.069932	0.028599383	0.008441589	0.003618639	0.001551	0.000665	0.000285	0.000122	5.24E-05
93	8	10	12	13	14.5	15	8	10Year Plus -2	1	1	1	0.517947	0.268269578	0.138949548	0.07047742	0.035007	0.017818	0.01	0.00388	0.001506
94	8.209444	10	12	13	14.5	15	9	10Year Plus -1	1	1	0.575109	0.28566	0.141889414	0.07047742	0.035006605	0.017818	0.01	0.00388	0.001506	0.000584
95	8.209444	10	12	13	14.5	15	10	10Year Plus 0	1	0.575109	0.28566	0.141889	0.07047742	0.035006605	0.017817974	0.01	0.00388	0.001506	0.000584	0.000227
96	8.209444	10	12	13	14.5	15	11	10Year Plus 1	0.575109	0.28566	0.141889	0.070477	0.035006605	0.017817974	0.01	0.00388	0.001506	0.000584	0.000227	8.79E-05
97	1.246617	7.3	11.6	12.9	16.2	14.9	5.3	10Year Plus -2	0.516356	0.374244	0.271245	0.196593	0.142486396	0.103271242	0.074848896	0.054249	0.039319	0.028497	0.020654	0.013195
98	1.246617	7.3	11.6	12.9	16.2	14.9	6.3	10Year Plus -1	0.374244	0.271245	0.196593	0.142486	0.103271242	0.074848896	0.054248958	0.039319	0.028497	0.020654	0.013195	0.008442
99	1.246617	7.3	11.6	12.9	16.2	14.9	7.3	10Year Plus 0	0.271245	0.196593	0.142486	0.103271	0.074848896	0.054248958	0.039318541	0.028497	0.020654	0.013195	0.008442	0.005527
100	1.246617	7.3	11.6	12.9	16.2	14.9	8.3	10Year Plus 1	0.196593	0.142486	0.103271	0.074849	0.054248958	0.039318541	0.028497279	0.020654	0.013195	0.008442	0.005527	0.003619
101	4.621835	7.9	10.6	11.8	13.7	13.8	5.9	10Year Plus -2	1	0.869443	0.525791	0.317969	0.192289939	0.116286269	0.070323473	0.042528	0.025718	0.015614	0.009295	0.004472
102	4.621835	7.9	10.6	11.8	13.7	13.8	6.9	10Year Plus -1	0.869443	0.525791	0.317969	0.19229	0.116286269	0.070323473	0.042527728	0.025718	0.015614	0.009295	0.004472	0.002152
103	4.621835	7.9	10.6	11.8	13.7	13.8	7.9	10Year Plus 0	0.525791	0.317969	0.19229	0.116286	0.070323473	0.042527728	0.025718406	0.015614	0.009295	0.004472	0.002152	0.001035
104	4.621835	7.9	10.6	11.8	13.7	13.8	8.9	10Year Plus 1	0.317969	0.19229	0.116286	0.070323	0.042527728	0.025718406	0.015614184	0.009295	0.004472	0.002152	0.001035	0.000498
105	4.2	6.2	6.6	6.7	7	8.7	4.2	10Year Plus -2	1	1	1	0.554102	0.307029062	0.170125427	0.072477964	0.001337	2.39E-05	4.28E-07	7.66E-09	1.37E-10
106	5.2	6.2	6.6	6.7	7	8.7	5.2	10Year Plus -1	1	1	1	0.452035	0.204335971	0.072477964	0.001337481	2.39E-05	4.28E-07	7.66E-09	1.37E-10	2.45E-12
107	6.2	6.2	6.6	6.7	7	8.7	6.2	10Year Plus 0	1	1	1	0.297635	0.072477964	0.001337481	2.39256E-05	4.28E-07	7.66E-09	1.37E-10	2.45E-12	4.38E-14
108	7.2	6.2	6.6	6.7	7	8.7	7.2	10Year Plus 1	1	1	1	0.072478	0.001337481	2.39256E-05	4.27994E-07	7.66E-09	1.37E-10	2.45E-12	4.38E-14	7.84E-16
109	6.6	8.6	9.2	9.4	9.9	12.4	6.6	10Year Plus -2	1	1	1	0.61268	0.375377367	0.229986384	0.140908168	0.054687	0.006314	0.000634	6.36E-05	6.38E-06
110	7.6	8.6	9.2	9.4	9.9	12.4	7.6	10Year Plus -1	1	1	1	0.536698	0.288044414	0.154592773	0.054687269	0.006314	0.000634	6.36E-05	6.38E-06	6.4E-07
111	8.6	8.6	9.2	9.4	9.9	12.4	8.6	10Year Plus 0	1	1	1	0.426216	0.181659977	0.054687269	0.00631385	0.000634	6.36E-05	6.38E-06	6.4E-07	6.42E-08
112	9.6	8.6	9.2	9.4	9.9	12.4	9.6	10Year Plus 1	1	1	1	0.258086	0.054687269	0.00631385	0.000633528	6.36E-05	6.38E-06	6.4E-07	6.42E-08	6.44E-09
113	2.391158	6.7	10	11.6	15.4	14.6	4.7	10Year Plus -2	0.888387	0.605593	0.412819	0.281409	0.191829957	0.130766048	0.089140193	0.060765	0.041422	0.028236	0.019319	0.01366
114	2.391158	6.7	10	11.6	15.4	14.6	5.7	10Year Plus -1	0.605593	0.412819	0.281409	0.19183	0.130766048	0.089140193	0.060764809	0.041422	0.028236	0.019319	0.01366	0.00967
115	2.391158	6.7	10	11.6	15.4	14.6	6.7	10Year Plus 0	0.412819	0.281409	0.19183	0.130766	0.089140193	0.060764809	0.041421966	0.028236	0.019319	0.01366	0.00967	0.006915
116	2.391158	6.7	10	11.6	15.4	14.6	7.7	10Year Plus 1	0.281409	0.19183	0.130766	0.08914	0.060764809	0.041421966	0.028236397	0.019319	0.01366	0.00967	0.006915	0.004945
117	3.30797	5.8	8.1	9.7	11.3	12.7	3.8	10Year Plus -2	1	1	0.768001	0.44913	0.262652779	0.153600277	0.089825987	0.052531	0.03072	0.018722	0.013459	0.009262
118	3.30797	5.8	8.1	9.7	11.3	12.7	4.8	10Year Plus -1	1	0.768001	0.44913	0.262653	0.153600277	0.089825987	0.052530556	0.03072	0.018722	0.013459	0.009262	0.004304
119	3.30797	5.8	8.1	9.7	11.3	12.7	5.8	10Year Plus 0	0.768001	0.44913	0.262653	0.1536	0.089825987	0.052530556	0.030720055	0.018722	0.013459	0.009262	0.004304	0.002
120	3.30797	5.8	8.1	9.7	11.3	12.7	6.8	10Year Plus 1	0.44913	0.262653	0.1536	0.089826	0.052530556	0.030720055	0.018722355	0.013459	0.009262	0.004304	0.002	0.000929
121	4.8	6.8	8.2	9.1	13	12.1	4.8	10Year Plus -2	1	1	1	0.577969	0.334048497	0.193069772	0.111588399	0.05078	0.021768	0.011892	0.008052	0.005909
122	5.8	6.8	8.2	9.1	13	12.1	5.8	10Year Plus -1	1	1	1	0.486968	0.237137369	0.115478198	0.050780484	0.021768	0.011892	0.008052	0.005909	0.004336
123	6.281715	6.8	8.2	9.1	13	12.1	6.8	10Year Plus 0	1	1	0.644664	0.276347	0.118461107	0.050780484	0.021767968	0.011892	0.008052	0.005909	0.004336	0.003182
124	6.281715	6.8	8.2	9.1	13	12.1	7.8	10Year Plus 1	1	0.644664	0.276347	0.118461	0.050780484	0.021767968	0.011892071	0.008052	0.005909	0.004336	0.003182	0.002335
125	5.4	7.4	8.9	9.2	10.8	12.2	5.4	10Year Plus -2	1	1	1	0.592553	0.351119173	0.208056754	0.123284674	0.061703	0.027595	0.008579	0.003986	0.001852
126	6.4	7.4	8.9	9.2	10.8	12.2	6.4	10Year Plus -1	1	1	1	0.508022	0.258086154	0.131113394	0.061703386	0.027595	0.008579	0.003986	0.001852	0.000861
127	6.938647	7.4	8.9	9.2	10.8	12.2	7.4	10Year Plus 0	1	1	0.689865	0.308517	0.137972966	0.061703386	0.027594593	0.008579	0.003986	0.001852	0.000861	0.0004
128	6.938647	7.4	8.9	9.2	10.8	12.2	8.4	10Year Plus 1	1	0.689865	0.308517	0.137973	0.061703386	0.027594593	0.008578896	0.003986	0.001852	0.000861	0.0004	0.000186
129	8	10	12	13	14.5	16	8	10Year Plus -2	1	1	1	0.585385	0.342676024	0.200597529	0.117426857	0.063722	0.033473	0.017818	0.01	0.00409
130	8.723309	10	12	13	14.5	16	9	10Year Plus -1	1	1	0.836836	0.439595	0.230921515	0.121304356	0.063721853	0.033473	0.017818	0.01	0.00409	0.001673
131	8.723309	10	12	13	14.5	16	10	10Year Plus 0	1	0.836836	0.439595	0.230922	0.121304356	0.063721853	0.033473444	0.017818	0.01	0.00409	0.001673	0.000684
132	8.723309	10	12	13	14.5	16	11	10Year Plus 1	0.836836	0.439595	0.230922	0.121304	0.063721853	0.033473444	0.017817974	0.01	0.00409	0.001673	0.000684	0.00028

	1 yr Elevation (ft)	10 yr Elevation (ft)	50 yr Elevation (ft)	100 yr Elevation (ft)	500 yr Elevation (ft)	Wave Heigh Factor	FFE	FFE Comments	-2 EANF	-1 EANF	0 EANF	1 EANF	2 EANF	3 EANF	4 EANF	5 EANF	6 EANF	7 EANF	8 EANF	>8 EANF
133	1.417414	7.3	11.6	12.9	16.2	15.9	5.3	10Year Plus -2	0.564576	0.416717	0.307581	0.227028	0.167570639	0.123684932	0.091292618	0.067384	0.049736	0.036711	0.027096	0.02
134	1.417414	7.3	11.6	12.9	16.2	15.9	6.3	10Year Plus -1	0.416717	0.307581	0.227028	0.167571	0.123684932	0.091292618	0.067383649	0.049736	0.036711	0.027096	0.02	0.012968
