

Creating Inundation Awareness: Flood Elevation Monitoring in Northeast Monmouth County

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Abstract

In October of 2012, the Jersey Shore was greatly impacted by Superstorm Sandy. Communities along the east coast were devastated as water levels rose to new heights. Towns such as Keansburg, Atlantic Highlands, and Oceanport experienced flooding that has caused lasting effects throughout their municipalities. Prior to Superstorm Sandy, many New Jersey residents living in these regions were unaware that their homes and businesses were in areas that could be considered flood zones.

In hopes of creating inundation awareness throughout the county, many towns are looking to display the high water marks left behind by the storm. The Monmouth University research team worked with several of the local communities to delineate the Sandy high water marks. In some towns, small plaques were put up to inform citizens of how high the water had been during the storm—and could potentially be again. In others, the levels were observed for town records. A laser level and standard survey methodology were used to mark high water levels and RTK GPS was used to determine actual elevation verification in NAVD88. The plaques will educate tourists and make New Jersey residents aware of the water levels that were reached in the past whilst reminding them that these high water marks could potentially be reached again. The work done by the research team thus far has helped to catalyze county-wide conversation about recording these marks throughout Monmouth County.