

## **ASSESSING DATA UNDER 303(D) AND 305(B) OF THE CLEAN WATER ACT USING HYDROLOGIC UNIT CODE (HUC) 14 LEVEL WATERSHEDS AS AN ASSESSMENT UNIT**

Nancy Immesberger

New Jersey Dept. of Environmental Protection  
Water Monitoring and Standards  
PO Box 409  
Trenton, NJ 08625

### **ABSTRACT**

States are required to report to USEPA on the water quality and degree of designated use attainment of their waters pursuant to Federal Clean Water Act sections 305(b) and 303(d). In order to simplify and more efficiently track and report changes in water quality through time for the purposes of 305(b) and 303(d), New Jersey has catalogued and reported assessment results at the subwatershed scale, specifically the USGS Hydrologic Unit Code (HUC) 14 level. New Jersey has found the HUC-14 watershed to be an efficient tool to catalogue and report on water resource management information.

Although reported as watersheds, New Jersey uses a pyramid approach to data assessment which begins with assessing data at a parameter level, then moving up to combining all parameters at the station level, and finally, combining data from multiple stations and several parameters to make a watershed level decision on designated use attainment. The Department reviews all existing and readily available monitoring data from over 6,800 monitoring stations using only high quality data collected under an approved quality assurance/quality control. The Department takes into consideration such as sample size, frequency, magnitude, and duration of exceedance, outliers, censored data, significant figures, etc. and makes a determination as to whether or not the individual parameter meets SWQS at each station location. Issues effecting the assessments include the spatial extent of beaches, transient phenomena, comparison of different biological metrics, use of modeling results, and grab versus continuous monitoring data.

If any location within the HUC unit does not support a use, that HUC containing the site is catalogued as not supporting the use and the constituent in violation of water quality standards is placed on the state's 303(d) list s.

**Key words:** Monitoring data, Integrated List, Listing Methodology, 305(b), 303(d), subwatershed, hydrologic unit, HUC-14, water quality assessment