



**Portsmouth Naval Shipyard Shoreline Stabilization  
Kittery, Maine**

*Naval Facilities Engineering Command, EFA Northeast*

***Project Description***

The Portsmouth Naval Shipyard (PNS) is located on the northern side of the Piscataqua River in the town of Kittery, Maine. The shipyard, established in the 19<sup>th</sup> century, was primarily used to design, construct, repair, and overhaul submarines during the 20<sup>th</sup> century. The entire facility consists of approximately 278 acres.

During a previous site instigation, significant erosion was discovered along the shoreline of the facility adjacent to the Defense Reutilization and Management Office (DRMO) Salvage Area. In 1999, most of the shoreline was stabilized and re-shaped, but continuous bad weather and wave action from the river caused additional erosion problems adjacent to the project completed in 1999.

Ahtna performed all construction activities, including removal and replacement of embankment, placement of zone material on slopes, and removal and replacement of fencing. The project was located in a sensitive area (shoreline to Atlantic Ocean), and erosion measures were constructed to minimize sloughage into the ocean. Ahtna stabilized the additional 100 feet from previously stabilized shoreline to the seawall adjacent to the paved parking area servicing several buildings in the PNS.

The stabilization design provides filtering by using multiple layers of increasingly larger materials. The existing embankment rock was re-shaped and re-graded.



**Portsmouth Naval Shipyard, Kittery, ME.**  
*Significant erosion was discovered along the shoreline at the facility adjacent to the DRMO Salvage Area.*



**Portsmouth Naval Shipyard, Kittery, ME.**  
*Ahtna performed all construction activities, including removal and replacement of embankment and placement of zone material on slopes.*