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Effluent discharges to the Southern California Bight from large municipal wastewater treatment facilities in 2001 and 2002

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ABSTRACT

Four municipal wastewater treatment facilities (POTWs) discharge upwards of 100 million gallons of treated wastewater to the Southern California Bight (SCB) every day and are a primary source of contaminants to the SCB. Since 1971, the Southern California Coastal Water Research Project (SCCWRP) has conducted annual assessments of contaminant loading to the SCB from the large POTWs. This report continues these assessments by characterizing effluents from large POTWs in 2001 and 2002. Data from compliance monitoring reports were used to evaluate large POTW effluents in terms of volumes, constituent mass emissions, and average constituent concentrations. Estimates were compared to results from previous years, and long-term trends in large POTW effluents were evaluated. Emphases for historical comparisons were focused on the years 1992 and 2002 to highlight changes in discharges in the last decade. Effluent discharges in 2002 were generally lower than previous years in terms of volume, concentrations, and mass emissions, despite an anomalous spike in effluent volumes and decline in quality in 2001. Effluent volumes discharged in 2002 were roughly the same as discharge volumes observed in 1992. However, the majority of mass emissions in 2002 were significantly lower than in 1992, indicating that effluent quality has improved in the last decade. Still, large POTWs remain one of the leading point sources of contaminants to the SCB.

Full Text

ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/AnnualReports/2003_04AnnualReport/ar01-stein_pg1-15.pdf