APPENDIX A. Southern California Range Complex Year Three Monitoring Plan and Adaptive Management Discussion for the period 02 August 2011 to 01 August 2012

Prepared for
National Marine Fisheries Service
Office of Protected Resources

Prepared by
Department of the Navy
U.S. Pacific Fleet

Southern California Range Complex

Year Four Monitoring Plan

02 August 2011 to 01 August 2012

01 October 2011

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Proposed YEAR Four (2012) Monitoring

For 2012 through 2014, the U.S. Navy proposes to keep the same level of monitoring effort in the Southern California Range Complex as was committed and accomplished in 2011. Table 1 highlights these goals.

In support of the Joint Subcommittee on Ocean Science and Technology recommendations, Southern California workshop recommendations, and Ocean Policy direction (Southall et al. 2009, OSTP 2009, CEQ 2010, EO 2010, Foley et al. 2010), the U.S. Navy is committed to structuring the Southern California Range Complex monitoring to address both NMFS regulatory required monitoring under the Southern California Range Complex Letter of Authorization while at the same time making significant contributions to the greater body of marine mammal science. The U.S. Navy assembled a Scientific Advisory Group comprised of leading marine mammal scientists as well as convened monitoring meetings with NMFS, researchers, and non-governmental organizations in October 2010 and June 2011 with the interest of soliciting input on future range complex monitoring objectives and methods. Recommendations generated during those meetings are currently under review by the U.S. Navy and NMFS and will be used to revise and improve the U.S. Navy's monitoring program from 2012 to 2014. Those recommendations will not be available for incorporation into this report therefore changes will be made under separate submission.

Table 1. U.S. Navy's proposed Year Four monitoring goals for the Southern California Range Complex.

Monitoring Technique	Implementation	
Visual Surveys	Portions of major training events, or unit level training events using sonar; or offshore or inshore detonation events (100-150 combined hours annually; 200-300 combined hours over 2-years)	Adaptive Management Review for 2013
Marine Mammal Observers	Opportunistic; major training events, unit level training events, or offshore or inshore detonation events as available (58-100 total hours annually; 108-200 total hours over 2-years)	
Passive Acoustics Monitoring	Continue data collection and analysis from passive acoustic recording device(s)	
Southern California Range Complex Exercise Summary From Navy Lookout Reports	Continue to collect/analyze marine mammal sightings from Navy lookouts during major training events and present results (data from Southern California Range Complex Exercise Report)	
Marine Mammal Tagging (MMT)	Present results from ongoing, other Navy funded (OPNAV N45) marine mammal research in Southern California	
Visual surveys, M3R, PhotoID	Present results from ongoing, other Navy funded (OPNAV N45) marine mammal research in Southern California	
TOTAL U.S. Navy 2012 Goal: • **Conduct additional analysis of field data collected from Years 1-4** • **100 to 150 hours visual survey field efforts** • **58-100 hours Marine Mammal Observers** • **PAM: continue data collection/analysis from passive acoustic recording devices** • **Present results as available from other U.S. Navy funded research projects such as visual surveys, passive acoustic monitoring, tagging, and photoID**		

References

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