

FACT SHEET #4
Nags Head Emergency Nourishment Project

Q. *How long will it take to construct the project?*

A. Typical production of one ocean-going dredge is about 25,000 cubic yards per day working around the clock. Thus, to accomplish ~4,000,000 cubic yards, it will take about 160 working days. However, there are numerous days when waves and weather do not allow safe operation of the equipment. At least 25 percent more time will be required if only one dredge is operating. This would mean a construction period of about 200 days, or about seven months. If state and federal permits preclude work during the summer when conditions are safer, the contractor will likely need even more than seven months and will factor this into his price.

Given the scale of the project, it is likely a contractor will plan to use two or more dredges at the same time so that the construction duration can be shortened. Recent CSE projects at Pine Knoll Shores, Indian Beach, and Emerald Isle involved two hopper dredges and simultaneous pump-out areas.

A big advantage of the recommended plan (use of offshore borrow area S1) is that all construction can be accomplished under a single mobilization and can be completed in less than six months if two or more dredges are operating. A "933" project, piggy-backing with federal maintenance of Oregon Inlet, would involve multiple dredge mobilizations and repeated disruption of the beach over many years until the full scope of the project is completed.

Q. *Will the project include protective dunes?*

A. Only in limited areas where no dunes presently exist. The primary purpose of the project is to rebuild the recreational beach, including its underwater slope. This will serve as a foundation for natural dune building after the project. The prerequisite for dunes is a dry-sand beach. Winds sweep sand off the beach to grow dunes naturally over time. If there is no dry beach, there is little sand available to feed the dunes. The proposed project will provide a wide dry beach, which will not only protect the existing dunes, but will feed them sand as well.

About 10 percent of the Nags Head shoreline lacks protective dunes, particularly along Surfside Drive. The project will incorporate a minimal dune in these areas to serve as the nucleus for natural dune growth. Private property owners will be encouraged to augment the project with sand fencing and planting of dune grasses.