135	1.417414	7.3	11.6	12.9	16.2	15.9	7.3	10Year Plus 0	0.307581	0.227028	0.167571	0.123685	0.091292618	0.067383649	0.049736291	0.036711	0.027096	0.02	0.012968	0.008547
136	1.417414	7.3	11.6	12.9	16.2	15.9	8.3	10Year Plus 1	0.227028	0.167571	0.123685	0.091293	0.067383649	0.049736291	0.036710666	0.027096	0.02	0.012968	0.008547	0.005772
137	5.0357	7.9	10.6	11.8	13.7	14.8	5.9	10Year Plus -2	1	1	0.664229	0.41375	0.25772635	0.160538578	0.099999999	0.06229	0.038801	0.024169	0.015157	0.009351
138	5.0357	7.9	10.6	11.8	13.7	14.8	6.9	10Year Plus -1	1	0.664229	0.41375	0.257726	0.160538578	0.099999999	0.062290323	0.038801	0.024169	0.015157	0.009351	0.004782
139	5.0357	7.9	10.6	11.8	13.7	14.8	7.9	10Year Plus 0	0.664229	0.41375	0.257726	0.160539	0.099999999	0.062290323	0.038800844	0.024169	0.015157	0.009351	0.004782	0.002446
140	5.0357	7.9	10.6	11.8	13.7	14.8	8.9	10Year Plus 1	0.41375	0.257726	0.160539	0.1	0.062290323	0.038800844	0.024169171	0.015157	0.009351	0.004782	0.002446	0.001251
141	4.2	6.2	6.6	6.7	7	9.7	4.2	10Year Plus -2	1	1	1	0.618966	0.383118684	0.23713737	0.146779926	0.05848	0.001337	2.39E-05	4.28E-07	7.66E-09
142	5.2	6.2	6.6	6.7	7	9.7	5.2	10Year Plus -1	1	1	1	0.545559	0.297635143	0.162377673	0.058480353	0.001337	2.39E-05	4.28E-07	7.66E-09	1.37E-10
143	6.2	6.2	6.6	6.7	7	9.7	6.2	10Year Plus 0	1	1	1	0.439397	0.193069772	0.058480353	0.001337481	2.39E-05	4.28E-07	7.66E-09	1.37E-10	2.45E-12
144	7.2	6.2	6.6	6.7	7	9.7	7.2	10Year Plus 1	1	1	1	0.278256	0.058480353	0.001337481	2.39256E-05	4.28E-07	7.66E-09	1.37E-10	2.45E-12	4.38E-14
145	6.6	8.6	9.2	9.4	9.9	13.4	6.6	10Year Plus -2	1	1	1	0.667669	0.445782285	0.297635143	0.198721846	0.13268	0.054687	0.006314	0.000634	6.36E-05
146	7.6	8.6	9.2	9.4	9.9	13.4	7.6	10Year Plus -1	1	1	1	0.61268	0.375377367	0.229986384	0.140908168	0.054687	0.006314	0.000634	6.36E-05	6.38E-06
147	8.6	8.6	9.2	9.4	9.9	13.4	8.6	10Year Plus 0	1	1	1	0.536698	0.288044414	0.154592773	0.054687269	0.006314	0.000634	6.36E-05	6.38E-06	6.4E-07
148	9.6	8.6	9.2	9.4	9.9	13.4	9.6	10Year Plus 1	1	1	1	0.426216	0.181659977	0.054687269	0.00631385	0.000634	6.36E-05	6.38E-06	6.4E-07	6.42E-08
149	2.705023	6.7	10	11.6	15.4	15.6	4.7	10Year Plus -2	1	0.69493	0.482041	0.33437	0.231937346	0.160884373	0.111598163	0.077411	0.053696	0.037247	0.025836	0.018196
150	2.705023	6.7	10	11.6	15.4	15.6	5.7	10Year Plus -1	0.69493	0.482041	0.33437	0.231937	0.160884373	0.111598163	0.077410563	0.053696	0.037247	0.025836	0.018196	0.013278
151	2.705023	6.7	10	11.6	15.4	15.6	6.7	10Year Plus 0	0.482041	0.33437	0.231937	0.160884	0.111598163	0.077410563	0.053696182	0.037247	0.025836	0.018196	0.013278	0.009689
152	2.705023	6.7	10	11.6	15.4	15.6	7.7	10Year Plus 1	0.33437	0.231937	0.160884	0.111598	0.077410563	0.053696182	0.037246596	0.025836	0.018196	0.013278	0.009689	0.007067
153	3.621835	5.8	8.1	9.7	11.3	13.7	3.8	10Year Plus -2	1	1	0.91429	0.552912	0.334370151	0.202208485	0.122284454	0.073951	0.044721	0.027045	0.017729	0.013116
154	3.621835	5.8	8.1	9.7	11.3	13.7	4.8	10Year Plus -1	1	0.91429	0.552912	0.33437	0.202208485	0.122284454	0.073950842	0.044721	0.027045	0.017729	0.013116	0.009324
155	3.621835	5.8	8.1	9.7	11.3	13.7	5.8	10Year Plus 0	0.91429	0.552912	0.33437	0.202208	0.122284454	0.073950842	0.044721359	0.027045	0.017729	0.013116	0.009324	0.004631
156	3.621835	5.8	8.1	9.7	11.3	13.7	6.8	10Year Plus 1	0.552912	0.33437	0.202208	0.122284	0.073950842	0.044721359	0.027044993	0.017729	0.013116	0.009324	0.004631	0.0023
157	4.8	6.8	8.2	9.1	13	13.1	4.8	10Year Plus -2	1	1	1	0.630957	0.39810717	0.251188642	0.158489319	0.1	0.044721	0.02	0.011735	0.008178
158	5.8	6.8	8.2	9.1	13	13.1	5.8	10Year Plus -1	1	1	1	0.562341	0.316227765	0.17782794	0.099999999	0.044721	0.02	0.011735	0.008178	0.006135
159	6.8	6.8	8.2	9.1	13	13.1	6.8	10Year Plus 0	1	1	1	0.464159	0.215443468	0.099999999	0.044721359	0.02	0.011735	0.008178	0.006135	0.004603
160	6.938647	6.8	8.2	9.1	13	13.1	7.8	10Year Plus 1	1	1	0.5	0.223607	0.099999999	0.044721359	0.02	0.011735	0.008178	0.006135	0.004603	0.003453
161	5.4	7.4	8.9	9.2	10.8	13.2	5.4	10Year Plus -2	1	1	1	0.642233	0.412462638	0.264896929	0.170125428	0.10926	0.055697	0.026799	0.008694	0.004318
162	6.4	7.4	8.9	9.2	10.8	13.2	6.4	10Year Plus -1	1	1	1	0.577969	0.334048498	0.193069773	0.111588399	0.055697	0.026799	0.008694	0.004318	0.002145
163	7.4	7.4	8.9	9.2	10.8	13.2	7.4	10Year Plus 0	1	1	1	0.486968	0.237137371	0.115478198	0.055696652	0.026799	0.008694	0.004318	0.002145	0.001065
164	7.452512	7.4	8.9	9.2	10.8	13.2	8.4	10Year Plus 1	1	1	0.5	0.240578	0.115755791	0.055696652	0.026798806	0.008694	0.004318	0.002145	0.001065	0.000529
165	8	10	12	13	14.5	17	8	10Year Plus -2	1	1	1	0.636681	0.405362095	0.258086153	0.164318428	0.104618	0.057286	0.030847	0.017044	0.01
166	9	10	12	13	14.5	17	9	10Year Plus -1	1	1	1	0.570292	0.325233386	0.185478118	0.105776755	0.057286	0.030847	0.017044	0.01	0.004472
167	9.380241	10	12	13	14.5	17	10	10Year Plus 0	1	1	0.681377	0.366904	0.197568669	0.10638575	0.057286045	0.030847	0.017044	0.01	0.004472	0.002
168	9.380241	10	12	13	14.5	17	11	10Year Plus 1	1	0.681377	0.366904	0.197569	0.10638575	0.057286045	0.030847092	0.017044	0.01	0.004472	0.002	0.000894
169	1.588211	7.3	11.6	12.9	16.2	16.9	5.3	10Year Plus -2	0.611422	0.458696	0.344119	0.258162	0.193676517	0.145298421	0.109004599	0.081777	0.06135	0.046025	0.034529	0.025904
170	1.588211	7.3	11.6	12.9	16.2	16.9	6.3	10Year Plus -1	0.458696	0.344119	0.258162	0.193677	0.145298421	0.109004599	0.081776543	0.06135	0.046025	0.034529	0.025904	0.019201
171	1.588211	7.3	11.6	12.9	16.2	16.9	7.3	10Year Plus 0	0.344119	0.258162	0.193677	0.145298	0.109004599	0.081776543	0.061349733	0.046025	0.034529	0.025904	0.019201	0.012772
172	1.588211	7.3	11.6	12.9	16.2	16.9	8.3	10Year Plus 1	0.258162	0.193677	0.145298	0.109005	0.081776543	0.061349733	0.046025298	0.034529	0.025904	0.019201	0.012772	0.00861
173	5.449564	7.9	10.6	11.8	13.7	15.8	5.9	10Year Plus -2	1	1	0.817606	0.522861	0.334370151	0.213830261	0.136744804	0.087449	0.055923	0.035763	0.022871	0.014768
174	5.449564	7.9	10.6	11.8	13.7	15.8	6.9	10Year Plus -1	1	0.817606	0.522861	0.33437	0.213830261	0.136744804	0.087448527	0.055923	0.035763	0.022871	0.014768	0.009377
175	5.449564	7.9	10.6	11.8	13.7	15.8	7.9	10Year Plus 0	0.817606	0.522861	0.33437	0.21383	0.136744804	0.087448527	0.055923477	0.035763	0.022871	0.014768	0.009377	0.004926
176	5.449564	7.9	10.6	11.8	13.7	15.8	8.9	10Year Plus 1	0.522861	0.33437	0.21383	0.136745	0.087448527	0.055923477	0.035763155	0.022871	0.014768	0.009377	0.004926	0.002587
177	4.2	6.2	6.6	6.7	7	10.7	4.2	10Year Plus -2	1	1	1	0.667669	0.445782285	0.297635144	0.198721846	0.13268	0.044721	0.002	8E-05	3.2E-06
178	5.2	6.2	6.6	6.7	7	10.7	5.2	10Year Plus -1	1	1	1	0.61268	0.375377367	0.229986385	0.140908168	0.044721	0.002	8E-05	3.2E-06	1.28E-07
