

Appendix K: References Cited

K.1 Executive Summary

New York State Climate Action Council. 2022. Scoping Plan. December 2022. New York State Climate Action Council. 445 p. <https://climate.ny.gov/resources/scoping-plan/>.

K.2 Chapter 1, Introduction

[BOEM] Bureau of Ocean Energy Management. 2021. Commercial and research wind lease and grant issuance and site assessment activities on the Atlantic Ocean Continental Shelf of the New York Bight, final environmental assessment. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. 167 p. Report No.: OCS EIS/EA BOEM 2021-073. [accessed 2022 Nov 28]. https://www.boem.gov/sites/default/files/documents//NYBightFinalEA_BOEM_2021-073.pdf.

[MMS] Minerals Management Service. 2007. Programmatic Environmental Impact Statement for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer Continental Shelf: Final Environmental Impact Statement. US Department of the Interior. 38 p. Report No.: OCS EIS/EA MMS 2007-046. <https://www.boem.gov/Guide-To-EIS/>.

New York State Climate Action Council. 2022. Scoping Plan. December 2022. New York State Climate Action Council. 445 p. <https://climate.ny.gov/resources/scoping-plan/>.

K.3 Chapter 2, Alternatives Including the Proposed Alternatives

[DOE] US Department of Energy. 2023. Overview of Offshore Transmission Interconnection Configurations. Unpublished: 2 p.

Middleton P, Barnhart B. 2022. Supporting National Environmental Policy Act documentation for offshore wind energy development related to high voltage direct current cooling systems. Washington (DC): US Department of the Interior, Bureau of Ocean Energy Management. 13 p. Report No.: OCS Study BOEM 2022-023.

K.4 Chapter 3, Affected Environment and Environmental Consequences

K.4.1 Section 3.1 to 3.3 IPFs and Impact Levels

BOEM. 2019. National Environmental Policy Act documentation for impact-producing factors in the offshore wind cumulative impacts scenario on the north Atlantic Outer Continental Shelf. Sterling (VA): 213 p. Report No.: OCS Study BOEM 2019-036. [accessed 2023 Feb 08]. <https://www.boem.gov/sites/default/files/environmental-stewardship/Environmental->

Studies/Renewable-Energy/IPFs-in-the-Offshore-Wind-Cumulative-Impacts-Scenario-on-the-N-OCS.pdf

MMS. 2007. Programmatic Environmental Impact Statement for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer Continental Shelf: Final Environmental Impact Statement. US Department of the Interior. 38 p. Report No.: OCS EIS/EA MMS 2007-046. <https://www.boem.gov/Guide-To-EIS/>.

K.4.2 Section 3.4.1, Air Quality and Greenhouse Gas Emissions

Akhtar N, Geyer B, Schrum C. 2022. Impacts of accelerating deployment of offshore windfarms on near-surface climate. *Scientific Reports*. 12(18307):16. [accessed 2022 Dec 02]. <https://doi.org/10.1038/s41598-022-22868-9>.

Barthelmie R, Pryor S. 2021. Climate change mitigation potential of wind energy. *Climate*. 9(9):1-22. [accessed 2021 Nov 05]. <https://www.mdpi.com/2225-1154/9/9/136>.

BOEM. 2017a. Evaluating benefits of offshore wind energy projects in NEPA. Camarillo (CA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 94 p. Report No.: BOEM 2017-048. [accessed 2023 Feb 20]. <https://www.boem.gov/sites/default/files/environmental-stewardship/Environmental-Studies/Renewable-Energy/Final-Version-Offshore-Benefits-White-Paper.pdf>.

BOEM. 2017b. BOEM offshore wind energy facilities emission estimating tool, user's guide. Morrisville (NC): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 32 p. Report No.: BOEM 2021-046. [accessed 2021 Nov 5]. <https://www.boem.gov/Wind-Power-User-Guide/>.

BOEM. 2021. Vineyard Wind 1 offshore wind energy project final environmental impact statement. Volume II. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 642 p. Report No.: BOEM 2021-0012. [accessed 2023 Feb 20]. <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Vineyard-Wind-1-FEIS-Volume-2.pdf>.

Buonocore J, Luckow P, Fisher J, Kempton W, Levy J. 2016. Health and climate benefits of offshore wind facilities in the Mid-Atlantic United States. *Environmental Research Letters*. 11(2016). doi:10.1088/1748-9326/11/7/074019.

[CEQ] Council on Environmental Quality. 2016. Final guidance on consideration of greenhouse gas emissions and the effects of climate change. 34 p. [accessed 2022 Nov 05]. https://ceq.doe.gov/guidance/ceq_guidance_nepa-ghg.html.

CEQ. 2023. National Environmental Policy Act guidance on consideration of greenhouse gas emissions and climate change. 17 p. Report No.: CEQ-2022-0005. [accessed 2023 Mar 01]. <https://www.federalregister.gov/d/2023-00158>.

