

## ACRONYMS AND ABBREVIATIONS

|                |  |
|----------------|--|
| ABR            | Auditory Brainstem Response  |
| AIP            | Air Independent Propulsion   |
| ANPR           | Advance Notice of Proposed Rulemaking  |
| ASW            | Antisubmarine Warfare  |
| ATOC           | Acoustic Thermometry of Ocean Climate  |
| AUSI           | Autonomous Undersea Systems Institute  |
| AUV            | Autonomous Underwater Vehicle  |
| BUMED          | Bureau of Medicine and Surgery   |
| C              | Centigrade   |
| CEE            | Controlled Exposure Experiment   |
| CEQ            | Council on Environmental Quality   |
| CFR            | Code of Federal Regulations  |
| CITES          | Convention on International Trade in Endangered Species                            |
| CLFA           | Compact Low Frequency Active   |
| cm             | Centimeter(s)  |
| cm/sec or cm/s | Centimeters per second   |
| CNO            | Chief of Naval Operations  |
| CSG            | Carrier Strike Group   |
| CSI            | Cetacean Society International   |
| CV             | Critical Variance  |
| CW             | Continuous Wave  |
| CZ             | Convergence Zone   |
| CZMA           | Coastal Zone Management Act  |
| DAN            | Divers Alert Network   |
| DASN(E)        | Deputy Assistant Secretary of the Navy for Environment                             |
| dB             | Decibel(s)   |
| DoC            | Department of Commerce   |
| DoD            | Department of Defense  |
| DON            | Department of the Navy   |
| DSEIS          | Draft Supplemental Environmental Impact Statement                                  |
| E              | Endangered   |
| ECBC           | European Cetacean Bycatch Campaign   |
| EDM            | EMCON Emission Control   |
| EEZ            | Exclusive Economic Zone  |
| EFH            | Essential Fish Habitat(s)  |
| EIS            | Environmental Impact Statement   |
| EO             | (Presidential) Executive Order   |
| ESA            | Endangered Species Act   |
| ESG            | Expeditionary Strike Group   |
| ETP            | Eastern Tropical Pacific   |
| F              | Fahrenheit   |
| FAO            | Food and Agriculture Organization of the United Nations                            |
| FOEIS/EIS      | Final Overseas Environmental Impact Statement/Final Environmental Impact Statement |
| FM             | Frequency Modulated  |
| FR             | Federal Register   |
| ft             | Feet   |
| ft/sec or ft/s | Feet per second  |
| FY             | Fiscal Year  |
| GAO            | General Accounting Office  |
| GNP            | Gross National Product   |
| H              | High   |

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|---|--|
| HESS<br>HF<br>HFM<br>HF/M3<br>HLA<br>HR<br>hr<br>Hz   | High Energy Seismic Survey<br>High Frequency<br>Hyperbolic Frequency Modulated<br>High Frequency Marine Mammal Monitoring<br>Horizontal Line Array<br>House of Representative Bill<br>Hour<br>Hertz  |
| ICES<br>ICW<br>in<br>in prep.<br>ITS<br>IUCN<br>IUSS<br>IWC   | International Council for the Exploration of the Sea<br>Intra-Coastal Waterway<br>Inch<br>In preparation<br>Incidental Take Statement<br>International Union for Conservation of Nature and Natural Resources<br>Integrated Undersea Surveillance System<br>International Whaling Commission   |
| JASA<br>JCS   | Journal of the Acoustical Society of America<br>Joint Chiefs of Staff  |
| kg<br>kg/m <sup>3</sup><br>kJ/m<br>kHz<br>km<br>kph or km/h<br>kt   | Kilogram<br>Kilogram per cubic meter (density)<br>Kilojoule per meter<br>Kilohertz<br>Kilometer(s)<br>Kilometer(s) per hour<br>Knot(s)   |
| L<br>lb<br>lb/yd <sup>3</sup><br>LDEO<br>LF<br>LFA<br>LFS SRP<br>LINTS<br>LOA<br>LTM                        | Liter<br>Pound(s)<br>Pound per cubic yard (density)<br>Lamont-Doherty Earth Observatory<br>Low Frequency<br>Low Frequency Active<br>Low Frequency Sound Scientific Research Program<br>Linear Threshold Shift<br>Letter of Authorization<br>Long Term Monitoring   |
| m<br>m/sec or m/s<br>MF<br>M/H<br>mi<br>min<br>MIT<br>MMC<br>MMPA<br>MMRP<br>MMS<br>MPA<br>Msec or ms<br>mt | Meter(s)<br>Meters per second (sound speed)<br>Mid-Frequency<br>Medium/High<br>Mile(s) (statute)<br>Minute(s)<br>Massachusetts Institute of Technology<br>Marine Mammal Commission<br>Marine Mammal Protection Act<br>Marine Mammal Research Program (ATOC)<br>Minerals Management Service<br>Maritime Patrol Aircraft<br>Millisecond<br>Metric ton(s) |
| N<br>NATO<br>NAUI<br>NDAA<br>NE<br>NEPA<br>NGO  | North<br>North Atlantic Treaty Organization<br>National Association of Underwater Instructors<br>National Defense Authorization Act<br>Northeast<br>National Environmental Policy Act of 1969<br>Non-Governmental Organization   |

