

Assateague Island National Seashore North End Restoration Project Timeline

Date	Event
1800's - 1995	<p>Some information provided in the Project Introduction document. Detailed events are available in a timeline compiled by USACE. Contact Assateague Island National Seashore (asis_gis@nps.gov) for a copy of this document.</p> <p>Detailed information about construction and repairs on the jetties surrounding the Ocean City, MD Inlet is available here.</p> <p>A slide show created by the US Army Corps of Engineers, containing historic aerial photographs and information about the Ocean City, MD Inlet, is available here.</p>
January 27-29; February 4-6, 1998	<p>Extra-tropical cyclones (commonly referred to as nor'easters) occur over Assateague Island National Seashore, nearly breaching the island approximately 6.5 km (4 miles) south of the Ocean City Inlet. Click here for more details on the storms, and see the Project Introduction PDF for a more detailed account of their effects on Assateague Island.</p>
June 1998	<p>USACE completes the Environmental Impact Statement, a report required by government regulations that presents the feasibility and environmental ramifications of implementing the ASIS North End Restoration Project. Contact Assateague Island National Seashore (asis_gis@nps.gov) if you are interested in the specific document.</p>
September - October 1998	<p>In response to the extra-tropical cyclones in January and February, 1998, 200,000 cubic yards (153,000 cubic meters) of sediment are deposited on the beach and used to make the 'emergency storm berm' at about 3.5 meters (11.5ft) (NGVD29) elevation and 5-7.5 km (3.1-4.7 miles) south of the Ocean City Inlet. See the Project Introduction document for more details.</p>
April 27, 2002 – February 3, 2003	<p>The southern jetty of the Ocean City, MD Inlet is tightened, as material is rearranged and added to further restrict sediment from entering the inlet. This operation begins with the landward end of the southern jetty (bordering Assateague Island), and ends at the seaward edge.</p>

September 2002	The first, "short-term," stage of the North End Restoration Project is undergone as 1.4 million cubic meters (1.8 million cubic yards) of sediment is placed on the beach environment of Assateague Island between 2 and 12.5 km (1.2-7.8 miles) south of the Ocean City Inlet. The constructed berm is also rebuilt in approximately the same location, to the same height as when it was first constructed.
September 2003	USACE creates the "Assateague Island Monitoring and Adaptive Management Project Plan." Contact Assateague Island National Seashore (asis_gis@nps.gov) for document.
January 13, 2004	Monitoring status meeting held at Wye Island between ASIS, USACE, MD DNR (Maryland Department of Natural Resources), Town of Ocean City, and other interested parties. Agenda includes a review of original goals, construction status, and recent geomorphologic and biologic trends; presentation of overwash modeling; and assigning of specific tasks to each agency.
January 13, 2004 – January 24, 2004	Bathymetry survey is conducted over the Ocean City Inlet and associated tidal deltas. This survey will be used to examine effects to the inlet and tidal deltas caused by future dredge events. The data for this survey is listed and described in the North End Restoration Project Datasets and Contacts document.
January 30 – April 1, 2004	First round of dredging occurs, as 58,870 cubic meters (77,000 cubic yards) of sediment from the ebb tidal delta (also referred to as the ebb shoal) and 4,205 m ³ (5,500 yd ³) from the flood tidal delta in Sinepuxent Bay (total of 63,075 m ³ or 82,500 yd ³) is dredged and placed in the nearshore of Assateague Island, at about 3 miles south of the Ocean City Inlet, using the USACE Currituck dredge boat. See the Datasets and Contacts document for more details on the borrow and placement location data.
April 15, 2004 – April 17, 2004	Bathymetry survey is conducted over dredging areas within the Ocean City Inlet and associated tidal deltas. This survey will be used to examine effects to the inlet and tidal deltas caused by the spring dredge events, and also used to look at changes from future dredge events. The data for this survey is listed and described in the North End Restoration Project Datasets and Contacts document.

<p>September 10 – September 13, 2004</p>	<p>Bathymetry survey is conducted over dredging areas within the Ocean City Inlet and associated tidal deltas. This survey will be used to examine effects to the inlet and tidal deltas caused by the spring dredge events, and also used to look at changes from future dredge events. The data for this survey is listed and described in the North End Restoration Project Datasets and Contacts document.</p>
<p>October 1 - November 26, 2004</p>	<p>Fall 2004 dredging occurs. 67,197 m³ (87,890 yd³) of sediment is dredged from the ebb tidal delta (ebb shoal) and 5,834 m³ (7,630 yd³) is dredged from the flood tidal delta, for a total of 73,030 m³ (95,520 yd³). Of this, the majority of sediment is placed in the nearshore of Assateague Island, at about 3 miles south of the Ocean City Inlet, with some also placed off the coast of Ocean City, MD. All dredging is done using the USACE Currituck dredge boat. See the Datasets and Contacts document for more details on the borrow and placement location data.</p>
<p>December 2 – December 4, 2004</p>	<p>Bathymetry survey is conducted over dredging areas within the Ocean City Inlet and associated tidal deltas. This survey will be used to examine effects to the inlet and tidal deltas caused by the spring dredge events, and also used to look at changes from future dredge events. The data for this survey is listed and described in the North End Restoration Project Datasets and Contacts document.</p>
<p>October 18, 2004</p>	<p>Meeting is held at Assateague Island National Seashore to discuss the little to no overwash that has occurred since the berm was rebuilt in 2002. As a solution to this, the idea of creating notches, or small areas of lowered elevation, in the constructed berm is initiated. Agenda includes constructed berm alteration schedule, what modifications will be done, how the notches will be monitored, and other topics on dredging schedules, dredge and bathymetry data, shoreline delineation contract, annual reports, and data management.</p>
<p>October 22 – November 12, 2004</p>	<p>Proposed alterations (creation of berm notches) to the constructed berm are drafted and discussed between the North End Restoration Project team members.</p>
<p>January 2005</p>	<p>USACE creates the document "Atlantic Coast of Maryland Shoreline Protection Project: General Reevaluation Study. Overview of Study and Reconsideration of Ebb Shoal as Sand Source for Ocean City." Contact Assateague Island National Seashore (asis_gis@nps.gov) for a copy of the document.</p>

