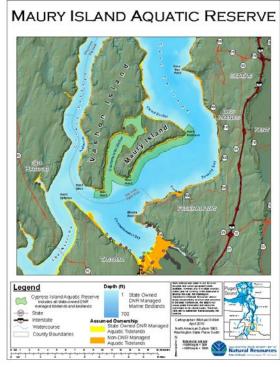


Geological Assessment: MATURAL RESOURCES Maury Island



This pile structure was located on the Maury Island shoreline and was removed. Structures such as these altered water flow and sedimentation.



Maury Island is located in King County, south east of Vashon Island.

Maury Island is a DNR managed Aquatic Reserve. Through the DNR Aquatic Reserves Program, DNR promotes the preservation, restoration, and enhancement of state-owned aquatic lands that are of special educational, scientific, or environmental interest. The management of Maury Island nearshore ecosystems requires an assessment of the temporal (time based) variability of physical and biotic conditions.

AAMT has partnered with the Washington State Department of Ecology and Central Washington University to collect elevation, geologic and benthic habitat data across the coastal zone of Maury Island Aquatic Reserve. High resolution data has been collected spanning from the top of coastal bluffs to nearshore waters up to at least 15m deep. Evaluating this data will allow DNR to obtain a modern baseline to assess the present condition of the nearshore zone and establish an inventory of key indicators such as beach morphology (e.g. elevation, slope, width), grain size, low-tide terrace eelgrass density, and quantities of large woody debris and overhanging vegetation. AAMT will explore relationships between sediment characteristics and the distribution of biotic elements from the spatial variability observed in the baseline data.

Repetitive surveys in the future will enable AAMT to detect change over time for bluff erosion, spit formation and a quantification of sediment supply to the beach. This will also provide a demonstration of method, technology, tools and application for collecting and processing modern data sets needed for marine resource management and assessing the feasibility of initiating such surveys at the other DNR Aquatic Reserves.