179	6.2	6.2	6.6	6.7	7	10.7	6.2	10Year Plus 0	1	1	1	0.536698	0.288044414	0.154592773	0.044721358	0.002	8E-05	3.2E-06	1.28E-07	5.12E-09
180	7.2	6.2	6.6	6.7	7	10.7	7.2	10Year Plus 1	1	1	1	0.426216	0.181659978	0.044721358	0.002	8E-05	3.2E-06	1.28E-07	5.12E-09	2.05E-10
181	6.6	8.6	9.2	9.4	9.9	14.4	6.6	10Year Plus -2	1	1	1	0.70548	0.497702356	0.351119173	0.247707635	0.174753	0.123285	0.048904	0.006687	0.000894
182	7.6	8.6	9.2	9.4	9.9	14.4	7.6	10Year Plus -1	1	1	1	0.66287	0.439397055	0.291263265	0.193069772	0.12798	0.048904	0.006687	0.000894	0.00012
183	8.6	8.6	9.2	9.4	9.9	14.4	8.6	10Year Plus 0	1	1	1	0.60619	0.367466193	0.222754294	0.135031403	0.048904	0.006687	0.000894	0.00012	1.6E-05
184	9.6	8.6	9.2	9.4	9.9	14.4	9.6	10Year Plus 1	1	1	1	0.5275	0.278255939	0.146779926	0.048904256	0.006687	0.000894	0.00012	1.6E-05	2.14E-06
185	2.87582	6.7	10	11.6	15.4	16.6	4.7	10Year Plus -2	1	0.754103	0.535443	0.380186	0.269947533	0.191673618	0.136095987	0.096634	0.068614	0.048719	0.034592	0.024562
186	2.87582	6.7	10	11.6	15.4	16.6	5.7	10Year Plus -1	0.754103	0.535443	0.380186	0.269948	0.191673618	0.136095987	0.096633631	0.068614	0.048719	0.034592	0.024562	0.017729
187	2.87582	6.7	10	11.6	15.4	16.6	6.7	10Year Plus 0	0.535443	0.380186	0.269948	0.191674	0.136095987	0.096633631	0.068613769	0.048719	0.034592	0.024562	0.017729	0.013116
188	2.87582	6.7	10	11.6	15.4	16.6	7.7	10Year Plus 1	0.380186	0.269948	0.191674	0.136096	0.096633631	0.068613769	0.048718539	0.034592	0.024562	0.017729	0.013116	0.009706
189	3.792632	5.8	8.1	9.7	11.3	14.7	3.8	10Year Plus -2	1	1	0.996618	0.629249	0.397298701	0.250848454	0.15838196	0.1	0.063139	0.039865	0.02517	0.017311
190	3.792632	5.8	8.1	9.7	11.3	14.7	4.8	10Year Plus -1	1	0.996618	0.629249	0.397299	0.250848454	0.15838196	0.1	0.063139	0.039865	0.02517	0.017311	0.012968
191	3.792632	5.8	8.1	9.7	11.3	14.7	5.8	10Year Plus 0	0.996618	0.629249	0.397299	0.250848	0.15838196	0.1	0.063138503	0.039865	0.02517	0.017311	0.012968	0.009351
192	3.792632	5.8	8.1	9.7	11.3	14.7	6.8	10Year Plus 1	0.629249	0.397299	0.250848	0.158382	0.1	0.063138503	0.039864706	0.02517	0.017311	0.012968	0.009351	0.004782
193	4.8	6.8	8.2	9.1	13	14.1	4.8	10Year Plus -2	1	1	1	0.667669	0.445782285	0.297635144	0.198721846	0.13268	0.080295	0.038634	0.019034	0.011601
194	5.8	6.8	8.2	9.1	13	14.1	5.8	10Year Plus -1	1	1	1	0.61268	0.375377367	0.229986385	0.140908168	0.080295	0.038634	0.019034	0.011601	0.008288
195	6.8	6.8	8.2	9.1	13	14.1	6.8	10Year Plus 0	1	1	1	0.536698	0.288044414	0.154592773	0.08029452	0.038634	0.019034	0.011601	0.008288	0.006338
196	7.352512	6.8	8.2	9.1	13	14.1	7.8	10Year Plus 1	1	1	0.72082	0.346827	0.166878176	0.08029452	0.038634231	0.019034	0.011601	0.008288	0.006338	0.004847
197	5.4	7.4	8.9	9.2	10.8	14.2	5.4	10Year Plus -2	1	1	1	0.681292	0.464158883	0.316227766	0.215443469	0.14678	0.1	0.049671	0.024672	0.008792
198	6.4	7.4	8.9	9.2	10.8	14.2	6.4	10Year Plus -1	1	1	1	0.630957	0.398107171	0.251188643	0.158489319	0.1	0.049671	0.024672	0.008792	0.004618

	1 yr Elevation (ft)	10 yr Elevation (ft)	50 yr Elevation (ft)	100 yr Elevation (ft)	500 yr Elevation (ft)	Wave Heigh Factor	FFE	FFE Comments	-2 EANF	-1 EANF	0 EANF	1 EANF	2 EANF	3 EANF	4 EANF	5 EANF	6 EANF	7 EANF	8 EANF	>8 EANF
199	7.4	7.4	8.9	9.2	10.8	14.2	7.4	10Year Plus 0	1	1	1	0.562341	0.316227766	0.177827941	0.1	0.049671	0.024672	0.008792	0.004618	0.002426
200	8.109444	7.4	8.9	9.2	10.8	14.2	8.4	10Year Plus 1	1	1	0.816019	0.405322	0.201326063	0.1	0.049670668	0.024672	0.008792	0.004618	0.002426	0.001274
201	8	10	12	13	14.5	18	8	10Year Plus -2	1	1	1	0.672336	0.452035365	0.303919537	0.204335971	0.137382	0.08914	0.05017	0.028236	0.016407
202	9	10	12	13	14.5	18	9	10Year Plus -1	1	1	1	0.618966	0.383118684	0.237137369	0.146779926	0.08914	0.05017	0.028236	0.016407	0.01
203	9.794106	10	12	13	14.5	18	10	10Year Plus 0	1	1	0.888387	0.5	0.281408918	0.158381959	0.089140192	0.05017	0.028236	0.016407	0.01	0.004647
204	9.794106	10	12	13	14.5	18	11	10Year Plus 1	1	0.888387	0.5	0.281409	0.158381959	0.089140192	0.050169691	0.028236	0.016407	0.01	0.004647	0.002159
205	1.515941	7.3	11.6	12.9	16.2	17.9	5.3	10Year Plus -2	0.619678	0.473883	0.36239	0.277128	0.211926859	0.16206566	0.123935579	0.094777	0.072478	0.055426	0.042385	0.032413
206	1.515941	7.3	11.6	12.9	16.2	17.9	6.3	10Year Plus -1	0.473883	0.36239	0.277128	0.211927	0.16206566	0.123935579	0.094776573	0.072478	0.055426	0.042385	0.032413	0.024787
207	1.515941	7.3	11.6	12.9	16.2	17.9	7.3	10Year Plus 0	0.36239	0.277128	0.211927	0.162066	0.123935579	0.094776573	0.072477966	0.055426	0.042385	0.032413	0.024787	0.018517
208	1.515941	7.3	11.6	12.9	16.2	17.9	8.3	10Year Plus 1	0.277128	0.211927	0.162066	0.123936	0.094776573	0.072477966	0.055425676	0.042385	0.032413	0.024787	0.018517	0.012599
209	5.620361	7.9	10.6	11.8	13.7	16.8	5.9	10Year Plus -2	1	1	0.891009	0.589738	0.390333796	0.258352743	0.170997594	0.113179	0.074911	0.049582	0.032817	0.021721
210	5.620361	7.9	10.6	11.8	13.7	16.8	6.9	10Year Plus -1	1	0.891009	0.589738	0.390334	0.258352743	0.170997594	0.113179279	0.074911	0.049582	0.032817	0.021721	0.014433
211	5.620361	7.9	10.6	11.8	13.7	16.8	7.9	10Year Plus 0	0.891009	0.589738	0.390334	0.258353	0.170997594	0.113179279	0.074910698	0.049582	0.032817	0.021721	0.014433	0.009421
212	5.620361	7.9	10.6	11.8	13.7	16.8	8.9	10Year Plus 1	0.589738	0.390334	0.258353	0.170998	0.113179279	0.074910698	0.049581626	0.032817	0.021721	0.014433	0.009421	0.005191
213	4.2	6.2	6.6	6.7	7	11.7	4.2	10Year Plus -2	1	1	1	0.70548	0.497702356	0.351119173	0.247707635	0.174753	0.123285	0.039865	0.002	8E-05
214	5.2	6.2	6.6	6.7	7	11.7	5.2	10Year Plus -1	1	1	1	0.66287	0.439397055	0.291263265	0.193069772	0.12798	0.039865	0.002	8E-05	3.2E-06
215	6.2	6.2	6.6	6.7	7	11.7	6.2	10Year Plus 0	1	1	1	0.60619	0.367466193	0.222754295	0.135031403	0.039865	0.002	8E-05	3.2E-06	1.28E-07
216	7.2	6.2	6.6	6.7	7	11.7	7.2	10Year Plus 1	1	1	1	0.5275	0.278255939	0.146779926	0.039864705	0.002	8E-05	3.2E-06	1.28E-07	5.12E-09

Table 5. EANF Values for Use in Existing Module (Based on Piece Wise Log-Linear Regression of 10- and 50-Year SWEL to Estimate 1 Year)

	1 yr Elevation (ft)	10 yr Elevation (ft)	50 yr Elevation (ft)	100 yr Elevation (ft)	500 yr Elevation (ft)	Wave Heigh Factor	FFE	FFE Comments	-2 EANF	-1 EANF	0 EANF	1 EANF	2 EANF	3 EANF	4 EANF	5 EANF	6 EANF	7 EANF	8 EANF	>8 EANF
1	6.6	8.6	9.2	9.4	9.9	9.4	6.6	10Year Plus -2	1	1	0.075804	0.567829	0.33183924	0.023387438	0.001088765	4.95E-05	2.25E-06	1.02E-07	4.64E-09	2.21E-10
2	7.6	8.6	9.2	9.4	9.9	9.4	7.6	10Year Plus -1	1	1	0.643633	0.331839	0.023387438	0.001088765	4.95014E-05	2.25E-06	1.02E-07	4.64E-09	2.11E-10	1E-11
3	7.741594	8.6	9.2	9.4	9.9	9.4	8.6	10Year Plus 0	1	0.643633	0.331839	0.023387	0.001088765	4.95014E-05	2.24817E-06	1.02E-07	4.64E-09	2.11E-10	9.56E-12	4.55E-13
4	7.741594	8.6	9.2	9.4	9.9	9.4	9.6	10Year Plus 1	0.643633	0.331839	0.023387	0.001089	4.95014E-05	2.24817E-06	1.02098E-07	4.64E-09	2.11E-10	9.56E-12	4.34E-13	2.07E-14
