

NEW JERSEY'S USE OF A REAL TIME WATER QUALITY MONITORING NETWORK AND AIRCRAFT REMOTE SENSING

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ABSTRACT

The Bureau of Marine Water Monitoring utilizes both Real Time Water Quality monitors and Aircraft Remote sensing for chlorophyll *a* to assess potential human and ecological health impacts in New Jersey's Estuarine and Coastal Waters. Six Real Time Water Quality monitors are deployed in the estuarine waters, and measure a key parameter, chlorophyll *a* (algal biomass indicator). The aircraft sensor records chlorophyll *a* concentrations in the ocean. High chlorophyll *a* concentrations trigger a response of intensive sampling in the area to determine if there are any potential toxic algal species blooming that may be harmful to humans by either contact or through consumption of shellfish from the area. This information is useful for both the Bathing Beach Program and as part of the Bureau's required National Shellfish Sanitation Program (NSSP) toxic contingency plan.

KEYWORDS

Marine Water Monitoring, Real Time Water Quality, Aircraft Remote Sensing, Chlorophyll *a*, Toxic algal species, National Shellfish Sanitation Program (NSSP)