

LITERATURE CITED

- AFWFO 2012. Observer Protocols for Pile Driving, Dredging and Placement of Fill. Anchorage Fish and Wildlife Field Office. US Fish and Wildlife Service, Anchorage, Alaska.
- Allen, B. M., and R. P. Angliss. 2013. Alaska marine mammal stock assessments, 2012. NOAA Technical Memorandum NMFS-AFSC-245. National Marine Fisheries Service, Seattle, WA.
- Allen, B. M., and R. P. Angliss. 2014. Alaska marine mammal stock assessments, 2013. NOAA Technical Memorandum NMFS-AFSC-277. National Marine Fisheries Service, Seattle, WA.
- Angliss, R.P., and R.B. Outlaw. 2005. Alaska Marine Mammal Stock Assessments, 2002. NOAA Technical Memorandum. NMFS-AFSC-161.
- ANSI (American National Standards Institute). 1986. Methods of measurement for impulse noise 3 (ANSI S12.7-1986). Acoustical Society of America, Woodbury, NY.
- ANSI. 2005. Measurement of sound pressure levels in air (ANSI S1.13-2005). Acoustical Society of America, Woodbury, NY.
- Blackwell, S. B., and C. R. Greene, Jr. 2002. Acoustic measurements in Cook Inlet, Alaska, during August 2001. Greeneridge Rep. 271-2. Prepared by Greeneridge Sciences, Inc., Santa Barbara, CA, for National Marine Fisheries Service, Anchorage, AK.
- Blackwell, S.B. 2004. Underwater measurements of pile-driving sounds during the Port MacKenzie dock modifications, 13-16 August 2004. Rep. from Greeneridge Sciences, Inc., Goleta, CA, and LGL Alaska Research Associates, Inc., Anchorage, AK, in association with Can J Fish Aquat Sci 69: 1783–1797.
- Laughlin, J. 2010. Airborne Noise Measurements (A- weighted and un-weighted) during Vibratory Pile Installation – Technical Memorandum. Prepared by the Washington State Department of Transportation, Office of Air Quality and Noise. June 21, 2010.
- Clark, C.W., W.T. Ellison, B.L. Southall, L. Hatch, S.M. Van Parijs, A. Frankel, and D. Ponirakis. 2009. Acoustic masking in marine ecosystems: intuitions, analysis, and implication. *Marine Ecology Progress Series* **395**:201-222.
- Cox, T.M., T.J. Ragen, A.J. Read, E. Vos, R.W. Baird, K. Balcomb, et al. 2006. Understanding the impacts of anthropogenic sound on beaked whales. *Journal of Cetacean Research and Management* **7** (3):177-187.
- Dahlheim, M.E., J.M. Waite, and P.A. White 2009 "Cetaceans of Southeast Alaska: Distribution and Seasonal Occurrence". *Journal of Biogeography (J. Biogeogr.)* (2009) 36, 410–426.

