The cesium-potassium ratio and trace metal biomagnification in two contaminated marine food webs

David R. Young¹, Alan J. Mearns², Tsu-Kai Jan³, and Robert P. Eganhouse⁴

ABSTRACT

Muscle tissue concentration ratios of cesium (Cs) to potassium (K) appear to be useful indicators of the biomagnification potential of marine food webs. Applications of this technique indicated that two metalsrich ecosystems in southern California, the Salton Sea and the municipal wastewater discharge zone off Palos Verdes Peninsula, are sufficiently "structured" to permit food web magnification. Despite this, with the possible exception of mercury no significant biomagnification of the contaminant trace metals was observed.

Due to distribution restrictions, the full-text version of this article is available by request only. Please contact pubrequest@sccwrp.org to request a copy.

¹Dames & Moore, Los Angeles, CA

²NOAA Office of Marine Pollution Assessment, Seattle, WA

³Southern California Costal Water Research Project, Long Beach, CA

⁴Institute of Geophysics, University of California, Los Angeles, CA