

Reduce the disruption of sediment transport to Plum Island Beach.

Before restoring the jetties to the original 1880 design, a hydraulic, sedimentologic, and morphodynamic study of the Merrimack River, with a geomorphic or morphodynamic investigation of the Merrimack tidal inlet including studies aimed at constructing models of sediment transport and channel hydraulics which will lead to a better designed jetty.

Consideration must be given to alterations of the Merrimack Jetty system, possibly installing Thead groins and other combinations of breakwaters and jetty spurs to reduce the disruption of sediment transport to Plum Island Beach.

Erosion is a simple math equation, more sand leaving the area than arriving, the length of the jetties are causing N.E. storm currents to accelerate erosion @ Center Island.