

DRAFT: FOR DISCUSSION

Advisory Committee on Acoustic Impacts on Marine Mammals

**Draft Chronology of Major Relevant Events**

Draft developed by the Marine Mammal Commission

<b>Event</b>	<b>Location</b>	<b>Date</b>
Marine Mammal Protection Act amended (section 101(a)(5)(A), small take authorizations)		1981
Marine Mammal Protection Act amended (section 101(a)(5)(A), small take authorizations extended to depleted/ESA species)		1986
Canary Islands beaked whale strandings <i>Nature</i> article suggests military connection	Canary Islands, Spain	1985, 1988, 1989 1991
Heard Island Feasibility Study <i>Science</i> article published	Heard Island, south of Australia	January 1991 1990
Acoustic Thermometry of Ocean Climate Program (ATOC) (later the North Pacific Acoustic Laboratory- NPAL)	Hawaii and California, USA	1992 - present
Ship shock trials (USS John Paul Jones) Lawsuit filed; preliminary injunction issued Shock tests proceed under settlement agreement	90nm southwest of San Nicolas Island, California, USA	1994 April 1994 June 1994
<i>Low Frequency Sound and Marine Mammals: Current Knowledge and Research Needs</i> published by National Research Council (NRC)		1994
Marine Mammal Protection Act amended (section 101(a)(5)(D), harassment definitions added)		1994
<i>Marine Mammals and Noise</i> published (Richardson <i>et al.</i> )		1995
Marine Mammal Commission/National Marine Fisheries Service Workshop on Acoustic Deterrence of Harmful Marine Mammal-Fishery Interactions Proceedings report completed (MMC/NMFS) Interagency Coordinating Group on Ocean Noise (ICG) Established		March 1996  1996 1996

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Greece beaked whale strandings NATO/SACLANTCEN Bioacoustics Panel review	Kyparissiakos Gulf coast	May 1996 June 1998
Office of Naval Research Workshop on the Effects of Anthropogenic Noise in the Marine Environment Proceedings report completed (ONR)		February 1998  June 1999
High Frequency Marine Mammal Mitigation Sonar System (HF M3) Integration with Low-Frequency Active (LFA) Sonar program Performance test with bottlenose dolphins Permit amendment issued Lawsuit filed; permanent injunction issued Environmental Assessment completed; new permit issued Lawsuit filed; motion for permanent injunction denied	Hawaii, Southern California, Adriatic Sea	1998- present April 2000 August 2000 September 2002 January 2003 December 2003 January 2004
Minerals Management Service High Energy Seismic Survey (HESS) Team convened Workshop on the Effects of Seismic Sound on Marine Mammals Final report completed (MMS)	West coast of U.S., from Monterey Bay National Marine Sanctuary south to the Mexican border in State and Federal waters	September 1996  June 1997 February 1999
Low-Frequency Active Sonar (LFAS) litigation <i>Federal Register</i> notice of intent to prepare an Environmental Impact Statement (EIS) for SURTASS LFAS (Navy) EIS for SURTASS LFAS filed (Navy) Final regulations published Lawsuit filed Temporary injunction issued Final ruling; settlement agreement reached		1996 - 2002 July 1996  January 2001 July 2002 October 2002 August 2003 October 2003
<i>Sounding the Depths: Supertankers, Sonar, and the Rise of Underwater Noise</i> published by Natural Resources Defense Council (NRDC)		1999

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Bahamas beaked whale strandings Interim report completed (NMFS/Navy)	The Bahamas	March 2000 December 2001
<i>Marine Mammals and Low-Frequency Sound: Progress Since 1994</i> published (NRC)		2000
Littoral Warfare Advanced Development (LWAD) Program litigation Lawsuit filed Final ruling issued		2001 - 2002 September 2001 September 2002
National Marine Fisheries Service Acoustic Resonance Workshop Report completed (NMFS)	Silver Spring, Maryland, USA	April 2002 November 2002
Canary Islands beaked whale strandings	Fuerteventura and Lanzarote, Canary Islands	September 2002
Gulf of California beaked whale strandings	La Paz, Baja Sur, Mexico	September 2002
Puget Sound porpoise strandings Necropsy workshop (NMFS)	Puget Sound, Washington, USA	May 2003 July 2003
2004 National Defense Authorization Act passed (Defense exemptions, new harassment definitions for Defense and federal research)		September 2003
NRC Panel on Describing Biologically Significant Marine Mammal Behavior convened		October 2003
Marine Mammal Commission Advisory Committee on Acoustic Impacts on Marine Mammals chartered		November 2003
<i>Ocean Noise and Marine Mammals</i> published (NRC)		2003
<i>Oceans of Noise</i> published by Whale and Dolphin Conservation Society (WDCS)		2003