- Dazey, E., B. McIntosh, S. Brown, and K.M. Dudzinski. 2012. Assessment of Underwater Anthropogenic Noise Associated with Construction Activities in Bechers Bay, Santa Rosa Island, California. *Journal of Environmental Protection*, 2012, 3:1286-1294.
- Everitt, R.D., C.H. Fiscus, and R.L. DeLong. 1980. Northern Puget Sound Marine Mammals. DOC/EPA Interagency Energy/ Environ. R&D Program. Doc. #EPA-6009/7-80-139, U.S. Environmental Protection Agency, Washington, D.C. 134 p.
- Ferries Division. December 16, 2014. R:\NOTEBOOKS\1263402_Gustavus Marine Mammal Permitting Support\Deliverables\Reports\Gustavus IHA 20160415\Revised Gustavus IHA
- Finneran, J.J., C.E. Schlundt, D.A. Carder, J.A. Clark, J.A. Young, J.B. Gaspin, and S.H. Ridgway. 2000. Auditory and behavioral responses of bottlenose dolphins (*Tursiops truncatus*) and a beluga whale (*Delphinapterus leucas*) to impulsive sounds resembling distant signatures of underwater explosions. *Journal of the Acoustical Society of America* **108** (1):417-431.
- Finneran, J.J., C.E. Schlundt, R. Dear, D.A. Carder, and S.H. Ridgway. 2002. Temporary shift in masked hearing thresholds in odontocetes after exposure to single underwater impulses from a seismic watergun. *Journal of the Acoustical Society of America* **111** (6):2929.
- Finneran, J.J., D.A. Carder, C.E. Schlundt, and S.H. Ridgway. 2005. Temporary threshold shift in bottlenose dolphins (*Tursiops truncatus*) exposed to mid-frequency tones. *Journal of the Acoustical Society of America* **118** (4):2696-2705.
- Foote, A.D., R.W. Osborne, and A.R. Hoelzel. 2004. Whale-call response to masking boat noise. *Nature* **428**:910.
- Gabriele, C., J. Neilson, and P. Vanselow. 2015. Glacier Bay and Icy Strait Humpback Whale Fact Sheet. Glacier Bay National Park, updated April 2015.
- Gordon, J., D. Gillespie, J. Potter, A. Frantzis, M.P. Simmonds, R. Swift, and D. Thompson. 2004. A review of the effects of seismic surveys on marine mammals. *Marine Technology Society Journal* **37** (4):16-34.
- Harris, C.M. (ed.). 1998. *Handbook of Acoustical Measurements and Noise Control*. Acoustical Society of America, Woodbury, NY.
- Hastings, M. C., and A. N. Popper. 2005. Effects of sound on fish. Technical report for Jones and Stokes to California Department of Transportation.
- Hendrix, A.N., J.M. Straley, C.M. Gabriele, and S.M. Gende 2012. Bayesian Estimation of Humpback Whale (*Megaptera novaeangliae*) Population Abundance and Movement Patterns in Southeast Alaska.
- Hildebrand, J. A. 2009. Anthropogenic and natural sources of ambient noise in the ocean. *Mar. Ecol. Prog. Ser.* 395, 5–20.

Hobbs, R.C., and J.M. Waite. 2010. Abundance of harbor porpoise (*Phocoena phocoena*) in three Alaskan regions, corrected for observer errors due to perception bias and species misidentification, and corrected for animals submerged from view.

Holt, M.M., D.P. Noren, V. Veirs, C.K. Emmons, and S. Veirs. 2009. Speaking up: Killer whales (*Orcinus orca*) increase their call amplitude in response to vessel noise. *Journal of the Acoustical Society of America* **125** (1):EL27-32.

Illingworth & Rodkin, Inc. 2013. Naval Base Kitsap at Bangor, Trident Support Facilities Explosive Handling Wharf (EHW-2) Project, Acoustic Monitoring Report, Bangor, Washington. Prepared for U.S. Navy by Illingworth & Rodkin, Inc., Petaluma, CA under contract with Hart Crowser. 23 April 2013, Revised 15 May 2013. Available online at: http://www.nmfs.noaa.gov/pr/pdfs/permits/navy_kitsap_ehw2_acoustics2013.pdf.

Illingworth & Rodkin, Inc. 2014. Anchorage Port Modernization Project Underwater Noise Monitoring Plan. Prepared for CH2M Hill Engineers, Inc., on behalf of HDR, by Illingworth & Rodkin, Inc., Marysville, CA.

ISO (International Organization for Standardization). 2003. Acoustics – Description, measurement and assessment of environmental noise – Part 1: Basic quantities and assessment procedures (ISO 1996-1:2003(E)). International Organization for Standardization, Geneva.

Jemison, L. A., Pendleton, G. W., Wilson, C. A. and Small, R. J. 2006. Long-term trends in harbor seal numbers at Tugidak Island and Nanvak Bay, Alaska. *Marine Mammal Science* **22**(2):339-360.

Kastak, D., R.J. Schusterman, B.L. Southall, and C.J. Reichmuth. 1999. Underwater temporary threshold shift induced by octave-band noise in three species of pinniped. *Journal of the Acoustical Society of America* **106**(2):1142-1148.

