

## RESOLUTION 2017- 213

### **RESOLUTION OF WATERFRONT COMMUNITIES, IN THE COUNTY OF OCEAN, STATE OF NEW JERSEY SUPPORTING LEGISLATIVE ACTION REQUESTING THE STATE OF NEW JERSEY AND FEDERAL GOVERNMENT TO PERFORM A COMPREHENSIVE STUDY OF POTENTIAL MITIGATION TO REDUCE FUTURE IMPACTS OF MAJOR STORMS THAT CAUSE MAJOR DAMAGE TO LIVES AND PROPERTIES SURROUNDING BARNEGAT BAY.**

**WHEREAS**, on October 29, 2012, Superstorm Sandy made landfall near Atlantic City, New Jersey causing tens of billions of dollars of damage to communities surrounding Barnegat Bay. Superstorm Sandy affected, in some way, virtually every household, business and community in New Jersey. The emotional, financial and physical impacts are still being felt by our coastal communities; and

**WHEREAS**, a comprehensive strategy that expeditiously, efficiently and effectively addresses mitigation strategies, to reduce the impacts from future major storms needs to be addressed; and

**WHEREAS**, historical data and projections indicate that coastal storms of similar magnitude or greater will continue to be a serious threat to our communities; and

**WHEREAS**, all scientific and empirical data collected during the post Superstorm Sandy indicate the majority of the destruction was caused by excessive wave “run up” resulting from wave action as well as dune failure on Long Beach Island. All waves are the function or interaction of wind energy over water, the speed of the wind over water and the time and the unencumbered distance the wind travels over the water known as “Fetch”. Although it would be impossible to address all factors that contribute to coastal flooding, we can address one of the most severe threats, wave heights, and wave run up, by controlling the fetch or distance waves travel unencumbered over the water in Barnegat Bay; and

**WHEREAS**, numerous issues including dredging of the portion of our coastal inland waterway that transverse Barnegat Bay have become necessary due to the hazards that currently exist. The restoration and creation of elevated nesting areas and habitat (berms) for our shore birds and other species that have been lost due to coastal development, and rises in sea levels should also be addressed; and

**WHEREAS**, FEMA identifies “V-zones” or coastal high hazard areas as those areas “where wave action and/or high velocity water can cause structural damage in the 100-year flood”, the reduction of “fetch” or distance a wave can travel unobstructed over water can have a significant impact on reducing future damage in major coastal storms. Therefore, reducing fetch will reduce wave height and run up; and

**WHEREAS**, currently the Federal government is constructing mitigation project on Cedar Bonnet Island in Barnegat Bay utilizing dredge materials to establish a 20 foot high berm on the Island to restore habitat as part of a mitigation project. Therefore, the creation of additional berms needs to be considered; and

**WHEREAS**, Barnegat Bay contains dozens of small marsh islands between Long Beach Island and the Mainland that can also support berms made up of dredge materials directly from Barnegat Bay. The utilization of these dredge materials directly from Barnegat Bay would result in significant cost savings as the major cost driver of dredging is the dewatering and disposal of these dredge materials which typically accounts for up to 80% of the total cost of dredging. The monetary cost of construction of these berms is minor relative to the cost that would occur from any future major storms. The creation of berms on these marsh islands within the bay will serve to block or dampen the waves in the Bay associated with these storms, from all wind and wave directions, protecting both Long Beach Island as well as mainland and serve as an economic disposal site for dredged materials.

**NOW, THEREFORE BE IT RESOLVED**, a comprehensive study of the utilization of dredging portions of Barnegat Bay, and using those dredge materials to establish berms on various small marsh islands throughout the Bay, as a cost effective proven methodology to reduce future damage from major coastal storms needs to be undertaken.

**BE IT FURTHER RESOLVED** that a certified copy of this Resolution shall be forwarded to neighboring communities adjacent to Barnegat Bay, to support the intent of this resolution and adopt the same, forwarding their concerns to appropriate decision makers.

#### **CERTIFICATION**

I, Michele A. Rivers, Municipal Clerk of the Township of Barnegat, County of Ocean, State of New Jersey do hereby certify that the foregoing resolution was duly adopted by the Barnegat Township Committee at their regular meeting held at the Municipal Complex, 900 West Bay Avenue, Barnegat, New Jersey, on the 2nd day of May, 2017.

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Michele A. Rivers, RMC  
Municipal Clerk