

Pollutant Inputs and Distributions off Southern California

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ABSTRACT

The coastal plain of southern California is inhabited by approximately 11 million persons, about 5 percent of the Nation's population. A wide variety of activities in this region generate waste products that may contribute pollutants to the adjacent marine environment, which is known as the Southern California Bight.

Most of the freshwater that enters the Bight is municipal wastewater discharged from four submarine outfall systems lying off the cities of Los Angeles, Santa Ana, and San Diego (Figure 1). These systems carry approximately 95 percent of the more than 1 billion gallons of wastewater released daily off southern California. In addition, surface runoff contributes on the average, the equivalent of 400 million gallons per day (mgd) of freshwater through 15 major channels distributed fairly evenly along the coast. However, about 80 percent of this flow results from a few storms, which generally occur during the fall and winter seasons.

Another potential source of pollution is industrial waste discharged directly into the marine environment. A great number of these discharges enter the Los Angeles/Long Beach Harbor in San Pedro Bay, the largest harbor in the Bight. This harbor also receives the greatest variety of industrial wastes.

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