Kryter, K.D. 1985. *The Effects of Noise on Man*. Academic Press, New York.

Lerma, D. 2014. Naval Base Point Loma Fleet Logistics Center Fuel Pier Replacement Project: Acoustic, marine mammal, green sea turtle, and California least tern monitoring report. Prepared by Tierra Data Inc. for Naval Facilities Engineering Command Southwest: 250.

Lowry, L. F., K. J. Frost, J. M. VerHoef, and R. A. DeLong. 2001. Movements of satellite-tagged subadult and adult harbor seals in Prince William Sound, Alaska. *Marine Mammal Science* **17**:835-861.

Lucke, K., Lepper, P. A., Blanchet, M.-A., and Siebert, U. (2009). “Temporary shift in masked hearing thresholds in a harbor porpoise (*Phocoena phocoena*) after exposure to seismic airgun stimuli,” *J. Acoust. Soc. Am.* **125**(6), 4060–4070

- Lusseau, D. and L. Bejder. 2007. The long-term consequences of short-term responses to disturbance experiences from whale watching impact assessment. *International Journal of Comparative Psychology* **201** (2-3):228-236
- MacGillvray, A., G. Warner, and C. McPherson. 2015. Alaska DOT Hydroacoustic Pile Driving Study, Kake Monitoring Results. JASCO Applied Sciences, Victoria, BC. Prepared for the Alaska Department of Transportation and Public Facilities.
- Mathews, E.A., J.N. Womble, G.W. Pendleton, L.A. Jemison, J.M. Maniscalco, et al. 2011. Population Expansion and Colonization of Steller Sea Lions in the Glacier Bay Region of Southeastern Alaska: 1970s to 2009. *Mar Mamm Sci* 27: 852–880.
- Merrick R.L., and T.R. Loughlin. 1997. Foraging behavior of adult female and young-of-the-year Steller sea lions in Alaskan waters. *Canadian Journal of Zoology* 75:776–786.
- Miles, P.R., C.I. Malme, and W.J. Richardson. 1987. Prediction of drilling site-specific interaction of industrial acoustic stimuli and endangered whales in the Alaskan Beaufort Sea. OCS Study MMS 87-0084. Minerals Management Service, Anchorage, AK.
- Mitson, R.B. (ed.). 1995. Underwater Noise of Research Vessels: Review and Recommendations. *ICES Coop. Res. Rep.* No. 209, 61.
- Morton and Symonds., 2002. Displacement of *Orcinus Orca* by high amplitude sound in British Columbia. *ICES J. Mar. Sci.* 21:217-242
- Moulton et al 2005. Effects of offshore oil development on local abundance and distribution of ringed seals of the Alaskan Beaufort Sea . *Marine Mammal Science* 21:217-242
- Muto, M.M. and R.P. Angliss. 2015. Alaska Marine Mammal Stock Assessments, 2015. National Marine Mammal Laboratory, Alaska Fisheries Science Center. Seattle, Washington.
- Neilson, J.L. and C.M. Gabriele 2012. Results of Humpback Whale Monitoring in Glacier Bay and Adjacent Waters: 2010. Report to the National Park Service, Glacier Bay National Park and Preserve, Gustavus, AK. 20 pp.
- Neilson, J.L., C.M. Gabriele, and P.B.S. Vanselow 2014. Results of Humpback Whale Monitoring in Glacier Bay and Adjacent Waters 2012: Annual Progress Report. Natural Resource Technical Report NPS/GLBA/NRTR—2013/796. NPS/GLBA/NRTR—2013/.
- Neilson, J.L., C.M. Gabriele, and P.B.S. Vanselow 2015. Humpback Whale Monitoring in Glacier Bay and Adjacent Waters in 2014. Annual Progress Report. Natural Resource Technical Report NPS/GLBA/NRTR—2015/949. NPS/GLBA/NRTR—2013/.
- NIOSH (National Institute for Occupational Safety and Health). 1998. Criteria for a recommended standard: Occupational noise exposure. United States Department of Health and Human Services, Cincinnati, OH.

NMFS (National Marine Fisheries Service). 1993. Designated critical habitat Steller sea lion. *Federal Register* 58:45269-45285.