5	1.978767	6.7	10	11.6	15.4	11.6	4.7	10Year Plus -2	0.10911	0.094229	0.074676	0.055251	0.038835113	0.026322988	0.017405716	0.011322	0.007286	0.004656	0.002962	0.005116
6	1.978767	6.7	10	11.6	15.4	11.6	5.7	10Year Plus -1	0.094229	0.074676	0.055251	0.038835	0.026322988	0.017405716	0.011321605	0.007286	0.004656	0.002962	0.00188	0.003236
7	1.978767	6.7	10	11.6	15.4	11.6	6.7	10Year Plus 0	0.074676	0.055251	0.038835	0.026323	0.017405716	0.011321605	0.007285614	0.004656	0.002962	0.00188	0.00119	0.002046
8	1.978767	6.7	10	11.6	15.4	11.6	7.7	10Year Plus 1	0.055251	0.038835	0.026323	0.017406	0.011321605	0.007285614	0.004656088	0.002962	0.00188	0.00119	0.000753	0.001293
9	2.509444	5.8	8.1	9.7	11.3	9.7	3.8	10Year Plus -2	1	0.601219	0.151566	0.10736	0.065350269	0.03617455	0.018977689	0.009676	0.004862	0.002425	0.001205	0.001184
10	2.509444	5.8	8.1	9.7	11.3	9.7	4.8	10Year Plus -1	0.601219	0.151566	0.10736	0.06535	0.03617455	0.018977689	0.009676001	0.004862	0.002425	0.001205	0.000598	0.000587
11	2.509444	5.8	8.1	9.7	11.3	9.7	5.8	10Year Plus 0	0.151566	0.10736	0.06535	0.036175	0.018977689	0.009676001	0.004861702	0.002425	0.001205	0.000598	0.000296	0.000291
12	2.509444	5.8	8.1	9.7	11.3	9.7	6.8	10Year Plus 1	0.10736	0.06535	0.036175	0.018978	0.009676001	0.004861702	0.002424787	0.001205	0.000598	0.000296	0.000147	0.000144
13	4.797053	6.8	8.2	9.1	13	9.1	4.8	10Year Plus -2	1	1	0.862776	0.056955	0.034567995	0.020095569	0.011390696	0.006364	0.003527	0.001946	0.001071	0.001306
14	4.797053	6.8	8.2	9.1	13	9.1	5.8	10Year Plus -1	1	0.862776	0.056955	0.034568	0.020095569	0.011390696	0.006364211	0.003527	0.001946	0.001071	0.000589	0.000717
15	4.797053	6.8	8.2	9.1	13	9.1	6.8	10Year Plus 0	0.862776	0.056955	0.034568	0.020096	0.011390696	0.006364211	0.003527221	0.001946	0.001071	0.000589	0.000323	0.000393
16	4.797053	6.8	8.2	9.1	13	9.1	7.8	10Year Plus 1	0.056955	0.034568	0.020096	0.011391	0.006364211	0.003527221	0.00194614	0.001071	0.000589	0.000323	0.000178	0.000216
17	5.253985	7.4	8.9	9.2	10.8	9.2	5.4	10Year Plus -2	1	1	0.610323	0.226914	0.106878002	0.038180805	0.012246338	0.00379	0.00116	0.000354	0.000108	4.72E-05
18	5.253985	7.4	8.9	9.2	10.8	9.2	6.4	10Year Plus -1	1	0.610323	0.226914	0.106878	0.038180805	0.012246338	0.003789673	0.00116	0.000354	0.000108	3.28E-05	1.44E-05
19	5.253985	7.4	8.9	9.2	10.8	9.2	7.4	10Year Plus 0	0.610323	0.226914	0.106878	0.038181	0.012246338	0.003789673	0.001159633	0.000354	0.000108	3.28E-05	9.99E-06	4.37E-06
20	5.253985	7.4	8.9	9.2	10.8	9.2	8.4	10Year Plus 1	0.226914	0.106878	0.038181	0.012246	0.003789673	0.001159633	0.000353624	0.000108	3.28E-05	9.99E-06	3.04E-06	1.33E-06
21	7.138647	10	12	13	14.5	13	8	10Year Plus -2	1	0.484591	0.209113	0.151392	0.084191516	0.040090959	0.017677834	0.00753	0.00316	0.001318	0.000548	0.000389
22	7.138647	10	12	13	14.5	13	9	10Year Plus -1	0.484591	0.209113	0.151392	0.084192	0.040090959	0.017677834	0.007529545	0.00316	0.001318	0.000548	0.000228	0.000162
23	7.138647	10	12	13	14.5	13	10	10Year Plus 0	0.209113	0.151392	0.084192	0.040091	0.017677834	0.007529545	0.003159638	0.001318	0.000548	0.000228	9.45E-05	6.71E-05
24	7.138647	10	12	13	14.5	13	11	10Year Plus 1	0.151392	0.084192	0.040091	0.017678	0.007529545	0.003159638	0.001317585	0.000548	0.000228	9.45E-05	3.93E-05	2.79E-05
25	1.148091	7.3	11.6	12.9	16.2	12.9	5.3	10Year Plus -2	0.109707	0.097834	0.079954	0.060809	0.043766661	0.030265782	0.020355213	0.013435	0.008758	0.005663	0.003642	0.006461
26	1.148091	7.3	11.6	12.9	16.2	12.9	6.3	10Year Plus -1	0.097834	0.079954	0.060809	0.043767	0.030265782	0.020355213	0.013434915	0.008758	0.005663	0.003642	0.002335	0.004126
27	1.148091	7.3	11.6	12.9	16.2	12.9	7.3	10Year Plus 0	0.079954	0.060809	0.043767	0.030266	0.020355213	0.013434915	0.008757664	0.005663	0.003642	0.002335	0.001493	0.002633
28	1.148091	7.3	11.6	12.9	16.2	12.9	8.3	10Year Plus 1	0.060809	0.043767	0.030266	0.020355	0.013434915	0.008757664	0.005662524	0.003642	0.002335	0.001493	0.000954	0.001679
29	4.037173	7.9	10.6	11.8	13.7	11.8	5.9	10Year Plus -2	0.430218	0.168863	0.148214	0.106769	0.066456436	0.037674853	0.020234795	0.010553	0.00542	0.002761	0.001401	0.001435
30	4.037173	7.9	10.6	11.8	13.7	11.8	6.9	10Year Plus -1	0.168863	0.148214	0.106769	0.066456	0.037674853	0.020234795	0.010553211	0.00542	0.002761	0.001401	0.000709	0.000726
31	4.037173	7.9	10.6	11.8	13.7	11.8	7.9	10Year Plus 0	0.148214	0.106769	0.066456	0.037675	0.020234795	0.010553211	0.005419611	0.002761	0.001401	0.000709	0.000359	0.000367
32	4.037173	7.9	10.6	11.8	13.7	11.8	8.9	10Year Plus 1	0.106769	0.066456	0.037675	0.020235	0.010553211	0.005419611	0.002761192	0.001401	0.000709	0.000359	0.000181	0.000185
33	4.2	6.2	6.6	6.7	7	6.7	4.2	10Year Plus -2	1	1	0.004344	0.392882	0.592826629	0.009880281	6.60723E-05	4.37E-07	2.9E-09	1.92E-11	1.27E-13	8.46E-16
34	5.2	6.2	6.6	6.7	7	6.7	5.2	10Year Plus -1	1	1	0.397227	0.592827	0.009880281	6.60723E-05	4.37479E-07	2.9E-09	1.92E-11	1.27E-13	8.41E-16	5.6E-18
35	5.627729	6.2	6.6	6.7	7	6.7	6.2	10Year Plus 0	1	0.397227	0.592827	0.00988	6.60723E-05	4.37479E-07	2.89645E-09	1.92E-11	1.27E-13	8.41E-16	5.57E-18	3.71E-20
36	5.627729	6.2	6.6	6.7	7	6.7	7.2	10Year Plus 1	0.397227	0.592827	0.00988	6.61E-05	4.37479E-07	2.89645E-09	1.91767E-11	1.27E-13	8.41E-16	5.57E-18	3.68E-20	2.46E-22
37	6.6	8.6	9.2	9.4	9.9	10.4	6.6	10Year Plus -2	1	1	1	0.139797	0.586846381	0.250874478	0.021078033	0.001318	8.07E-05	4.93E-06	3.02E-07	1.96E-08
38	7.6	8.6	9.2	9.4	9.9	10.4	7.6	10Year Plus -1	1	1	1	0.726643	0.250874478	0.021078033	0.001318175	8.07E-05	4.93E-06	3.02E-07	1.84E-08	1.2E-09
39	7.741594	8.6	9.2	9.4	9.9	10.4	8.6	10Year Plus 0	1	1	0.726643	0.250874	0.021078033	0.001318175	8.07024E-05	4.93E-06	3.02E-07	1.84E-08	1.13E-09	7.34E-11
40	7.741594	8.6	9.2	9.4	9.9	10.4	9.6	10Year Plus 1	1	0.726643	0.250874	0.021078	0.001318175	8.07024E-05	4.93433E-06	3.02E-07	1.84E-08	1.13E-09	6.89E-11	4.49E-12
41	1.978767	6.7	10	11.6	15.4	12.6	4.7	10Year Plus -2	0.102425	0.091479	0.075666	0.058711	0.043336293	0.030822722	0.021348579	0.014516	0.009747	0.00649	0.004296	0.008255
42	1.978767	6.7	10	11.6	15.4	12.6	5.7	10Year Plus -1	0.091479	0.075666	0.058711	0.043336	0.030822722	0.021348579	0.014516255	0.009747	0.00649	0.004296	0.002834	0.005422
43	1.978767	6.7	10	11.6	15.4	12.6	6.7	10Year Plus 0	0.075666	0.058711	0.043336	0.030823	0.021348579	0.014516255	0.009747115	0.00649	0.004296	0.002834	0.001865	0.003557
44	1.978767	6.7	10	11.6	15.4	12.6	7.7	10Year Plus 1	0.058711	0.043336	0.030823	0.021349	0.014516255	0.009747115	0.006489646	0.004296	0.002834	0.001865	0.001225	0.002332
45	2.509444	5.8	8.1	9.7	11.3	10.7	3.8	10Year Plus -2	1	0.548285	0.148286	0.116228	0.078645348	0.048064548	0.027569336	0.015241	0.008254	0.004421	0.002353	0.002653
