**Determining Mudflat areas along Tinicum Coastline**

Addressing future needs for possible dredging of twelve marinas along the Tinicum shoreline required a review of all mudflat areas exposed at mean low tide. Mudflat is the exposed bottom of the river at mean low tide.

A two by three foot aerial photograph of Tinicum shoreline was provided showing each of the 12 areas but included no scale to facilitate measurement. The mean low waterline was determined through observation and measurement at low tide as well as advice from property owners. To allow calculating the size of each mudflat area, a measurement scale for use on the overhead photo had to be developed.

The aerial view of WEBC showed the fixed docks on the east and Westside of the marina. A distance measurement by tape found the two docks to be 210 ft apart. Through calculating for an accurate scale, it was found that a 30 second of an inch on the photo times a factor of 2.50 was equal to one yard or three feet. This formula provided a means for determining size of each mudflat area from the aerial photo.

The mudflat areas in front of the twelve marinas including irregular and above ground sections was therefore determined with good accuracy.

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