

SERDP PROJECT OF THE YEAR SUSTAINABLE INFRASTRUCTURE

PREDICTIVE MODELING OF MARINE MAMMAL DENSITY FROM EXISTING SURVEY DATA AND MODEL VALIDATION USING UPCOMING SURVEYS

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PREDICTIVE SPATIAL ANALYSIS OF MARINE MAMMAL HABITATS

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The Navy and other users of the marine environment need to estimate marine mammal density within their operational areas to comply with the requirements of the Marine Mammal Protection Act, the Endangered Species Act, and the National Environmental Policy Act. Knowledge of where and in what densities marine mammals are found at a given time further allows potential impacts to be minimized.

Addressing the eastern Pacific Ocean and the Atlantic Coast respectively, Dr. Jay Barlow and Dr. Andrew Read and their research teams have developed spatio-temporal habitat models of marine mammal distribution based on oceanographic physical and biological variables. Providing this information to planners and decision makers via a web-based spatial decision support system will assist efforts to make sound management and regulatory decisions based on an understanding of the expected distribution and abundance of marine mammals within Navy ranges and operational areas.

For more specific information about these projects, stop by Poster #123 and Poster #124.