- [CSU] Colorado State University. 2022. Federal land manager environmental database, air quality related values - express tools. [accessed 2022 Apr 01].
<https://views.cira.colostate.edu/fed/Express/AqrvTools.aspx>.
- DOE. 2015. Wind vision: a new era for wind power in the United States. US Department of Energy. 350 p. [accessed 2023 Feb 23].
https://www.energy.gov/sites/default/files/2015/03/f20/wv_full_report.pdf.
- Dolan SL, Heath GA. 2012. Life cycle greenhouse gas emissions of utility-scale wind power. *Journal of Industrial Ecology*. 16(S1):S136-154. [accessed 2023 Jan 31].
<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1530-9290.2012.00464.x>. doi:10.1111/j.1530-9290.2012.00464.x.
- Ferraz de Paula L, Carmo B. 2022. Environmental impact assessment and life cycle assessment for a deep water floating offshore wind turbine on the Brazilian Continental Shelf. *Wind*. 2(2022):495-512. doi:10.3390/wind2030027.
- Forster P, Ramaswamy V, Artaxo P, Berntsen T, Betts R, Fahey D, Haywood J, Lean J, Lowe D, Myrhe G, et al. 2007. Changes in atmospheric constituents and in radiative forcing. In: Solomon S, Qin D, Manning M, Chen Z, Marquis M, Averyt KB, Tignor M, Miller HL, editors. *Climate Change 2007: The Physical Science Basis Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge (UK); New York (NY): Cambridge University Press. p. 129. https://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html.
- [IWG] Interagency Working Group. 2021. Social cost of carbon, methane, and nitrous oxide - interim estimates under the executive order 13990. 48 p. [accessed 2022 Nov 02].
https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf.
- Kempton W, Firestone J, Lilley J, Rouleau T, Whiteaker P. 2005. The offshore wind power debate: views from Cape Cod. *Coastal Management Journal*. 33(2):1119-1149. doi:10.1080/08920750590917530.
- Millstein D, Wiser R, Bolinger M, Barbose G. 2018. The climate and air-quality benefits of wind and solar power in the United States. Lawrence Berkeley National Laboratory. 28 p. [accessed 2023 Feb 23].
<https://escholarship.org/content/qt6cv7c3g2/qt6cv7c3g2.pdf>.
- Monitoring Analytics. 2021. 2020 state of the market report for PJM. 76 p. [accessed 2021 Nov 08].
<https://www.pjm.com/-/media/committees-groups/committees/mc/2021/20210329-special/20210329-state-of-the-market-report-for-pjm-2020.ashx>.
- New Jersey Board of Public Utilities. 2019. New Jersey Energy Master Plan. 294 p. [accessed 2021 Nov 05]. https://nj.gov/emp/docs/pdf/2020_NJBPU_EMP.pdf.

- New York State Climate Action Council. 2022. New York State climate action council scoping plan. 445 p. [accessed 2023, Feb 22]. <https://climate.ny.gov/-/media/project/climate/files/NYS-Climate-Action-Council-Final-Scoping-Plan-2022.pdf>.
- [NJDEP] New Jersey Department of Environmental Protection. 2019. New Jersey 2019 IEP technical appendix. Evolved Energy Research. 124 p. [accessed 2021 Nov 05]. https://nj.gov/emp/pdf/New_Jersey_2019_IEP_Technical_Appendix.pdf.
- [NOAA] National Oceanic and Atmospheric Administration. 2006. Small diesel spills (500-5000 gallons). 2 p. [accessed 2021 Nov 02]. https://dec.alaska.gov/spar/ppr/response/sum_fy10/100111201/NOAAFactsheet_Diesel.pdf.
- [NREL] National Renewable Energy Laboratory. 2021. Life cycle assessment harmonization. National Renewable Energy Laboratory. 9 p. [accessed 2023 Jan 31]. <https://www.nrel.gov/analysis/life-cycle-assessment.html>.
- [NYSERDA] New York State Energy Research and Development Authority. 2015. New York State 2015 energy plan. 126 p. [accessed 2022 Dec 20]. <https://energyplan.ny.gov/Plans/2015.aspx>.
- O'Donoghue PR, Heath GA, Dolan SL, Vorum M. 2014. Life cycle greenhouse gas emissions of electricity generated from conventionally produced natural gas: Systematic review and harmonization. *Journal of Industrial Ecology*. 18(1):125-144. [accessed 2023 Jan 31]. <https://doi.org/10.1111/jiec.12084>. doi:10.1111/jiec.12084.
- Rueda-Bayona J, Cabello Eras J, Chaparro R. 2022. Impacts generated by the materials used in offshore wind technology on human health, natural environment and resources. *Energy*. 261(2022):Part A:125223. doi:10.1016/j.energy.2022.125223.
- Shoaib N. 2022. A study on wind farms in New Jersey: life cycle assessment and acceptance of wind farms by the tourists. *Theses, Dissertations and Culminating Projects*. 1114:1-90. <https://digitalcommons.montclair.edu/etd/1114>.
- US Energy Information Administration. 2014. Oil tanker sizes range from general purpose to ultra-large crude carriers on AFRA scale. US Energy Information Administration. 3 p. <https://www.eia.gov/todayinenergy/detail.php?id=17991>.
- [USEPA] US Environmental Protection Agency. 1992. Memo from John S. Seitz, director, office of air quality planning and standards, to regional air quality directors. Research Triangle Park (NC): 4 p. [accessed 2022 Apr 29]. <https://www.epa.gov/sites/default/files/2015-07/documents/class1.pdf>.
- USEPA. 2020a. CO-Benefits Risk Assessment (COBRA) health impacts screening and mapping tool. 6 p. [accessed 2021 Sep 16]. <https://www.epa.gov/statelocalenergy/co-benefits-risk-assessment-cobra-health-impacts-screening-and-mapping-tool>.