<p>January 21, 2005</p>	<p>Sediment samples are collected from each constructed berm notch. These samples were analyzed by USACE to calculate grain size distributions; contact Assateague Island National Seashore for copies of these graphs. An email describing alterations to the constructed berm is sent to interested parties.</p>
<p>March 2, 2005</p>	<p>Meeting is held at Kent Island for the North End Restoration Project team. Agenda includes an update on the constructed berm alterations (notches), presentation on reservoir modeling, discussion of borrow sites for upcoming dredging, monitoring status and future plans of USACE and NPS, and data management.</p>
<p>March 19 – March 22, 2005</p>	<p>Bathymetry survey is conducted over dredging areas within the Ocean City Inlet and associated tidal deltas. This survey will be used to examine effects to the inlet and tidal deltas caused by the spring dredge events, and also used to look at changes from future dredge events. The data for this survey is listed and described in the North End Restoration Project Datasets and Contacts document.</p>
<p>March 19 – April 28, 2005</p>	<p>Spring 2005 dredging occurs. 24,687 m³ (32,290 yd³) of sand is dredged from the ebb tidal delta (shoal) and 841 m³ (1100 yd³) is dredged from the flood tidal delta, for a total of 25,528 m³ (33,390 yd³). All sediment is placed in the nearshore of Assateague Island, at about 3 miles south of the Ocean City Inlet, using the USACE Currituck dredge boat. See the Datasets and Contacts document for more details on the borrow and placement location data.</p>
<p>May 1 – May 3, 2005</p>	<p>Bathymetry survey is conducted over dredging areas within the Ocean City Inlet and associated tidal deltas. This survey will be used to examine effects to the inlet and tidal deltas caused by the spring dredge events, and also used to look at changes from future dredge events. The data for this survey is listed and described in the North End Restoration Project Datasets and Contacts document.</p>
<p>August 21 – September 3, 2005</p>	<p>Bathymetry survey is conducted over the Ocean City Inlet and associated tidal deltas. This survey will be used to examine effects to the inlet and tidal deltas caused by the spring dredge events, and also used to look at changes from future dredge events. The data for this survey is listed and described in the North End Restoration Project Datasets and Contacts document.</p>

<p>September 8, 2005</p>	<p>Meeting held at Wye Island for the North End Restoration Project team. Agenda included project summary of seismic and side-scan sonar surveys of dredge locations used for Ocean City sediment mitigation, recent and historic shoreline change trends on Assateague Island, progress on reservoir model for assessing bypassing, update on Chincoteague Bay hydrographic model, survey and dredging updates, discussion of piping plover population dynamics model, status of NPS biological monitoring, and data management.</p>
<p>September 18 – November 13, 2005</p>	<p>Fall 2005 dredging occurs. 52,586 m³ (68,780 yd³) of sand is dredged from the ebb tidal delta (shoal) and 9,174 m³ (12,000 yd³) is dredged from the flood tidal delta, for a total of 61,760 m³ (80,780 yd³). Dredging is performed with the USACE Currituck dredge boat. See the Datasets and Contacts document for more details on the borrow and placement location data.</p>
<p>December 7 – December 8, 2005</p>	<p>Bathymetry survey is conducted over dredging areas within the Ocean City Inlet and associated tidal deltas. This survey will be used to examine effects to the inlet and tidal deltas caused by the spring dredge events, and also used to look at changes from future dredge events. The data for this survey is listed and described in the North End Restoration Project Datasets and Contacts document.</p>
<p>February 16, 2006</p>	<p>Meeting held in the Barret room at the Queen Anne's County Office of Tourism for the North End Restoration Project team. Agenda topics include discussions and presentation of north end shoreline change analysis, notching and evolution of the constructed berm, dredging locations, pre- and post-dredge bathymetry surveys, the North End Restoration Project website, USACE modeling and monitoring, and the status of NPS biological monitoring.</p>
<p>March 15 – March 16, 2006</p>	<p>Bathymetry survey is conducted over dredging areas within the Ocean City Inlet and associated tidal deltas. This survey will be used to examine effects to the inlet and tidal deltas caused by the spring dredge events, and also used to look at changes from future dredge events. The data for this survey is listed and described in the North End Restoration Project Datasets and Contacts document.</p>
<p>April 3 – May 11, 2006</p>	<p>Spring 2006 dredging occurs. Exact volumes are not available at this time, but it is estimated that 29,397 m³ (38,450 yd³) of sand is dredged from the ebb tidal delta (shoal). Dredging is performed with the USACE Currituck dredge boat. See the Datasets and Contacts document for more details on the borrow and placement location data.</p>

August 9, 2006	Meeting held at Wye River for the North End Restoration Project team. Agenda topics include a by-passing and back-passing project summary, analysis of the constructed berm and possible further alterations to the structure, determination of borrow sites for fall 2006 dredging, frequency of bathymetry surveys, Maryland Geologic Survey work on off-shore shoals, numerical simulations of hydrodynamics and sediment transport at the Ocean City, MD inlet.
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