

It was concluded that by timing of dredging so as to not coincide with the reproductive season, recovery could be enhanced.

Parr, T., D. Diener, and S. Lacy (1978) "Effects of Beach Replenishment on the Nearshore Sand Fauna at Imperial Beach, California", U.S. Army, Corps of Engineers, Coastal Engineering Research Center, Miscellaneous Report No. 78-4, 125 pages.

This study was carried out to identify any possible impacts on the nearshore sand fauna in response to a beach nourishment project of 765,000 cubic meters comprising material which was mostly finer than the native. It was found that measurable effects were short lived (5 weeks or less) and that the finer sediment resulted in an increase in the numbers of crustaceans. The finer sediments gradually moved offshore and there was a positive correlation between the finer sediments and the number of species and abundance. It was concluded that the overall abundance and diversity were not affected adversely by beach nourishment. It was believed that because the beach environment is energetic, the normally resident fauna must be able to cope with considerable stress; hence their capability to respond after beach nourishment.

Peddicord, R.K. and V.A. McFarland (1978) "Effects of Suspended Dredged Material on Aquatic Animals", U.S. Army Waterways Experiment Station, Technical Report D-78-29, 115 pages.

A laboratory study was conducted to investigate limits of tolerance of a variety of juvenile and laboratory fish and invertebrates to contaminated and uncontaminated concentrations of harbor sediments. Additionally, animal tissues were analyzed for concentrations of contaminants. It was found that the various species could tolerate high levels of uncontaminated concentrations longer than the same levels of contaminated concentrations. Most animals survived durations longer than are created during harbor dredging operation. Concentration levels that proved lethal were quite high and generally persist in nature only in the bottom fluid mud layer, if one is present. Tissue accumulation of contaminants was found to be present in less than 25% of those exposed.