46	2.509444	5.8	8.1	9.7	11.3	10.7	4.8	10Year Plus -1	0.548285	0.148286	0.116228	0.078645	0.048064548	0.027569336	0.015240952	0.008254	0.004421	0.002353	0.001249	0.001405
47	2.509444	5.8	8.1	9.7	11.3	10.7	5.8	10Year Plus 0	0.148286	0.116228	0.078645	0.048065	0.027569336	0.015240952	0.008254127	0.004421	0.002353	0.001249	0.000662	0.000743
48	2.509444	5.8	8.1	9.7	11.3	10.7	6.8	10Year Plus 1	0.116228	0.078645	0.048065	0.027569	0.015240952	0.008254127	0.004420516	0.002353	0.001249	0.000662	0.00035	0.000393
49	4.797053	6.8	8.2	9.1	13	10.1	4.8	10Year Plus -2	1	1	1	0.887389	0.043799137	0.027555796	0.016810706	0.010064	0.005956	0.003502	0.002051	0.002873
50	4.797053	6.8	8.2	9.1	13	10.1	5.8	10Year Plus -1	1	1	0.887389	0.043799	0.027555796	0.016810706	0.010063542	0.005956	0.003502	0.002051	0.001198	0.001675
51	4.797053	6.8	8.2	9.1	13	10.1	6.8	10Year Plus 0	1	0.887389	0.043799	0.027556	0.016810706	0.010063542	0.005956395	0.003502	0.002051	0.001198	0.000699	0.000976
52	4.797053	6.8	8.2	9.1	13	10.1	7.8	10Year Plus 1	0.887389	0.043799	0.027556	0.016811	0.010063542	0.005956395	0.003501789	0.002051	0.001198	0.000699	0.000407	0.000569
53	5.253985	7.4	8.9	9.2	10.8	10.2	5.4	10Year Plus -2	1	1	0.440492	0.25658	0.173491622	0.081030105	0.031300155	0.011187	0.003886	0.001337	0.000458	0.000238
54	5.253985	7.4	8.9	9.2	10.8	10.2	6.4	10Year Plus -1	1	0.440492	0.25658	0.173492	0.081030105	0.031300155	0.011186921	0.003886	0.001337	0.000458	0.000157	8.16E-05
55	5.253985	7.4	8.9	9.2	10.8	10.2	7.4	10Year Plus 0	0.440492	0.25658	0.173492	0.08103	0.031300155	0.011186921	0.003886101	0.001337	0.000458	0.000157	5.37E-05	2.79E-05
56	5.253985	7.4	8.9	9.2	10.8	10.2	8.4	10Year Plus 1	0.25658	0.173492	0.08103	0.0313	0.011186921	0.003886101	0.001336545	0.000458	0.000157	5.37E-05	1.84E-05	9.55E-06
57	7.138647	10	12	13	14.5	14	8	10Year Plus -2	1	1	0.570459	0.179815	0.121465181	0.067193816	0.03312041	0.015397	0.006963	0.003109	0.001381	0.001096
58	7.138647	10	12	13	14.5	14	9	10Year Plus -1	1	0.570459	0.179815	0.121465	0.067193816	0.03312041	0.015397113	0.006963	0.003109	0.001381	0.000612	0.000485
59	7.138647	10	12	13	14.5	14	10	10Year Plus 0	0.570459	0.179815	0.121465	0.067194	0.03312041	0.015397113	0.00696272	0.003109	0.001381	0.000612	0.000271	0.000214
60	7.138647	10	12	13	14.5	14	11	10Year Plus 1	0.179815	0.121465	0.067194	0.03312	0.015397113	0.00696272	0.003109203	0.001381	0.000612	0.000271	0.00012	9.48E-05
61	1.148091	7.3	11.6	12.9	16.2	13.9	5.3	10Year Plus -2	0.103216	0.095051	0.080909	0.064384	0.04854326	0.035130933	0.024677742	0.016974	0.011507	0.007724	0.005151	0.010071
62	1.148091	7.3	11.6	12.9	16.2	13.9	6.3	10Year Plus -1	0.095051	0.080909	0.064384	0.048543	0.035130933	0.024677742	0.016974138	0.011507	0.007724	0.005151	0.00342	0.006651
63	1.148091	7.3	11.6	12.9	16.2	13.9	7.3	10Year Plus 0	0.080909	0.064384	0.048543	0.035131	0.024677742	0.016974138	0.011507136	0.007724	0.005151	0.00342	0.002264	0.004387
64	1.148091	7.3	11.6	12.9	16.2	13.9	8.3	10Year Plus 1	0.064384	0.048543	0.035131	0.024678	0.016974138	0.011507136	0.007724386	0.005151	0.00342	0.002264	0.001495	0.002892
65	4.037173	7.9	10.6	11.8	13.7	12.8	5.9	10Year Plus -2	0.37388	0.154505	0.149252	0.120099	0.083215681	0.051862322	0.030216981	0.016919	0.009263	0.005009	0.00269	0.003088
66	4.037173	7.9	10.6	11.8	13.7	12.8	6.9	10Year Plus -1	0.154505	0.149252	0.120099	0.083216	0.051862322	0.030216981	0.016918849	0.009263	0.005009	0.00269	0.00144	0.001648

	1 yr Elevation (ft)	10 yr Elevation (ft)	50 yr Elevation (ft)	100 yr Elevation (ft)	500 yr Elevation (ft)	Wave Heigh Factor	FFE	FFE Comments	-2 EANF	-1 EANF	0 EANF	1 EANF	2 EANF	3 EANF	4 EANF	5 EANF	6 EANF	7 EANF	8 EANF	>8 EANF
67	4.037173	7.9	10.6	11.8	13.7	12.8	7.9	10Year Plus 0	0.149252	0.120099	0.083216	0.051862	0.030216981	0.016918849	0.009262561	0.005009	0.00269	0.00144	0.000769	0.000879
68	4.037173	7.9	10.6	11.8	13.7	12.8	8.9	10Year Plus 1	0.120099	0.083216	0.051862	0.030217	0.016918849	0.009262561	0.005008655	0.00269	0.00144	0.000769	0.00041	0.000469
69	4.2	6.2	6.6	6.7	7	7.7	4.2	10Year Plus -2	1	1	1	0.015808	0.542573331	0.431672104	0.009819186	0.000126	1.6E-06	2.03E-08	2.58E-10	3.32E-12
70	5.2	6.2	6.6	6.7	7	7.7	5.2	10Year Plus -1	1	1	1	0.558381	0.431672104	0.009819186	0.000125986	1.6E-06	2.03E-08	2.58E-10	3.28E-12	4.22E-14
71	5.627729	6.2	6.6	6.7	7	7.7	6.2	10Year Plus 0	1	1	0.558381	0.431672	0.009819186	0.000125986	1.60062E-06	2.03E-08	2.58E-10	3.28E-12	4.17E-14	5.36E-16
72	5.627729	6.2	6.6	6.7	7	7.7	7.2	10Year Plus 1	1	0.558381	0.431672	0.009819	0.000125986	1.60062E-06	2.03327E-08	2.58E-10	3.28E-12	4.17E-14	5.29E-16	6.81E-18
73	6.6	8.6	9.2	9.4	9.9	11.4	6.6	10Year Plus -2	1	1	1	0.021825	0.200330961	0.563063395	0.193859349	0.019255	0.001536	0.00012	9.39E-06	7.96E-07
74	7.6	8.6	9.2	9.4	9.9	11.4	7.6	10Year Plus -1	1	1	1	1	0.785219207	0.193859349	0.01925489	0.001536	0.00012	9.39E-06	7.34E-07	6.22E-08
75	7.741594	8.6	9.2	9.4	9.9	11.4	8.6	10Year Plus 0	1	1	1	0.785219	0.193859349	0.01925489	0.00153616	0.00012	9.39E-06	7.34E-07	5.73E-08	4.86E-09
76	7.741594	8.6	9.2	9.4	9.9	11.4	9.6	10Year Plus 1	1	1	0.785219	0.193859	0.01925489	0.00153616	0.000120206	9.39E-06	7.34E-07	5.73E-08	4.48E-09	3.79E-10
77	1.978767	6.7	10	11.6	15.4	13.6	4.7	10Year Plus -2	0.611957	0.08814	0.075463	0.06091	0.046866203	0.034750105	0.025065413	0.017722	0.012354	0.008527	0.005846	0.012399
78	1.978767	6.7	10	11.6	15.4	13.6	5.7	10Year Plus -1	0.08814	0.075463	0.06091	0.046866	0.034750105	0.025065413	0.017722339	0.012354	0.008527	0.005846	0.003989	0.00841
79	1.978767	6.7	10	11.6	15.4	13.6	6.7	10Year Plus 0	0.075463	0.06091	0.046866	0.03475	0.025065413	0.017722339	0.01235428	0.008527	0.005846	0.003989	0.002713	0.005697
80	1.978767	6.7	10	11.6	15.4	13.6	7.7	10Year Plus 1	0.06091	0.046866	0.03475	0.025065	0.017722339	0.01235428	0.00852742	0.005846	0.003989	0.002713	0.001841	0.003856
81	2.509444	5.8	8.1	9.7	11.3	11.7	3.8	10Year Plus -2	1	0.5035	0.141426	0.119953	0.088634341	0.059041522	0.036660752	0.02178	0.012601	0.007179	0.004054	0.005172
82	2.509444	5.8	8.1	9.7	11.3	11.7	4.8	10Year Plus -1	0.5035	0.141426	0.119953	0.088634	0.059041522	0.036660752	0.021779541	0.012601	0.007179	0.004054	0.002278	0.002894
83	2.509444	5.8	8.1	9.7	11.3	11.7	5.8	10Year Plus 0	0.141426	0.119953	0.088634	0.059042	0.036660752	0.021779541	0.012600557	0.007179	0.004054	0.002278	0.001276	0.001618
84	2.509444	5.8	8.1	9.7	11.3	11.7	6.8	10Year Plus 1	0.119953	0.088634	0.059042	0.036661	0.021779541	0.012600557	0.007178549	0.004054	0.002278	0.001276	0.000714	0.000904
85	4.797053	6.8	8.2	9.1	13	11.1	4.8	10Year Plus -2	1	1	1	0.852888	0.051715833	0.034826661	0.022645316	0.014391	0.009012	0.005592	0.003451	0.005477
86	4.797053	6.8	8.2	9.1	13	11.1	5.8	10Year Plus -1	1	1	0.852888	0.051716	0.034826661	0.022645316	0.014390863	0.009012	0.005592	0.003451	0.002121	0.003356
87	4.797053	6.8	8.2	9.1	13	11.1	6.8	10Year Plus 0	1	0.852888	0.051716	0.034827	0.022645316	0.014390863	0.009012403	0.005592	0.003451	0.002121	0.001302	0.002054
