

**MINUTES**  
**BEACHFRONT MANAGEMENT COMMITTEE**  
**MARCH 28, 2013**  
**10:00 a.m.**

Present: David Lybrand, David Cannon, Roy McLaurin, Committee Members: Iris Hill, ex-officio. On the conference call: Dudley Patrick, Project Manager for the Feasibility Study by the Army Corps of Engineers, and Mark Craven, Principal Architect from Army Corps of Engineers

Mr. Lybrand stated that the town has spent a considerable amount of money to come up with a plan. He stated he was not certain what the purpose of the plan was, and asked Mr. Patrick and Mr. Gravens to explain that. He would like to have the ACOE members on the conference call explain Beach FX vs. Rule #5. He also asked them what the Corps participation would be if the Town gets a permit to put in some groins and do some re-nourishment in the permit and the construction. Mr. Patrick said he was under the impression that the meeting was to focus on what the Committee had questions on as far as methodology was concerned. Mr. Gravens gave an overview: the purpose of the study and the project is storm damage reduction. The Corps job is to put in place a federal shore protection project that will reduce damages for the next fifty years. The design is based on an economic analysis. A cost benefit analysis has arrived at a beach cross section that involves a substantial dune feature. Mr. Gravens emphasized that the dune feature is key. The dune provides a protective role, and the design has ultimately landed on a significant dune feature across the entire project domain, with a protective berm in front of the dune. The Corps analysis began in 2009, which is the existing condition beach profile and they have a design dune cross-section with a protective beach in front of it which is approximately 75 feet wide at the northern end and it decreases to 50 feet at the central portion of the Atlantic facing shore line and then decreases to effectively zero at the point. In some locations, more so in the north, the Corps is increasing the total width of the beach and advancing the shore line seaward to some extent. It's only in those areas that the Corps is suggesting the increase of groin lengths where the shore line will be advanced. The Corps is not proposing groin lengthening in areas where the shore line will be advanced seaward because as the groins get longer, their potential for trapping new sand or reducing transport off the island increases. Resource agencies would have concerns about that, if the Corps is changing the literal transport. Mr. Gravens stated that, there seems to be an assumption that Beach FX was used to determine the amount of groin lengthening, which is inaccurate. Beach FX is the engineering, economic model that is used to evaluate physical and economic performance of the projects. The cost benefit analysis has shown the ACOEs project to be favorable in that the cost of the project is less than the damages, or the cost benefit is greater than one. The federal government requires a favorable or positive cost benefit ratio in order to expend public funds. Mr. Lybrand expressed concern over the use of Beach FX and the proposal of a dune, fearing that the dune would not last. He referenced the 1995 nourishment project in which there had been a great deal of sand pumped on the beach and moved to establish a considerable dune, which subsequently washed away. Mr. Gravens stated that the motivation for lengthening groins is exclusively for providing beach width necessary to accommodate a design beach cross section. The proposed groin lengthening is not provided as a means for trapping more sand or increasing the beach significantly. Mr. Lybrand

referenced the 1997 project in which DHEC helped design the groins, one of which had been extended 30 feet, resulting in 30 additional feet of vegetation for the homeowner adjacent to that groin. Mr. Lybrand expressed his dissatisfaction with current engineering design. Mr. Gravens reiterated that Beach FX was not used to evaluate or assess the amount of groin lengthening. Mr. Lybrand asked what effect the proposed groin lengths would have on the permit application. Mr. Gravens stated that the permits depend, to some extent, on the environmental agency recommendations. The environmental agency has to be sure that negative results will not be produced elsewhere due to any proposed project. Furthermore, if there is not sound, reliable reasoning behind the groin lengthening process, the permit could possibly be delayed. Mr. Patrick agreed with Mr. Gravens that this is the case. Mr. McLaurin asked about the migration of sand in the southward direction and whether or not it was feasible to transport the sand that had accumulated there to areas that needed sand. Mr. Patrick said that he would feel more comfortable if the environmental engineer would answer that question. Mr. Patrick stated he would be glad to schedule a meeting or another conference call and have the engineer available. Administrator Hill asked the Army Corps of Engineers to take a look at groins eight, nine and ten to see if lengthening was a possibility. Mr. Gravens said they would take another look at it. It was determined that the Committee would send questions to Administrator Hill and she would get answers from the Army Corps of Engineers. After the call ended, David Lybrand made a motion to accept the ACOE project, apply for a permit that addresses all environmental aspects and ask for Bill Eisner from DHEC's input and go forward with a demonstration project. Mr. McLaurin seconded the motion and it was approved unanimously.

The meeting was adjourned at 11:45 a.m.