Mussel Watch Pilot Project on Emerging Contaminants

What is it?

The National Oceanic and Atmospheric Administration (NOAA) is working with the State Water Board's Ocean Unit and SWAMP in a pilot project using mussels to look for new pollutants. Called, 'Mussel Watch', it represents the longest continuous contaminant monitoring program in the Nation's coastal and Great Lakes waters. The project was developed to analyze chemical and biological contaminants in sediments and bivalve tissues. The project regularly quantifies PAHs, PCBs, DDTs and its metabolites and is now looking to quantify emerging contaminants like drugs and other personal care products (for example, synthetic estrogen used in birth control pills, anti-bacterial agents in hand sanitizers, and a flame retardant used on computers, furniture, and cars). The concern is that these chemicals can accumulate in the tissues of mussels and also of people. After conducting analytical tests on the mussels, the data generated will help guide the study of emerging contaminants in other states.

Why is it important to the State?

Mussel Watch supports 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 estuarine and coastal waters. These interrelated activities are designed to provide coastal managers with national context to measures of local and regional environmental condition. Monitoring activities are designed to quantify and assess spatial and temporal trends in coastal contamination, and to provide a baseline to assess impacts from anthropogenic and natural events including chemical spill and severe storms.

Why is it important to me?

These chemicals are being detected more often in surface water, but little is known about how these substance effect the health of humans and animals.

How will the information be used?

The data generated will help guide the study of emerging contaminants in other states. It will also be used to guide management decisions in California.

Partners: NOAA (lead agency), SWAMP, State Water Resources Control Board Ocean Standards Unit

To learn more about this project click here.