

Chromium in the Southern California Marine Environment

Alan J. Mearns

¹*Southern California Coastal Waters Research Project, El Segundo, CA*

ABSTRACT

Populations of nearshore fishes and invertebrates respond to municipal wastewater discharges through observable changes in abundance, diversity, community structure and diseases. Both groups of organisms show some enhancement in numbers with a consequent decrease in diversity in the immediate vicinity of large (12 to 360 MGD) coastal outfalls. A disease caused by a still unidentified component from one outfall affects a variety of resident benthic fish. Effects of persistent synthetic materials, such as DDT isomers, extend well beyond dilution zones and are clearly undesirable. However, there appears to be little or no bioaccumulation of trace elements (metals) originating from primary effluent. Effects of the discharges on major fisheries resources are small relative to other factors and are thus difficult to assess.

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.