

EXECUTIVE SUMMARY [NON-CONFIDENTIAL, NON-TECHNICAL ABSTRACT FOR PUBLIC INFORMATION OR PROGRAM PROMOTION]:

The Dungeness crab is considered a key marine species, serving as an indicator of coastal health. The crab is also economically important as a commercially harvested species and supports a valuable sport fishery along the coast of California. Recent studies on the environmental consequences of dredging in estuaries have established a strong probability that Dungeness crab populations in California will be seriously reduced by habitat alteration unless proper precautions are taken to reduce losses. The establishment of marine reserves has been proposed as one way to accomplish this.

The preliminary study proposed here will develop molecular markers to be used to elucidate the patterns of Dungeness crab larval distribution and adult crab settlement along the Pacific coast. The data resulting from this analysis will be incorporated into a larger project, which will determine effective size and spacing of Pacific coast marine reserves.