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The Mussel Watch California Pilot Study on contaminants of emerging concern (CECs): Synthesis and next steps

Keith A. Maruya¹, Nathan G. Dodder¹, Stephen B. Weisberg¹, Dominic Gregorio², Jonathan S. Bishop², Susan Klosterhaus^{3,*}, David A. Alvarez⁴, Edward T. Furlong⁵, Suzanne Bricker⁶, Kimani L. Kimbrough⁶ and Gunnar G. Lauenstein⁶

¹*Southern California Coastal Water Research Project, Costa Mesa, CA*

²*California State Water Resources Control Board, Sacramento, CA*

³*San Francisco Estuary Institute, Richmond, CA*

⁴*US Geological Survey, Columbia, MO*

⁵*US Geological Survey, Denver, CO*

⁶*National Oceanic and Atmospheric Administration, National Centers for Coastal Ocean Science, Silver Spring, MD*

**Currently at: Cradle to Cradle Products Innovation Institute, San Francisco, CA*

ABSTRACT

A multiagency pilot study on mussels (*Mytilus* spp.) collected at 68 stations in California revealed that 98% of targeted contaminants of emerging concern (CECs) were infrequently detectable at concentrations <1 ng/g. Selected chemicals found in commercial and consumer products were more frequently detected at mean concentrations up to 470 ng/g dry wt. The number of CECs detected and their concentrations were greatest for stations categorized as urban or influenced by stormwater discharge. Exposure to a broader suite of CECs was also characterized by passive sampling devices (PSDs), with estimated water concentrations of hydrophobic compounds correlated with *Mytilus* concentrations. The results underscore the need for focused CEC monitoring in coastal ecosystems and suggest that PSDs are complementary to bivalves in assessing water quality. Moreover, the partnership established among participating agencies led to increased spatial coverage, an expanded list of analytes and a more efficient use of available resources.

Full Text

http://ftp.sccwrp.org/pub/download/DOCUMENTS/AnnualReports/2013AnnualReport/ar13_061_073.pdf