

TABLE 1: STORM TIDE ELEVATION FREQUENCIES  
(STILL WATER LEVELS)

Elevation (NGVD)	% Chance Occurrence in any given Year	Return Period
+7.0'	82%	1.2 years
+7.5'	40%	2.5 years
+8.0'	12%	8.3 years
+8.5'	4%	25 years
+9.0'	1%	100 years
+9.5'	0.3%	300 years

In reality, the wharf is impacted by waves as well as storm surge levels. The FIRM map indicates that 1.0' high waves accompany storm surges in the A2-Zone (the 2 indicates the number of .5 increments of wave height). A more realistic frequency of flooding for the wharf would include wave heights of 1.0' above the still water level. These are presented in Table 2.

TABLE 2: STORM TIDE ELEVATION FREQUENCIES  
(WAVE HEIGHTS ADDED)

Elevation (NGVD)	% Chance Occurrence in any given Year	Return Period
+8.0'	82%	1.2 years
+8.5'	40%	2.5 years
+9.0'	12%	8.3 years
+9.5'	4%	25 years
+10.0'	1%	100 years
+10.5'	0.3%	300 years

Therefore, the interior of the wharf around Harris Co., the entrance to the rest of the wharf, floods approximately every 2.5 years. The duration of flooding would be for 2 to 3 hours at the peak of the high tide.

Presumably, the very end of the wharf is impacted by 3' high waves. Here the limiting height of the rim of the wharf is 9.5' according to the base map. Waves overtop the end of the wharf at least once every year with water rushing back along the interior of the wharf. This frequency can be greatly reduced by constructing a 3' high wall skirting the