



2022 Avon Beach Nourishment

Project Update — July 11, 2022

Issue No. 2

For updates and additional information, visit [MoreBeachToLove.com](https://www.MoreBeachToLove.com).

Construction Progress

Great Lakes Dredge & Dock Company's (GLDD) second hopper dredge, the *Liberty Island*, arrived in Avon and resumed pumping operations on the evening of Friday, July 8, 2022. As of Sunday, July 10, the volume from the *Liberty Island* combined with the amount placed by the first hopper dredge, *Ellis Island*, from June 19–29, totals **over 50% of the project volume** (ie – 500,000 cubic yards [cy] out of 1 million cy). Over 1 mile of the Avon oceanfront has been nourished, and another ~1.5 miles needs to be completed.

Pumping through the Avon Pier on July 10, 2022.



The *Liberty Island* arrived in Avon on Friday, July 8 and delivered her first load ~500 feet (ft) north of the Avon Pier that evening.



Prior to *Liberty Island*'s arrival, GLDD used America's largest hopper dredge, *Ellis Island*, to begin the Avon nourishment on Sunday, June 19. The *Ellis Island* pumped through a submerged pipeline which was landed on the oceanfront near the public beach access at Greenwood Place. In five days, the dredge completed a ~3,200-ft section south of the landing point, and by Friday, June 24, pumping reached the southern boundary of the project near NPS ORV Ramp 38.

The *Ellis Island* approaching the southern boundary of the project the morning of June 24, 2022.



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After the dredge *Ellis Island* completed the southernmost section, operations proceeded north toward the Avon Pier from the landing point at Greenwood Place on the evening of June 25. Work progressed smoothly over the next six days. By Wednesday, June 29, another ~2,000 ft of beach was nourished from the landing point to the oceanfront near Pampas Drive. At that time, the *Ellis Island* had completed the work planned from this landing point.



During the 11 days of nourishment from June 19–29, the *Ellis Island* placed ~480,000 cy of sand on the beach. It averaged over 40,000 cy per day, which was faster than expected. GLDD decided to pause the Avon project and move the *Ellis Island* downcoast to initiate the Buxton renourishment project. The equipment, shore pipes, survey vessel, etc., were consolidated to an area on the newly constructed beach in front of the Pampas Drive public beach access.

While awaiting *Liberty Island's* arrival, GLDD installed the second submerged pipeline approximately 500 ft north of Avon Pier. The remaining Avon project volume will be pumped from this landing point and transferred to the rest of the project area.

The work plan is to pump south through the pier for ~800 ft. The pumping direction will then be flipped toward the north until the northern project boundary at Due East Road has been reached. The final section between the pier and Pampas Drive will be nourished afterward to complete the project.

Photo taken on July 2, 2022.



On the day of her arrival, the *Liberty Island* pumped south toward Avon Pier. [Photo July 8, 2022]



Sand Source

Nourishment usually involves excavations of “borrow deposits” that contain sediments similar to the native beach. Depending upon the sand source, there are two primary construction methods used to restore sand supplies along the oceanfront:

1. Ocean-certified dredges using offshore borrow areas; and
2. Trucks using inland deposits.

Economics favor a sand source that matches the native beach quality, involves the shortest transportation distance, and minimizes environmental impacts. Several potential sand sources for Avon were evaluated. It was determined that sediment in the offshore borrow area closely matched the native beach, contained sufficient volume, and would restore the eroding beaches in the most effective and cost-efficient way.

The new sand is similar in texture to the native beach but slightly darker upon initial placement. The sun will bleach this sand over the next few weeks and make it indistinguishable from the native beach—as proven by the recently completed ~1-mile section between Pampas Drive and NPS ORV Ramp 38.



Looking Forward

The beach around the Avon Pier has experienced accelerated erosion over the past few years, and ocean waves have undermined the ground under the pier. Nourishment sand will attenuate the wave forces around the pier and protect the foundation from further ocean threats. After nourishing the section around Avon Pier, GLDD moved the equipment and shore pipes to the north of the pier and started pumping north toward Due East Road on the evening of July 10, 2022.

The *Liberty Island* was pumping at approximately 1,000 ft north of the Avon Pier on the morning of July 11, 2022 toward the northern boundary of the project at Due East Road. The beach access south of the pier was re-opened for the public.



Construction Schedule

The Avon project calls for the placement of 1 million cy of sand along approximately 2.5 miles of shoreline from 4,000 ft north of Avon Pier at Due East Road to the southern limit of Avon. GLDD estimates that it will take another 20–30 days to complete the project under normal weather conditions. GLDD currently anticipates the Avon project will be completed by August.

View the construction progress map at [MoreBeachToLove.com](https://www.morebeachtolove.com).

