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Impact of stormwater discharges to water quality in California's areas of special biological significance

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ABSTRACT

Over 1,600 storm drain outfalls discharge untreated runoff into California's 34 marine water quality protected areas, termed Areas of Special Biological Significance (ASBS). The goal of this study was to assess the extent and magnitude of water quality impacts in California's ASBS following storm events. A stratified probabilistic design was used for sampling receiving water shorelines near (discharge) and far (non-discharge) from storm drain outfalls. In general, reasonably good water quality exists in California's ASBS following storm events. Many of the target analytes measured did not exceed the State of California's Ocean Plan water quality standards (WQS). The post-storm concentrations of most constituents in discharge and non-discharge strata of ASBS were similar. The three potentially problematic parameters identified were total PAH, chromium, and copper. Southern California, which has more intense development than elsewhere in the state, had almost twice as many target analytes exceed WQS than central or northern California.

Full Text

ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/AnnualReports/2011AnnualReport/ar11_285_295.pdf