88	4.797053	6.8	8.2	9.1	13	11.1	7.8	10Year Plus 1	0.852888	0.051716	0.034827	0.022645	0.014390863	0.009012403	0.005592473	0.003451	0.002121	0.001302	0.000797	0.001257
89	5.253985	7.4	8.9	9.2	10.8	11.2	5.4	10Year Plus -2	1	1	1	0.543049	0.216355598	0.134020492	0.06359185	0.026354	0.010303	0.003935	0.00149	0.000902
90	5.253985	7.4	8.9	9.2	10.8	11.2	6.4	10Year Plus -1	1	1	0.543049	0.216356	0.134020492	0.06359185	0.026353873	0.010303	0.003935	0.00149	0.000562	0.00034
91	5.253985	7.4	8.9	9.2	10.8	11.2	7.4	10Year Plus 0	1	0.543049	0.216356	0.13402	0.06359185	0.026353873	0.010302731	0.003935	0.00149	0.000562	0.000212	0.000128
92	5.253985	7.4	8.9	9.2	10.8	11.2	8.4	10Year Plus 1	0.543049	0.216356	0.13402	0.063592	0.026353873	0.010302731	0.003935312	0.00149	0.000562	0.000212	7.98E-05	4.82E-05
93	7.138647	10	12	13	14.5	15	8	10Year Plus -2	1	1	0.4554	0.18637	0.151538304	0.098264979	0.054711325	0.027904	0.013596	0.006477	0.003052	0.002687
94	7.138647	10	12	13	14.5	15	9	10Year Plus -1	1	0.4554	0.18637	0.151538	0.098264979	0.054711325	0.027903699	0.013596	0.006477	0.003052	0.001431	0.001256
95	7.138647	10	12	13	14.5	15	10	10Year Plus 0	0.4554	0.18637	0.151538	0.098265	0.054711325	0.027903699	0.013595671	0.006477	0.003052	0.001431	0.000669	0.000587
96	7.138647	10	12	13	14.5	15	11	10Year Plus 1	0.18637	0.151538	0.098265	0.054711	0.027903699	0.013595671	0.006476743	0.003052	0.001431	0.000669	0.000313	0.000274
97	1.148091	7.3	11.6	12.9	16.2	14.9	5.3	10Year Plus -2	0.096994	0.091614	0.080621	0.066646	0.05230327	0.039397886	0.028769545	0.020536	0.014421	0.010012	0.006895	0.014765
98	1.148091	7.3	11.6	12.9	16.2	14.9	6.3	10Year Plus -1	0.091614	0.080621	0.066646	0.052303	0.039397886	0.028769545	0.020535516	0.014421	0.010012	0.006895	0.004723	0.010043
99	1.148091	7.3	11.6	12.9	16.2	14.9	7.3	10Year Plus 0	0.080621	0.066646	0.052303	0.039398	0.028769545	0.020535516	0.014421077	0.010012	0.006895	0.004723	0.003223	0.00682
100	1.148091	7.3	11.6	12.9	16.2	14.9	8.3	10Year Plus 1	0.066646	0.052303	0.039398	0.02877	0.020535516	0.014421077	0.010011645	0.006895	0.004723	0.003223	0.002193	0.004627
101	4.037173	7.9	10.6	11.8	13.7	13.8	5.9	10Year Plus -2	1	0.466906	0.143995	0.126939	0.096740404	0.065858931	0.041463616	0.024833	0.014431	0.008239	0.004656	0.005938
102	4.037173	7.9	10.6	11.8	13.7	13.8	6.9	10Year Plus -1	0.466906	0.143995	0.126939	0.09674	0.065858931	0.041463616	0.024833347	0.014431	0.008239	0.004656	0.002617	0.003321
103	4.037173	7.9	10.6	11.8	13.7	13.8	7.9	10Year Plus 0	0.143995	0.126939	0.09674	0.065859	0.041463616	0.024833347	0.014430672	0.008239	0.004656	0.002617	0.001466	0.001855
104	4.037173	7.9	10.6	11.8	13.7	13.8	8.9	10Year Plus 1	0.126939	0.09674	0.065859	0.041464	0.024833347	0.014430672	0.008238867	0.004656	0.002617	0.001466	0.00082	0.001036
105	4.2	6.2	6.6	6.7	7	8.7	4.2	10Year Plus -2	1	1	1	0.000919	0.041061974	0.634232736	0.313839901	0.009736	0.000206	4.33E-06	9.09E-08	1.95E-09
106	5.2	6.2	6.6	6.7	7	8.7	5.2	10Year Plus -1	1	1	1	1	0.676213305	0.313839901	0.009736037	0.000206	4.33E-06	9.09E-08	1.91E-09	4.09E-11
107	5.627729	6.2	6.6	6.7	7	8.7	6.2	10Year Plus 0	1	1	1	0.676213	0.313839901	0.009736037	0.000206334	4.33E-06	9.09E-08	1.91E-09	4E-11	8.57E-13
108	5.627729	6.2	6.6	6.7	7	8.7	7.2	10Year Plus 1	1	1	0.676213	0.31384	0.009736037	0.000206334	4.33024E-06	9.09E-08	1.91E-09	4E-11	8.39E-13	1.8E-14
109	6.6	8.6	9.2	9.4	9.9	12.4	6.6	10Year Plus -2	1	1	1	1	0.042122189	0.272142191	0.512609303	0.153432	0.017771	0.001739	0.000167	1.77E-05
110	7.6	8.6	9.2	9.4	9.9	12.4	7.6	10Year Plus -1	1	1	1	1	0.31426438	0.512609303	0.153431694	0.017771	0.001739	0.000167	1.6E-05	1.7E-06
111	7.741594	8.6	9.2	9.4	9.9	12.4	8.6	10Year Plus 0	1	1	1	1	0.826873683	0.153431694	0.017770591	0.001739	0.000167	1.6E-05	1.54E-06	1.63E-07
112	7.741594	8.6	9.2	9.4	9.9	12.4	9.6	10Year Plus 1	1	1	1	0.826874	0.153431694	0.017770591	0.001739092	0.000167	1.6E-05	1.54E-06	1.48E-07	1.57E-08
113	1.978767	6.7	10	11.6	15.4	14.6	4.7	10Year Plus -2	0.591358	0.084529	0.074426	0.06208	0.04948609	0.038040917	0.028434702	0.020812	0.015	0.010691	0.007559	0.017583
114	1.978767	6.7	10	11.6	15.4	14.6	5.7	10Year Plus -1	0.084529	0.074426	0.06208	0.049486	0.038040917	0.028434702	0.020812175	0.015	0.010691	0.007559	0.005315	0.012268
115	1.978767	6.7	10	11.6	15.4	14.6	6.7	10Year Plus 0	0.074426	0.06208	0.049486	0.038041	0.028434702	0.020812175	0.01499981	0.010691	0.007559	0.005315	0.003722	0.008545
116	1.978767	6.7	10	11.6	15.4	14.6	7.7	10Year Plus 1	0.06208	0.049486	0.038041	0.028435	0.020812175	0.01499981	0.010690905	0.007559	0.005315	0.003722	0.0026	0.005946
117	2.509444	5.8	8.1	9.7	11.3	12.7	3.8	10Year Plus -2	1	0.465694	0.132868	0.119809	0.09519952	0.068306606	0.045514585	0.028849	0.01771	0.01066	0.00634	0.00906
118	2.509444	5.8	8.1	9.7	11.3	12.7	4.8	10Year Plus -1	0.465694	0.132868	0.119809	0.09519	0.068306606	0.045514585	0.028848903	0.01771	0.01066	0.00634	0.003744	0.005316
119	2.509444	5.8	8.1	9.7	11.3	12.7	5.8	10Year Plus 0	0.132868	0.119809	0.09519	0.068307	0.045514585	0.028848903	0.017710163	0.01066	0.00634	0.003744	0.002202	0.003114
120	2.509444	5.8	8.1	9.7	11.3	12.7	6.8	10Year Plus 1	0.119809	0.09519	0.068307	0.045515	0.028848903	0.017710163	0.010659556	0.00634	0.003744	0.002202	0.001291	0.001823
121	4.797053	6.8	8.2	9.1	13	12.1	4.8	10Year Plus -2	1	1	1	1	0.875732229	0.041398422	0.028463802	0.019064	0.012545	0.00816	0.005267	0.00937
122	4.797053	6.8	8.2	9.1	13	12.1	5.8	10Year Plus -1	1	1	1	0.875732	0.041398422	0.028463802	0.019063857	0.012545	0.00816	0.005267	0.003383	0.005987
123	4.797053	6.8	8.2	9.1	13	12.1	6.8	10Year Plus 0	1	1	0.875732	0.041398	0.028463802	0.019063857	0.012544873	0.00816	0.005267	0.003383	0.002166	0.003821
124	4.797053	6.8	8.2	9.1	13	12.1	7.8	10Year Plus 1	1	0.875732	0.041398	0.028464	0.019063857	0.012544873	0.008159516	0.005267	0.003383	0.002166	0.001384	0.002436
125	5.253985	7.4	8.9	9.2	10.8	12.2	5.4	10Year Plus -2	1	1	1	1	0.62642289	0.177914983	0.105393462	0.051369	0.022658	0.009552	0.00395	0.002739
126	5.253985	7.4	8.9	9.2	10.8	12.2	6.4	10Year Plus -1	1	1	1	0.626423	0.177914983	0.105393462	0.051368798	0.022658	0.009552	0.00395	0.00162	0.001119
127	5.253985	7.4	8.9	9.2	10.8	12.2	7.4	10Year Plus 0	1	1	0.626423	0.177915	0.105393462	0.051368798	0.022658461	0.009552	0.00395	0.00162	0.000662	0.000457
128	5.253985	7.4	8.9	9.2	10.8	12.2	8.4	10Year Plus 1	1	0.626423	0.177915	0.105393	0.051368798	0.022658461	0.009552181	0.00395	0.00162	0.000662	0.00027	0.000186
129	7.138647	10	12	13	14.5	16	8	10Year Plus -2	1	1	1	0.532618	0.166891934	0.126739021	0.080416159	0.045359	0.023901	0.012143	0.006055	0.005877
130	7.138647	10	12	13	14.5	16	9	10Year Plus -1	1	1	0.532618	0.166892	0.126739021	0.080416159	0.045358656	0.023901	0.012143	0.006055	0.002991	0.002886
