

Water Monitoring and Standards

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Who we are:

Water Monitoring and Standards (WM&S) has primary responsibility for ambient monitoring of the State's fresh and marine waters, ground water (with NJGWS), development of surface and ground water quality standards, water quality characterization and assessment and TMDL development.

What types of monitoring do we do:

- ◆ Freshwater (rivers, streams, lakes)
- ◆ Marine Waters (bays, ocean) & Tidal Rivers
- ◆ Ambient Ground Water

What do we monitor these waters for:

- ◆ Sanitary quality (indicators of human disease organisms)
- ◆ Chemical/physical parameters
- ◆ Biological health (e.g., bottom-dwelling communities, fish populations)
- ◆ Phytoplankton (microscopic plants)
- ◆ Flow
- ◆ Sediment quality & toxicity
- ◆ Aquatic-related habitat
- ◆ Shellfish contamination



How is the monitoring information and data used:

- ◆ Water quality assessments, impairment determination & management responses for restoration
- ◆ Environmental and public health decision-making
- ◆ Inform the public about NJ's water quality

What other Programs do we have:

- ◆ Volunteer Monitoring
- ◆ AmeriCorps NJ Watershed Ambassadors
- ◆ Clean Shores



How are NJ's water monitoring communities supported:

- ◆ NJ Water Monitoring Council (with USGS)
- ◆ Watershed Watch Network



New Jersey Department of Environmental Protection
Water Monitoring and Standards

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Special focus area: Barnegat Bay Ambient Monitoring

Restoration of Barnegat Bay—Governor's priority

Comprehensive ambient monitoring network, established in June 2011, will provide water quality & quantity data to establish baseline conditions in the bay, assess them against water quality standards & develop linked hydrodynamic & water quality models of the Bay. These data & tools will direct actions to restore the Bay, including revising standards & developing TMDLs as needed.

- ◆ Network is led by DEP, with 10 Partners
- ◆ Water quality monitoring at 12 tributary and 14 bay locations
- ◆ Parameters monitored include dissolved oxygen, pH, chlorophyll, nutrients, temperature, conductivity, TSS, turbidity, BOD, transmissometry (bay only) and benthic macroinvertebrates (tributaries only), among others
- ◆ Stream flow also measured at all 12 tributary locations
- ◆ 6 new continuous flow gages are planned for tidal locations—3 have been installed: Point Pleasant Canal, Barnegat Inlet, and Mantoloking Bridge.
- ◆ Bathymetry work to map the bottom of the bay is underway
- ◆ Interactive Map provides monitoring information and data online at: <http://www.state.nj.us/dep/barnegatbay/plan-wqstandards.htm>

Partners