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|---|---|
| nm or nmi<br>NMFS<br>NMS<br>NOAA<br>NOI<br>NPAL<br>NRC<br>NRDC<br>NSMRL<br>NW   | Nautical mile(s)<br>National Marine Fisheries Service<br>National Marine Sanctuary<br>National Oceanic and Atmospheric Administration<br>Notice of Intent<br>North Pacific Acoustic Laboratory<br>National Research Council<br>National Resources Defense Council<br>Naval Submarine Medical Research Laboratory<br>Northwest   |
| OAT<br>OBIA<br>OIC<br>OPAREA  | Ocean Acoustic Tomography<br>Offshore Biologically Important Area(s)<br>Officer in Charge<br>Operations Area  |
| Pa<br>PADI<br>PBR<br>pers. comm.<br>PTS   | Pascal<br>Professional Association of Diving Instructors<br>Potential Biological Removal level<br>Personal Communication<br>Permanent Threshold Shift   |
| RL<br>rms<br>ROD<br>ROPOS<br>ROV<br>RPM<br>RTCs<br>R/V  | Received Level<br>Root Mean Squared<br>Record of Decision<br>Remotely Operated Platform for Ocean Science<br>Remotely Operated Vehicle<br>Revolutions Per Minute<br>Response to Comments<br>Research Vessel   |
| S<br>SAG<br>sec<br>SEIS<br>SEL<br>SEM<br>SL<br>SONAR<br>SPD<br>SPE<br>SPL<br>SPP or spp<br>SRP<br>SS<br>SSP<br>SURTASS<br>SWATH | South<br>Surface Active Group<br>Second(s)<br>Supplemental Environmental Impact Statement<br>Sound Exposure Level<br>Scanning Electron Microscopy<br>Source Level<br>SOund Navigation And Ranging<br>Sound Pressure Difference<br>Single Ping Equivalent<br>Sound Pressure Level<br>Species<br>Scientific Research Program<br>Sea State<br>Sound Speed Profile<br>Surveillance Towed Array Sensor System<br>Small Waterplane Area Twin Hull |
| T<br>T-AGOS<br>TL<br>TRPs<br>TTS  | Threatened<br>Ocean Surveillance Ship<br>Transmission Loss<br>Take Reduction Plans<br>Temporary Threshold Shift   |
| UNOLS<br>UN<br>U.S. or US<br>U.S.C. or USC<br>USD<br>USFWS<br>U.S.H.S.  | University - National Oceanographic Laboratory System<br>United Nations<br>United States<br>United States Code<br>United States Dollar<br>U.S. Fish and Wildlife Service<br>United States Humane Society  |

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|-------------------|--|
| USNS<br>USW       | United States Naval Ship<br>Undersea Warfare   |
| W<br>WDCS<br>WHOI | West<br>Whale and Dolphin Conservation Society<br>Woods Hole Oceanographic Institution |
| VLA               | Vertical Line Array  |
| ZMRG<br>ZOI       | Zero Mortality Rate Goal<br>Zone of Influence  |
| <b>Symbols</b>    |  |
| =                 | Equal to   |
| /                 | Divided by   |
| +                 | Plus   |
| ≥                 | Greater than or equal to   |
| >                 | Greater than   |
| <                 | Less than  |
| ~                 | Approximately  |
| ±                 | Plus or minus  |
| μ                 | Micro (10 <sup>-6</sup> )  |
| Log               | Logarithm  |