



# RHUMB LINES

*Straight Lines to Navigate By*



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## The Navy's Investment in Understanding Marine Mammals and Sound

*"The ocean is where our Sailors and Marines live and fight for freedom. Responsible stewardship of the seas is not a rhetorical concern or an abstraction for the United States Navy -- it is our livelihood."*

**-- The Honorable Donald C. Winter, Secretary of the Navy**

A significant threat to our nation's defense and executing the Maritime Strategy are diesel submarines. Developing a future force with capabilities to meet this threat makes ongoing investment in sonar technology a key priority. At the same time, the Navy is also committed to understanding sonar's impact on the environment.

### Our Program...Coordinating Research Efforts

CNO's Environmental Readiness Division and the Office of Naval Research have developed a coordinated Science & Technology and Research & Development program focused on marine mammals and sound. Total investment in this program for FY07-FY09 is \$18 million. The program:

- Comprises four interrelated areas: **determining marine mammal demographics**; establishing **accepted criteria and thresholds** to measure the effects of naval activities; developing **effective protective methods** to lessen those effects; and further **understanding the effects** of man-made sound fields on marine life.
- Provides better biological data and tools to enable the Fleet to train prior to deployments at a minimal risk to marine mammals.
- Seeks to make monitoring and mitigation as compatible as possible with Fleet sensors, data displays and personnel training.

### Proactive Measures and Cooperation With Partners

- The Navy voluntarily adopted 29 protective measures when using mid-range frequency active sonar in integrated training and exercises. These measures include posting extra look-outs, monitoring for marine mammals with passive sonar, and reducing power or turning off active sonar when marine mammals approach.
- In light of our common interest in protecting the marine environment and accelerating the knowledge base, we invite non-governmental advocacy groups to join us in funding meaningful, peer-reviewed scientific research.

### Key Messages

- The Navy is sensitive to the need to protect the environment and is proud of its record of environmental stewardship.
- To train as we fight and maintain our perishable skills, integrated sonar training exercises are essential for naval units to complete before they deploy.
- As both environmental stewards and warfighters, we encourage focusing resources on credible science to improve our insight into sonar's possible effects.
- The Navy implements protective measures to avoid affecting marine mammals during integrated training and exercises with active sonar use.

### Facts & Figures

- As of 2005, the Navy sponsored approximately 70% of all U.S. research on the effects of man-made sound on marine mammals, and approximately 50% of all such research conducted worldwide.
- NOAA Fisheries reports 2,500-7,000 marine mammal strandings on our coasts every year.
- Worldwide naval use of active sonar has been correlated with the stranding of approximately 50 marine mammals during 1996-2006, an average of five per year.
- For perspective, more than 600,000 marine mammals are killed each year by commercial fishing interests (Read, Drinker, Northridge. 2006. Bycatch of Marine Mammals in U.S. and Global Fisheries. Conservation Biology 20:163-9.).