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## **Benthic macrofaunal assemblages of the San Francisco Estuary and Delta, USA**

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### **ABSTRACT**

The spatial and temporal distribution of macrobenthic assemblages in the San Francisco Estuary and Sacramento–San Joaquin River Delta were identified using hierarchical cluster analysis of 501 samples collected between 1994 and 2008. Five benthic assemblages were identified that were distributed primarily along the salinity gradient: (1) a polyhaline assemblage that inhabits the Central Bay, (2) a mesohaline assemblage that inhabits South Bay and San Pablo Bay, (3) a low-diversity oligohaline assemblage primarily in Suisun Bay, (4) a low-diversity sand assemblage that occurs at various locations throughout the Estuary, and (5) a tidal freshwater assemblage in the Delta. Most sites were classified within the same assemblage in different seasons and years, but a few sites switched assemblage designations in response to seasonal changes in salinity from freshwater inflows.

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