131	7.138647	10	12	13	14.5	16	10	10Year Plus 0	1	0.532618	0.166892	0.126739	0.080416159	0.045358656	0.023900635	0.012143	0.006055	0.002991	0.001471	0.001415
132	7.138647	10	12	13	14.5	16	11	10Year Plus 1	0.532618	0.166892	0.126739	0.080416	0.045358656	0.023900635	0.012143063	0.006055	0.002991	0.001471	0.000722	0.000693

	1 yr Elevation (ft)	10 yr Elevation (ft)	50 yr Elevation (ft)	100 yr Elevation (ft)	500 yr Elevation (ft)	Wave Heigh Factor	FFE	FFE Comments	-2 EANF	-1 EANF	0 EANF	1 EANF	2 EANF	3 EANF	4 EANF	5 EANF	6 EANF	7 EANF	8 EANF	>8 EANF
133	1.148091	7.3	11.6	12.9	16.2	15.9	5.3	10Year Plus -2	0.091157	0.087851	0.079445	0.067815	0.055093539	0.042987466	0.032496909	0.023984	0.017389	0.012445	0.008825	0.020595
134	1.148091	7.3	11.6	12.9	16.2	15.9	6.3	10Year Plus -1	0.087851	0.079445	0.067815	0.055094	0.042987466	0.032496909	0.02398362	0.017389	0.012445	0.008825	0.006217	0.014378
135	1.148091	7.3	11.6	12.9	16.2	15.9	7.3	10Year Plus 0	0.079445	0.067815	0.055094	0.042987	0.032496909	0.02398362	0.017388714	0.012445	0.008825	0.006217	0.00436	0.010018
136	1.148091	7.3	11.6	12.9	16.2	15.9	8.3	10Year Plus 1	0.067815	0.055094	0.042987	0.032497	0.02398362	0.017388714	0.012445417	0.008825	0.006217	0.00436	0.003047	0.006971
137	4.037173	7.9	10.6	11.8	13.7	14.8	5.9	10Year Plus -2	1	0.414466	0.135047	0.128125	0.106030346	0.078261134	0.053021707	0.033869	0.020829	0.012511	0.007409	0.01043
138	4.037173	7.9	10.6	11.8	13.7	14.8	6.9	10Year Plus -1	0.414466	0.135047	0.128125	0.10603	0.078261134	0.053021707	0.033869441	0.020829	0.012511	0.007409	0.004351	0.006079
139	4.037173	7.9	10.6	11.8	13.7	14.8	7.9	10Year Plus 0	0.135047	0.128125	0.10603	0.078261	0.053021707	0.033869441	0.020828924	0.012511	0.007409	0.004351	0.002542	0.003537
140	4.037173	7.9	10.6	11.8	13.7	14.8	8.9	10Year Plus 1	0.128125	0.10603	0.078261	0.053022	0.033869441	0.020828924	0.012511441	0.007409	0.004351	0.002542	0.001481	0.002055
141	4.2	6.2	6.6	6.7	7	9.7	4.2	10Year Plus -2	1	1	1	1	0.003028459	0.085564059	0.668127963	0.233333	0.009633	0.000304	9.5E-06	3.07E-07
142	5.2	6.2	6.6	6.7	7	9.7	5.2	10Year Plus -1	1	1	1	1	0.088592518	0.668127963	0.233332725	0.009633	0.000304	9.5E-06	2.97E-07	9.58E-09
143	5.627729	6.2	6.6	6.7	7	9.7	6.2	10Year Plus 0	1	1	1	1	0.756720481	0.233332725	0.009632929	0.000304	9.5E-06	2.97E-07	9.28E-09	2.99E-10
144	5.627729	6.2	6.6	6.7	7	9.7	7.2	10Year Plus 1	1	1	1	0.75672	0.233332725	0.009632929	0.000304054	9.5E-06	2.97E-07	9.28E-09	2.9E-10	9.36E-12
145	6.6	8.6	9.2	9.4	9.9	13.4	6.6	10Year Plus -2	1	1	1	1	1	0.072633715	0.333988094	0.450431	0.124241	0.016533	0.001925	0.000249
146	7.6	8.6	9.2	9.4	9.9	13.4	7.6	10Year Plus -1	1	1	1	1	1	0.406621809	0.450430793	0.124241	0.016533	0.001925	0.000221	2.85E-05
147	7.741594	8.6	9.2	9.4	9.9	13.4	8.6	10Year Plus 0	1	1	1	1	0.406621809	0.450430793	0.12424077	0.016533	0.001925	0.000221	2.52E-05	3.25E-06
148	7.741594	8.6	9.2	9.4	9.9	13.4	9.6	10Year Plus 1	1	1	1	0.406622	0.450430793	0.12424077	0.016532529	0.001925	0.000221	2.52E-05	2.88E-06	3.72E-07
149	1.978767	6.7	10	11.6	15.4	15.6	4.7	10Year Plus -2	0.573132	0.080846	0.072833	0.062443	0.051301374	0.040692224	0.031386513	0.02369	0.017591	0.012903	0.009381	0.023801
150	1.978767	6.7	10	11.6	15.4	15.6	5.7	10Year Plus -1	0.080846	0.072833	0.062443	0.051301	0.040692224	0.031386513	0.023690422	0.017591	0.012903	0.009381	0.006775	0.017025
151	1.978767	6.7	10	11.6	15.4	15.6	6.7	10Year Plus 0	0.072833	0.062443	0.051301	0.040692	0.031386513	0.023690422	0.017590866	0.012903	0.009381	0.006775	0.004871	0.012155
152	1.978767	6.7	10	11.6	15.4	15.6	7.7	10Year Plus 1	0.062443	0.051301	0.040692	0.031387	0.023690422	0.017590866	0.012903491	0.009381	0.006775	0.004871	0.00349	0.008665
153	2.509444	5.8	8.1	9.7	11.3	13.7	3.8	10Year Plus -2	1	1	0.557484	0.117033	0.098673456	0.07547131	0.053534822	0.035977	0.023308	0.014744	0.009186	0.014589
154	2.509444	5.8	8.1	9.7	11.3	13.7	4.8	10Year Plus -1	1	0.557484	0.117033	0.098673	0.07547131	0.053534822	0.035976978	0.023308	0.014744	0.009186	0.005669	0.00892
155	2.509444	5.8	8.1	9.7	11.3	13.7	5.8	10Year Plus 0	0.557484	0.117033	0.098673	0.075471	0.053534822	0.035976978	0.023307956	0.014744	0.009186	0.005669	0.003478	0.005442
156	2.509444	5.8	8.1	9.7	11.3	13.7	6.8	10Year Plus 1	0.117033	0.098673	0.075471	0.053535	0.035976978	0.023307956	0.014743848	0.009186	0.005669	0.003478	0.002127	0.003315
157	4.797053	6.8	8.2	9.1	13	13.1	4.8	10Year Plus -2	1	1	1	1	0.84567819	0.046962855	0.033912445	0.023796	0.016363	0.011096	0.007454	0.014737
158	4.797053	6.8	8.2	9.1	13	13.1	5.8	10Year Plus -1	1	1	1	0.845678	0.046962855	0.033912445	0.023796049	0.016363	0.011096	0.007454	0.004975	0.009762
159	4.797053	6.8	8.2	9.1	13	13.1	6.8	10Year Plus 0	1	1	0.845678	0.046963	0.033912445	0.023796049	0.016363308	0.011096	0.007454	0.004975	0.003307	0.006455
160	4.797053	6.8	8.2	9.1	13	13.1	7.8	10Year Plus 1	1	0.845678	0.046963	0.033912	0.023796049	0.016363308	0.011096375	0.007454	0.004975	0.003307	0.002191	0.004264
161	5.253985	7.4	8.9	9.2	10.8	13.2	5.4	10Year Plus -2	1	1	1	1	0.495055818	0.196844274	0.145336945	0.08453	0.042503	0.01981	0.008906	0.007013
162	5.253985	7.4	8.9	9.2	10.8	13.2	6.4	10Year Plus -1	1	1	1	0.495056	0.196844274	0.145336945	0.084530411	0.042503	0.01981	0.008906	0.003939	0.003074
163	5.253985	7.4	8.9	9.2	10.8	13.2	7.4	10Year Plus 0	1	1	0.495056	0.196844	0.145336945	0.084530411	0.042503286	0.01981	0.008906	0.003939	0.001729	0.001344
164	5.253985	7.4	8.9	9.2	10.8	13.2	8.4	10Year Plus 1	1	0.495056	0.196844	0.145337	0.084530411	0.042503286	0.019810297	0.008906	0.003939	0.001729	0.000757	0.000587
165	7.138647	10	12	13	14.5	17	8	10Year Plus -2	1	1	1	0.433272	0.16632256	0.14615419	0.105996499	0.066643	0.038212	0.020762	0.010951	0.011687
166	7.138647	10	12	13	14.5	17	9	10Year Plus -1	1	1	0.433272	0.166323	0.14615419	0.105996499	0.066642833	0.038212	0.020762	0.010951	0.005686	0.006001
167	7.138647	10	12	13	14.5	17	10	10Year Plus 0	1	0.433272	0.166323	0.146154	0.105996499	0.066642833	0.038212239	0.020762	0.010951	0.005686	0.002928	0.003073
168	7.138647	10	12	13	14.5	17	11	10Year Plus 1	0.433272	0.166323	0.146154	0.105996	0.066642833	0.038212239	0.020761555	0.010951	0.005686	0.002928	0.001502	0.001571
169	1.148091	7.3	11.6	12.9	16.2	16.9	5.3	10Year Plus -2	0.08575	0.083977	0.077664	0.068113	0.057012085	0.045884331	0.035776525	0.027212	0.02031	0.014946	0.010884	0.027564
170	1.148091	7.3	11.6	12.9	16.2	16.9	6.3	10Year Plus -1	0.083977	0.077664	0.068113	0.057012	0.045884331	0.035776525	0.027212154	0.02031	0.014946	0.010884	0.007866	0.019698
171	1.148091	7.3	11.6	12.9	16.2	16.9	7.3	10Year Plus 0	0.077664	0.068113	0.057012	0.045884	0.035776525	0.027212154	0.020310117	0.014946	0.010884	0.007866	0.005654	0.014044
172	1.148091	7.3	11.6	12.9	16.2	16.9	8.3	10Year Plus 1	0.068113	0.057012	0.045884	0.035777	0.027212154	0.020310117	0.014945682	0.010884	0.007866	0.005654	0.004048	0.009997
