

Dune Update

Those of us who witnessed Hurricane Sandy, and saw its aftermath, know that the dunes on Ocean Grove's beaches were key to limiting damage from the storm.

Dunes build up naturally, over the course of many years, when dune grass traps blowing sand, allowing a pile of sand to add height and breadth, and form a barrier against storm tides and surges. Dune grass, with its robust and extensive root system, holds the accreted sand in place.

After the storm, residents and visitors alike were eager to see the dunes rebuilt. But rebuilding dunes requires much more than pushing around a lot of sand. For maximum effectiveness, dunes are engineered to deflect water away from vulnerable areas.

So, while all of us were wondering where our dunes were, the Ocean Grove Camp Meeting Association was devoting considerable time and resources to ensuring that the dune reconstruction would be "done right the first time".

To that end, the Camp Meeting has worked with dune experts, geologists and engineers to formulate a robust and effective design for the rebuilt dunes.

A major challenge is to design access points that will facilitate beach access for all beach-goers, regardless of their level of mobility. Permanent access will be provided by means of walkover bridges from the boardwalk over the dunes and then down onto the beach. Constructing these bridges will take time and money. Until the bridges can be put in place, access will be by cuts through the dunes that are angled to deflect the flow of water away from the cuts.

A great deal of discussion went into resolving the question of whether the new dunes would have a supporting structure. The ultimate support is a rock wall, but the cost is prohibitive, millions of dollars. Ultimately, the decision was made to forego a supporting structure, and to instead allow the dunes to build up the way they always have, by allowing sand to be collected by dune grass and anchored by its root system.

The first dune will be approximately 1,000 feet in length, and will be established at Middle Beach, in front of the new section of the

boardwalk, an area that now has no dunes. The dunes will be located approximately 20 to 25 feet to the east of the boardwalk. The footprint for the dune has been surveyed and staked, and will be approximately 32 feet wide. The area between the boardwalk and the edge of the proposed dune will be excavated, and the sand deposited to form the base of the dune. Snow fences will be installed against which more sand can accrete. After the sand comes the dune grass. A stupendous amount of dune grass will be planted – tens of thousands of plants. Fortunately for us, New Jersey is home to major growers of dune grass, and the supply is expected to be plentiful after having been nearly exhausted right after Sandy.

The dunes are projected to rise to a height of approximately 16 feet. The height of the boardwalk is 15.5 feet. Anyone (more than a foot tall) standing on the boardwalk will be able to see over the dune.

Work will begin as early as the week of October 27. Stay tuned for progress reports, and think about volunteering to plant dune grass.