

**Town of Nags Head**  
**Shoreline Management Committee**  
Meeting Minutes

*September 13, 2016, 3 pm*  
*Board of Commissioners Meeting Room*

1. Agenda

- Review of minutes & previous meeting
- Staff updates
- Discussion – preliminary options for the 2018 project
  - Continued discussion of target beach condition/review of preliminary design options based on minimum and maximum volumes
  - Review of dune management plan options for various dune conditions
- Closing

2. Attendees

Andy Garman – town staff, David Ryan – town staff, Commissioner John Ratzenberger, Cliff Ogburn – town staff, Tim Kana, PhD PG – CSE, Haiqing Kaczkowski (HK), PhD PE – CSE, Lin Callis, Mike Pfaff, Jim Morris, Bill Magann, Randy Blanton, Ken Termini, Perry White, Keith Sawyer.

3. Discussion

Drs. Tim Kana and Haiqing Kaczkowski began the discussion with a presentation outlining the project schedule and goals. The town is currently defining a target beach condition that will be achieved over consecutive nourishment cycles. Additionally, the consultant is working on the following items between now and the end of calendar year 2016:

- Conduct borrow area survey & obtain borings
- Develop renourishment requirements, dune stabilization alternatives, and initiate engineering studies
- Design, cost estimates, field work, initiate permit liaison work

The target beach condition would ideally address the following goals:

1. Higher level of storm damage reduction w/ South Nags Head as a focal point
2. Wider recreational beach
3. Integration of dune management into the overall 2018 and long-term plan
4. Replenish the sand deficit in the “sand box”

The 2018 project would be 10 miles long and would span from MP 11 to 21 (same limits as 2011).

The consultant and the committee began discussing minimum and maximum target quantities for the 2018 project. After a presentation of overall sand losses along the length of the existing project and in light of the stated project goals, the committee increased the minimum and maximum quantities to include additional sand in reaches 3b and 4 (last 9,000 feet of town). The minimum and maximum quantities the consultant was asked to use for the 2018 project design range from 1.8 million cu/yd to 3 million cu/yd. The maximum quantity target would improve project performance in SNH over the previous project and would augment sand in the remainder of the town to move the beach and dunes closer to the proposed target beach condition.

The committee then discussed dune management techniques and the consultant explained various options to manage the dunes and work towards a continuous dune line based on various existing “categories” of beach conditions. It was noted that in some instances, structures on the beach on in the dune line will limit the ability to create a continuous dune line. The committee then discussed the need to control cuts in the dune created when people want to improve views or move sand back to the beach. It was stated that the town should require more dune walkways to be reconstructed at a higher elevation rather than allowing property owners to cut the dune to remove sand away from existing structures. It was emphasized that the 2018 project should include a comprehensive sand fencing and dune vegetation component to build the dune and limit sand migration. In locations that have a significant existing dune, the goal would be to widen the dune to the east rather than increase the overall height of the dune. A sufficiently wide beach and use of strategically placed sand fencing and vegetation will be necessary to achieve this goal.

The committee discussed the need for public education on the nourishment project. It was noted that the beach is the town’s greatest asset and a healthy beach contributes to tourism and ultimately additional sales and occupancy tax revenue that reduces the tax rate for property owners. The committee suggested that the town work to educate this benefit to the public using a variety of media including tax and water bills. The education component will also focus on the lessons learned from the first project and how these lessons are being used to refine the town’s long-term strategy. Again, new project goals include additional measures to control migrating sand, improved dune management including sand fencing and vegetation, and a strategy for planning and funding consecutive nourishment cycles to achieve a target condition for the shoreline. The committee stressed the importance of achieving public buy-in for the next project.

At the conclusion of the meeting, the committee reiterated the planning goals for the next project including using the minimum and maximum fill volumes to generate project design alternatives. Three different graphs will be generated to show these alternatives. A presentation on the June 2016 beach monitoring report will be given at the October 5th Board of Commissioners meeting. An update will also be provided on the work progress of the Shoreline Management Committee to develop the short-term and long-term projects. The committee members were requested to attend the meeting. The item will be time specific at 10 am.

Next Shoreline Management Committee meeting, October 11, 2016 at 3:00 pm.