

WASHUPS OF FLOATABLE WASTE MATERIALS AND THEIR
IMPACT ON NEW YORK BIGHT BEACHES

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ABSTRACT*

During the summers of 1987 and 1988, the New York Bight once again experienced a series of incidents in which waterborne, floatable, waste materials and debris were stranded on area beaches. Medically-related wastes were of particular concern. The sources of floatable wastes are identified and local climatological data are used to explain the process by which floatable material was transported.

The climatology of the summers of 1987 and 1988 are compared with that of 1976, when similar strandings of floatable wastes occurred on the south shore of Long Island. The summer wind records of these years are also compared with the historical wind record, 1959-1988. The basis of these comparisons are measures of wind persistence and relative energy. These analyses indicate the unusual nature of the conditions that prevailed in 1976, 1987 and 1988 and how they differed from each other. During unusually persistent winds, floatable debris in near surface waters can be transported in excess of 100 km in a direction opposed to the general flow over the continental shelf. While major washups of floatable wastes are unusual, we now know under what conditions they are likely to occur. Emphasis must be placed on alleviating the problem at the sources.

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