NMFS 2013. Status Review of the Eastern Distinct Population Segment of Steller Sea Lion (*Eumetopias jubatus*). 144pp + Appendices. Protected Resources Division, Alaska Region, National Marine Fisheries Service, 709 West 9th Street, Juneau, Alaska 99802.

NMFS 2014. ESA/MMPA Mapper. National Marine Fisheries Service. Accessed February 5, 2015. <http://mapping.fakr.noaa.gov/esa/>

Nowacek, D.P., Thorne, L.H., Johnston, D.W. & Tyack, P.L. (2007). Responses of cetaceans to anthropogenic noise. *Mammalian Review*, 37(2), 81-115.

NRC (National Research Council). 2003. *Ocean noise and marine mammals*. National Academies Press, Washington, DC.

Ostrand, W.D., T.A. Gotthardt, S. Howlin, and M.D. Robards 2005. Habitat Selection Models for Pacific Sand Lance (*Ammodytes hexapterus*) in Prince William Sound, Alaska. *Northwestern Naturalist* 86:131–143.

Popper, A.N., and M.C. Hastings. 2009. The effects of anthropogenic sources of sound on fishes. Protection Act. Vashon Trestle Seismic Retrofit Washington State Department of Transportation

Rehberg M.J, R.D. Andrews, U.G. Swain, and D.G. Calkins. 2009. Foraging behavior of adult female Steller sea lions during the breeding season in Southeast Alaska. *Marine Mammal Science* 25: 588–604.

Reyff, J.A., P. Donovan, and C.R. Green, Jr. 2003. Underwater Sound Levels Associated with Seismic Retrofit Construction of the Richmond-San Rafael Bridge. Illingworth and Rodkin, Inc. and Greenridge Sciences. California Department of Transportation, Sacramento, California.

Richardson, W.J., C.R. Greene, C.I. Malme, and D.H. Thomson. 1995. *Marine Mammals and Noise*. Academic Press, Inc., San Diego, CA.

Ridgway, S.H., D.A. Carder, R.R. Smith, T. Kamolnick, C.E. Schlundt, and W.R. Elsberry. 1997. Behavioral responses and temporary shift in masked hearing threshold of bottlenose dolphins, *Tursiops truncatus*, to 1-second tones of 141 to 201 dB re 1 μ Pa. Technical Report 1751, Naval Command, Control and Ocean Surveillance Center: 32.

Ruggerone, G.T., S. Goodman, and R. Miner 2008. Behavioral Response and Survival of Juvenile Coho Salmon Exposed to Pile Driving Sounds. Prepared for the Port of Seattle, Seattle, Washington, prepared by Natural Resources Consultants, Inc. Seattle, Washington.

Schlundt, C.E., J.J. Finneran, D.A. Carder, and S.H. Ridgway. 2000. Temporary shift in masked hearing thresholds of bottlenose dolphins, *Tursiops truncatus*, and white whales, *Delphinapterus*

leucas, after exposure to intense tones. *Journal of the Acoustical Society of America* **107** (6):3496-3508.

Scholik, A.R. and H.Y. Yan. 2002. The effects of noise on the auditory sensitivity of the bluegill sunfish, *Lepomis macrochirus*. *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology* 133 (1):43-52..

Simmonds, M., S. Dolman, and L. Weilgart. 2004. *Oceans of noise. Whale and Dolphin Conservation Society, Bath, U.K.*

Skalski, J.R., W.H. Pearson, and C.I. Malme. 1992. Effects of sounds from a geophysical survey device on catch-per-unit-effort in a hook-and-line fishery for rockfish (*Sebastes* spp.). *Canadian Journal of Fisheries and Aquatic Sciences* 49:1357-1365.

