

NOAA's NATIONAL STATUS AND TRENDS MUSSEL WATCH PROJECT

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ABSTRACT

The Mussel Watch Program represents the longest running continuous contaminant monitoring program in U.S. coastal waters. This project was developed to analyze chemical and biological contaminant trends in sediment and bivalve tissue collected at over 280 coastal sites from 1986 to present. Mussel Watch supports NOAA's ecosystem-based management through an integrated program of environmental monitoring, assessment, and research to describe the current status of pollution and to detect changes in the environmental quality of our nation's estuarine, coastal waters, and Great Lakes. These interrelated activities are designed to provide resource managers, legislators, and policy makers with a national context of local and regional environmental condition.

Samples from the Mussel Watch Program specimen bank are used to construct, retrospectively, trends for new and emerging contaminants of concern. For example, polybrominated diphenyl ethers (PBDEs) are now being studied using historic specimen bank samples to compare their historic and present spatial distribution.

Among the many findings: elevated levels of metals and organic contaminants were found near urbanized and industrialized areas; metals do not have an increasing or decreasing national trend, however, some regional trends do exist, and legacy organic contaminants measured by the Mussel Watch Program are decreasing nationwide.

KEYWORDS

Mussel Watch, Status and Trends, NOAA