

Poster Title

Intro Box

Intro box text...

Key Concept

Key concepts text...

“Whale Tank”

Whale tank text...

Next Steps

Next steps text...

Project Snapshot



MEGADATA FOR DETECTING NEARSHORE IMPACTS TO THE SANTA BARBARA CHANNEL, CALIFORNIA

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PROJECT DESCRIPTION
As part of their marine resource planning, BOEM is interested in understanding the long-term trends of the Santa Barbara Channel. But much of these data has been recorded differently across many institutions, hampering the ability of scientists to model the ecosystem effects of oil spill scenarios or proposed wave energy development. Now, USGS researchers are seeking to merge these disparate data sets into megadata that can be used for complex, system-scale analyses.

The resulting megadata offers the ability to do models like mock BACI analyses of impacts on the scale of a platform or tanker spill—gaining the ability to detect impacts of various sizes and intensities on kelp. And if coupled with fine-scale sensor data of wave climates, statistical models could be built allowing BOEM to assess the potential environmental effects of wave-energy projects on nearshore ecosystems, under scenarios such as wave-height reduction.

KEY COLLABORATORS
Mike Kenner, Tim Tinker (USGS WERC) • David Kushner (NPS) • Andrew Rassweiler, Dan Reed (LTER) • Donna Schroeder (BOEM) • Jenn Caselle (PISCO)

RECENT PUBLICATIONS
DJ Kushner, A Rassweiler, JP McLaughlin, KD Lafferty. 2013. A multi-decade time series of kelp forest community structure at the California Channel Islands. Ecology 94:2655
doi: 10.1890/13-0562R.1

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