Southall, B.L., A.E. Bowles, W.T. Ellison, J.J. Finneran, R.L. Gentry, C.R. Greene Jr., D. Kastak, D.R. Ketten, J.H. Miller, P.E. Nachtigal, W.J. Richardson, J.A. Thomas, and P.L. Tyack 2007. *Marine Mammal Noise Exposure Criteria: Initial Scientific Recommendations. Aquatic Mammals, Volume 33(4).*

Straley, J.M., T.J. Quinn II, and C.M. Gabriele 2002. *Estimate of the Abundance of Humpback Whales in Southeastern Alaska 1994 to 2000. Final Report Submitted to the National Marine Fisheries Service, National Marine Mammal Laboratory, 7600 Sand Point Way N.E., Seattle, WA 98115, 23 pp.*

Swain, U., J. Lewis, G. Pendleton, and K. Pitcher. 1996. Movements, haulout, and diving behavior of harbor seals in southeast Alaska and Kodiak Island. *In Annual Report: Harbor seal investigations in Alaska*, pp. 59–144. NOAA Grant NA57FX0367. Alaska Department of Fish and Game, Division of Wildlife Conservation. Douglas, AK.

Thomsen, F., K. Ludemann, R. Kafemann, and W. Piper 2006. *Effects of Offshore Wind Farm Noise on Marine Mammals and Fish. Cowrie, Ltd., Hamburg, Germany.*

Urick, R.J. 1983. *Principles of Underwater Sound. Peninsula Publishing, Los Altos, CA.* Viada, S.T., R.M. Hammer, R. Racca, D. Hannay, M.J. Thompson, B.J. Balcom, and URS (URS Corporation), Australia Pty Ltd. 2011. *Ichthys gas field development project: potential effects of underwater blasting, pile driving and dredging on sensitive marine fauna in Darwin Harbor. INPEX Document No. C036-AH-REP-0115.*

Viada S.T., Hammer R.M., Racca R., Hannay D., Thompson M.J., Balcolm B.J., Phillips N.W. (2008). *Review of potential impacts on sea turtles from underwater explosive removal of offshore structures. Environmental Impact Assessment Review* 28: 267–285.

Ward, W.D. 1997. *Effects of high-intensity sound. Pages 1497-1507 in M.J. Crocker, ed. Encyclopedia of Acoustics, Volume III. John Wiley & Sons, New York.*

Wartzok, D., A.N. Popper, J. Gordon, and J. Merrill. 2003. *Factors affecting the responses of marine mammals to acoustic disturbance. Marine Technology Society Journal* **37** (4):6-15.

Weilgart, L.S. 2007. A brief review of known effects of noise on marine mammals. *International Journal of Comparative Psychology* **201** (2-3):159-168.

Wing, B.L. and K. Krieger 1983. Humpback Whale Prey Studies in Southeast Alaska, Summer 1982. NWAFC Auke Bay Laboratory, Auke Bay, Alaska.

Wolfe, R.J., J. Bryant, L. Hutchinson-Scarborough, M. Kookesh, and L.A. Sill. 2013. The Subsistence Harvest of Harbor Seal and Sea Lions by Alaska Natives in 2012. Alaska Native Harbor Seal Commission and Alaska Department of Fish & Game Subsistence Technical Paper No. 383, 87 p.

Womble, J.N. and S.M. Gende 2013. Post-Breeding Season Migrations of a Top Predator, the Harbor Seal (*Phoca vitulina richardii*), from a Marine Protected Area in Alaska. *PLoS ONE* 8(2): e55386. doi:10.1371/journal.pone.0055386

Womble, J.N., M.F. Sigler, and M.F. Willson 2009. Linking Seasonal Distributions with Prey Availability in a Central-place Forager, the Steller Sea Lion. *J. Biogeogr* 36:439–451.

WSDOT (Washington State Department of Transportation). 2010. Section 7.2.4. Determining the Extent of Underwater Project-Related Noise Version 04-02-2014. *In* Biological Assessment Preparation Advanced Training Manual. http://www.wsdot.wa.gov/NR/rdonlyres/448B609A-A84E-4670-811B-9BC68AAD3000/0/BA_ManualChapter7.pdf.

Yelverton, J.T., D.R. Richmond, E.R. Fletcher, and R.K. Jones. 1973. Safe distances from underwater explosions for mammals and birds. Report No. 3114T, Defense Nuclear Agency: 70.