173	4.037173	7.9	10.6	11.8	13.7	15.8	5.9	10Year Plus -2	1	1	0.494563	0.125082	0.110986937	0.088076372	0.063904634	0.043414	0.028191	0.017772	0.010996	0.017014
174	4.037173	7.9	10.6	11.8	13.7	15.8	6.9	10Year Plus -1	1	0.494563	0.125082	0.110987	0.088076372	0.063904634	0.043413818	0.028191	0.017772	0.010996	0.006725	0.010289
175	4.037173	7.9	10.6	11.8	13.7	15.8	7.9	10Year Plus 0	0.494563	0.125082	0.110987	0.088076	0.063904634	0.043413818	0.028190733	0.017772	0.010996	0.006725	0.004084	0.006205
176	4.037173	7.9	10.6	11.8	13.7	15.8	8.9	10Year Plus 1	0.125082	0.110987	0.088076	0.063905	0.043413818	0.028190733	0.017772391	0.010996	0.006725	0.004084	0.002469	0.003736
177	4.2	6.2	6.6	6.7	7	10.7	4.2	10Year Plus -2	1	1	1	1	1	0.007962882	0.148716783	0.654651	0.178722	0.009513	0.000415	1.88E-05
178	5.2	6.2	6.6	6.7	7	10.7	5.2	10Year Plus -1	1	1	1	1	1	0.156679665	0.654651412	0.178722	0.009513	0.000415	1.79E-05	8.1E-07
179	5.627729	6.2	6.6	6.7	7	10.7	6.2	10Year Plus 0	1	1	1	1	1	0.811331077	0.178722129	0.009513	0.000415	1.79E-05	7.75E-07	3.5E-08
180	5.627729	6.2	6.6	6.7	7	10.7	7.2	10Year Plus 1	1	1	1	1	0.811331077	0.178722129	0.009512925	0.000415	1.79E-05	7.75E-07	3.35E-08	1.51E-09
181	6.6	8.6	9.2	9.4	9.9	14.4	6.6	10Year Plus -2	1	1	1	1	1	1	0.114066168	0.378056	0.387286	0.102697	0.01548	0.002415
182	7.6	8.6	9.2	9.4	9.9	14.4	7.6	10Year Plus -1	1	1	1	1	1	1	0.492121764	0.387286	0.102697	0.01548	0.002094	0.000322
183	7.741594	8.6	9.2	9.4	9.9	14.4	8.6	10Year Plus 0	1	1	1	1	1	0.492121764	0.38728586	0.102697	0.01548	0.002094	0.000279	4.27E-05
184	7.741594	8.6	9.2	9.4	9.9	14.4	9.6	10Year Plus 1	1	1	1	1	0.492121764	0.38728586	0.102697439	0.01548	0.002094	0.000279	3.71E-05	5.68E-06
185	1.978767	6.7	10	11.6	15.4	16.6	4.7	10Year Plus -2	0.556933	0.077216	0.070886	0.062193	0.052433771	0.042740907	0.033892782	0.026294	0.020054	0.015097	0.011254	0.031007
186	1.978767	6.7	10	11.6	15.4	16.6	5.7	10Year Plus -1	0.077216	0.070886	0.062193	0.052434	0.042740907	0.033892782	0.026293747	0.020054	0.015097	0.011254	0.008328	0.022679
187	1.978767	6.7	10	11.6	15.4	16.6	6.7	10Year Plus 0	0.070886	0.062193	0.052434	0.042741	0.033892782	0.026293747	0.020053744	0.015097	0.011254	0.008328	0.006129	0.016549
188	1.978767	6.7	10	11.6	15.4	16.6	7.7	10Year Plus 1	0.062193	0.052434	0.042741	0.033893	0.026293747	0.020053744	0.015096683	0.011254	0.008328	0.006129	0.004493	0.012056
189	2.509444	5.8	8.1	9.7	11.3	14.7	3.8	10Year Plus -2	1	1	0.521328	0.112629	0.099669105	0.080487873	0.060329826	0.042741	0.029085	0.019254	0.012514	0.02196
190	2.509444	5.8	8.1	9.7	11.3	14.7	4.8	10Year Plus -1	1	0.521328	0.112629	0.099669	0.080487873	0.060329826	0.042741365	0.029085	0.019254	0.012514	0.008037	0.013923
191	2.509444	5.8	8.1	9.7	11.3	14.7	5.8	10Year Plus 0	0.521328	0.112629	0.099669	0.080488	0.060329826	0.042741365	0.029085488	0.019254	0.012514	0.008037	0.005122	0.008801
192	2.509444	5.8	8.1	9.7	11.3	14.7	6.8	10Year Plus 1	0.112629	0.099669	0.080488	0.06033	0.042741365	0.029085488	0.019254282	0.012514	0.008037	0.005122	0.003248	0.005553
193	4.797053	6.8	8.2	9.1	13	14.1	4.8	10Year Plus -2	1	1	1	1	1	0.866758	0.038745869	0.028339	0.020271	0.01427	0.009933	0.021683
194	4.797053	6.8	8.2	9.1	13	14.1	5.8	10Year Plus -1	1	1	1	1	0.866758	0.038745869	0.028338816	0.020271	0.01427	0.009933	0.00686	0.014823
195	4.797053	6.8	8.2	9.1	13	14.1	6.8	10Year Plus 0	1	1	1	0.866758	0.038745869	0.028338816	0.020270846	0.01427	0.009933	0.00686	0.004712	0.010111
196	4.797053	6.8	8.2	9.1	13	14.1	7.8	10Year Plus 1	1	1	0.866758	0.038746	0.028338816	0.020270846	0.014270067	0.009933	0.00686	0.004712	0.003225	0.006886
197	5.253985	7.4	8.9	9.2	10.8	14.2	5.4	10Year Plus -2	1	1	1	1	1	0.571888789	0.17079995	0.119123	0.069104	0.035879	0.017558	0.015647
198	5.253985	7.4	8.9	9.2	10.8	14.2	6.4	10Year Plus -1	1	1	1	1	0.571888789	0.17079995	0.119122961	0.069104	0.035879	0.017558	0.008344	0.007303

	1 yr Elevation (ft)	10 yr Elevation (ft)	50 yr Elevation (ft)	100 yr Elevation (ft)	500 yr Elevation (ft)	Wave Heigh Factor	FFE	FFE Comments	-2 EANF	-1 EANF	0 EANF	1 EANF	2 EANF	3 EANF	4 EANF	5 EANF	6 EANF	7 EANF	8 EANF	>8 EANF
199	5.253985	7.4	8.9	9.2	10.8	14.2	7.4	10Year Plus 0	1	1	1	0.571889	0.17079995	0.119122961	0.069104471	0.035879	0.017558	0.008344	0.00391	0.003393
200	5.253985	7.4	8.9	9.2	10.8	14.2	8.4	10Year Plus 1	1	1	0.571889	0.1708	0.119122961	0.069104471	0.035878557	0.017558	0.008344	0.00391	0.00182	0.001573
201	7.138647	10	12	13	14.5	18	8	10Year Plus -2	1	1	1	1	0.502901808	0.153330279	0.1264709	0.089037	0.055926	0.03265	0.018253	0.021431
202	7.138647	10	12	13	14.5	18	9	10Year Plus -1	1	1	1	0.502902	0.153330279	0.1264709	0.089036654	0.055926	0.03265	0.018253	0.009958	0.011473
203	7.138647	10	12	13	14.5	18	10	10Year Plus 0	1	1	0.502902	0.15333	0.1264709	0.089036654	0.055925787	0.03265	0.018253	0.009958	0.00536	0.006113
204	7.138647	10	12	13	14.5	18	11	10Year Plus 1	1	0.502902	0.15333	0.126471	0.089036654	0.055925787	0.032650382	0.018253	0.009958	0.00536	0.002864	0.003249
205	1.148091	7.3	11.6	12.9	16.2	17.9	5.3	10Year Plus -2	0.080775	0.08013	0.075492	0.067741	0.058180152	0.048117806	0.038568773	0.030146	0.023102	0.017438	0.013012	0.035638
206	1.148091	7.3	11.6	12.9	16.2	17.9	6.3	10Year Plus -1	0.08013	0.075492	0.067741	0.05818	0.048117806	0.038568773	0.030146044	0.023102	0.017438	0.013012	0.009627	0.026011
207	1.148091	7.3	11.6	12.9	16.2	17.9	7.3	10Year Plus 0	0.075492	0.067741	0.05818	0.048118	0.038568773	0.030146044	0.023102239	0.017438	0.013012	0.009627	0.007078	0.018933
208	1.148091	7.3	11.6	12.9	16.2	17.9	8.3	10Year Plus 1	0.067741	0.05818	0.048118	0.038569	0.030146044	0.023102239	0.017437915	0.013012	0.009627	0.007078	0.005179	0.013754
209	4.037173	7.9	10.6	11.8	13.7	16.8	5.9	10Year Plus -2	1	1	0.44622	0.119274	0.11214322	0.094844697	0.073290754	0.052782	0.036113	0.023851	0.015387	0.026094
210	4.037173	7.9	10.6	11.8	13.7	16.8	6.9	10Year Plus -1	1	0.44622	0.119274	0.112143	0.094844697	0.073290754	0.052781908	0.036113	0.023851	0.015387	0.009776	0.016318
211	4.037173	7.9	10.6	11.8	13.7	16.8	7.9	10Year Plus 0	0.44622	0.119274	0.112143	0.094845	0.073290754	0.052781908	0.036113416	0.023851	0.015387	0.009776	0.006152	0.010166
212	4.037173	7.9	10.6	11.8	13.7	16.8	8.9	10Year Plus 1	0.119274	0.112143	0.094845	0.073291	0.052781908	0.036113416	0.023850888	0.015387	0.009776	0.006152	0.003847	0.006318
213	4.2	6.2	6.6	6.7	7	11.7	4.2	10Year Plus -2	1	1	1	1	1	0.001014173	0.016633032	0.223559	0.60785	0.140997	0.009379	0.000567
214	5.2	6.2	6.6	6.7	7	11.7	5.2	10Year Plus -1	1	1	1	1	1	1	0.241205954	0.60785	0.140997	0.009379	0.000535	3.21E-05
215	5.627729	6.2	6.6	6.7	7	11.7	6.2	10Year Plus 0	1	1	1	1	1	1	0.849055789	0.140997	0.009379	0.000535	3.03E-05	1.81E-06
216	5.627729	6.2	6.6	6.7	7	11.7	7.2	10Year Plus 1	1	1	1	1	1	0.849055789	0.140997417	0.009379	0.000535	3.03E-05	1.71E-06	1.02E-07