



NATIONAL MARINE
SANCTUARIES TM

**A Report to the
Sanctuary Advisory Council
Monterey Bay National
Marine Sanctuary
2003 Field Research Review**

December 2003

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service
National Marine Sanctuary Program



NOAA Ocean Service



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REPORT AVAILABILITY

Electronic copies of this report can be downloaded from the Monterey Bay National Marine Sanctuary web site, <http://montereybay.nos.noaa.gov/>, under the "Sanctuary Advisory Council Meeting Agendas" section.



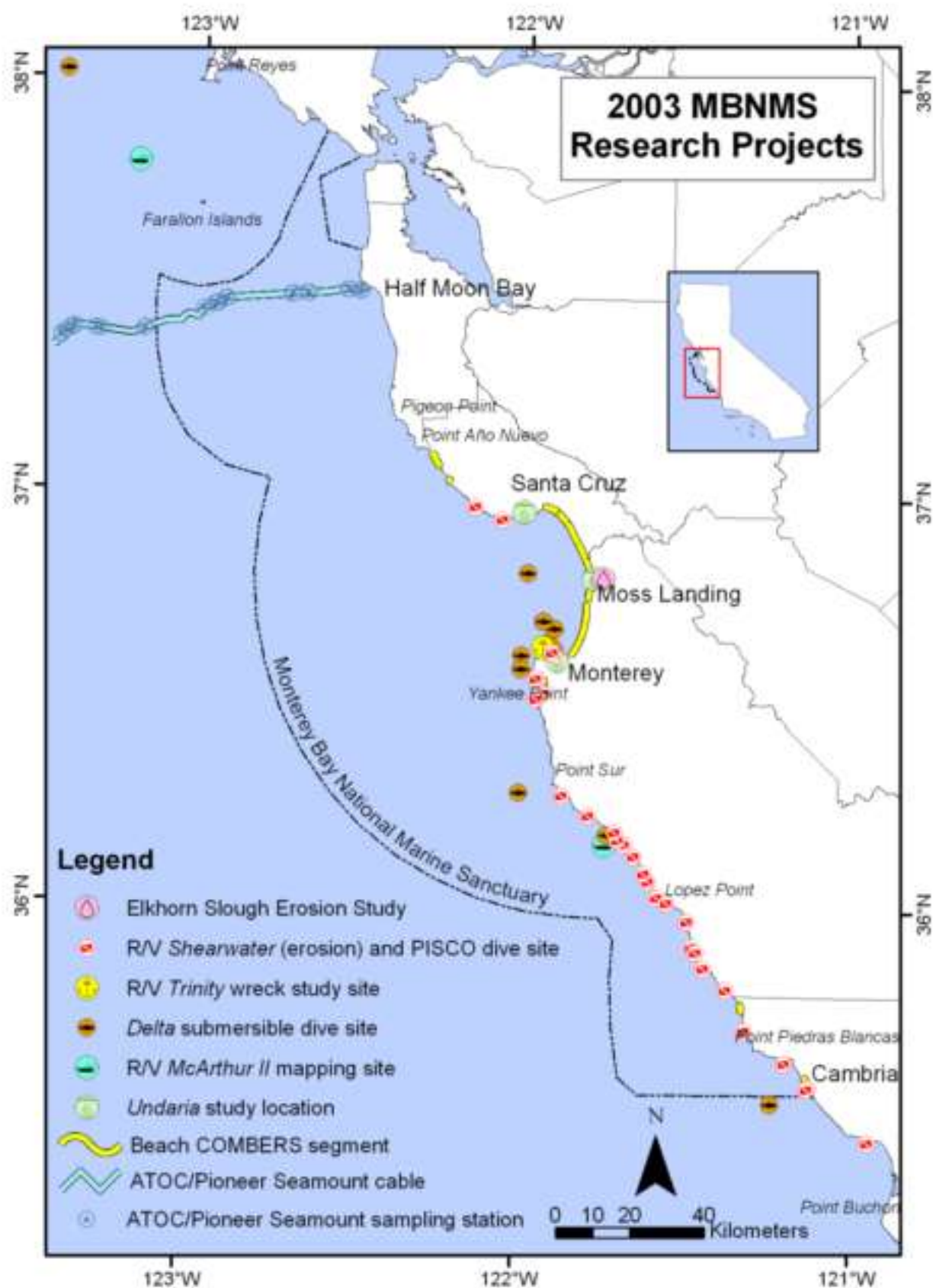
INTRODUCTION

The Monterey Bay National Marine Sanctuary (Sanctuary) Research Team increases understanding of the Sanctuary ecosystem, and interprets this information to a broad audience. The team enhances research on the Sanctuary by making scientists aware of critical management issues, reviewing existing literature and data, providing program funds to researchers, obtaining non-program grants and other funds to support regional research efforts, and by directly doing research. This research information is made available to decision makers, educators, scientists, and the public through the Sanctuary Resource Protection and Education Teams, as well as directly through web sites, reports, public presentations, and responding to individual requests for information. The Sanctuary Advisory Council working group on research (the Research Activity Panel) is an invaluable collaborator with the Sanctuary Research Team, providing guidance, expertise, and research facilities. In fact, the Sanctuary region is increasingly being recognized as a leading world center for marine science.

RV Shearwater.



This report is a review of the Sanctuary Research Team activities in 2003, with a focus on our major research cruises. In the first section of this report, we review four projects: (1) geological mapping using the NOAA R/V *McARTHUR II* (224 ft); (2) a shallow subtidal and rocky shore survey of the Big Sur coast, using the Channel Islands National Marine Sanctuary R/V *Shearwater* (62 ft); (3) fish, invertebrate, and habitat characterization, as well a shipwreck survey using the two-person *Delta* submersible ; and (4) an environmental impact survey of the Pioneer Seamount cable using MBARI's R/V *Pt. Lobos* (110 ft) and *Western Flyer* (117 ft). These projects address a range of management issues including delineation of sites sensitive to road maintenance dumping, assessing fish



Survey locations of Sanctuary Research Team field projects conducted during 2003.