- USEPA. 2020b. User's manual for the CO-Benefits Risk Assessment (COBRA) health impacts screening and mapping tool. Washington (DC): USEPA. [accessed 2021 Sep 16].
https://www.epa.gov/sites/default/files/2020-06/documents/cobra_user_manual_june_2020.pdf.
- USEPA. 2020c. Greenhouse gases equivalencies calculator – calculations and references. 37 p. [accessed 2021 Sep 16]. <https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references#vehicles>.
- USEPA. 2022. Nonattainment areas for criteria pollutants (green book). 7 p. [accessed 2022 Nov 13].
<https://www.epa.gov/green-book>.
- USEPA. 2023. National emissions inventory. Tier 1 summaries – Criteria air pollutants only by 14 major tiers. US Environmental Protection Agency. 5 p. <https://www.epa.gov/air-emissions-inventories/2020-nei-supporting-data-and-summaries>.

K.4.3 Section 3.4.2, Water Quality

- Bejarano AC, Michel J, Rowe Z, Li D, French Mcay L, Ekin D. 2013. Environmental risks, fate and effects of chemicals associated with wind turbines on the Atlantic outer continental shelf. Herndon (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 355 p. Report No.: OCS Study BOEM 2013-213.
- Carpenter J, Merckelbach L, Callies U, Clark S, Gaslikova L, Baschek B. 2016. Potential impacts of offshore wind farms on North Sea stratification. PLOS ONE. 11(8):1-28. doi:10.1371/journal.pone.0160830.
- Cazenave PW, Torres R, Allen JJ. 2016. Unstructured grid modelling of offshore wind farm impacts on seasonally stratified shelf seas. Progress in Oceanography. 145:25-41.
doi:10.1016/j.pocean.2016.04.004.
- Chen Z, Curchitser E. 2020. Interannual variability of the Mid-Atlantic Bight Cold Pool. Journal of Geophysical Research: Oceans. 125(8):1-20. doi:10.1029/2020JC016445.
- Clark S, Brown B. 1977. Changes in biomass of finfishes and squids from the Gulf of Maine to Cape Hatteras, 1963-74, as determined from research vessel survey data. Fishery Bulletin. 75(1):1-21.
- Floeter J, Van Beuskom E, Auch D, Callies U, Carpenter J, Dudeck T. 2017. Pelagic effects of offshore wind farm foundations in the stratified North Sea. Oceanography. 156(2017):154-173.
doi:10.1016/j.pocean.2017.07.003.
- Friedland K, Miles T, Goode A, Powell E, Brady D. 2022. The Middle Atlantic bright cold pool is warming and shrinking: Indices from in situ autumn seafloor temperatures. Fisheries Oceanography. 31(2):217-223. doi:10.1111/fog.12573.
- Harris J, Whitehouse R, Sutherland J. 2011. Marine scour and offshore wind-lessons learnt and future challenges. In: Proceedings of the AMSE 2011 20th International Conference of Ocean, Offshore and Arctic Engineering; 2011 Jun 19-24; Rotterdam, Netherlands. p 18.

- Johnson TL, Jon van Berkel J, Mortensen LO, Bell MA, Tiong I, Hernandez B, Snyder DB, Thomsen F, Petersen OS. 2021. Hydrodynamic modeling, particle tracking and agent-based modeling of larvae in the U.S. Mid-Atlantic Bight. Lakewood (CO): US Department of the Interior, Bureau of Ocean Energy Management. 232 p. Report No.: OCS Study BOEM 2021-049.
- Kirchgeorg T, Weinberg I, Hornig M, Baier R, Schmid M, Brockmeyer B. 2018. Emissions from corrosion protection systems of offshore wind farms: evaluation of the potential impact on the marine environment. *Marine Pollution Bulletin*. 136(2018):257-268.
- Latham P, Fiore W, Bauman M, Weaver J. 2017. Effects matrix for evaluating potential impacts of offshore wind energy development on U.S. Atlantic coastal habitats. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. Report No.: OCS Study BOEM 2017-014. [accessed 2022 Nov 23].
<https://www.boem.gov/sites/default/files/environmental-stewardship/Environmental-Studies/Renewable-Energy/Effects-Matrix-Evaluating-Potential-Impacts-of-Offshore-Wind-Energy-Development-on-US-Atlantic-Coastal-Habitats.pdf>.
- Lentz S. 2008. Observations and a model of the mean circulation over the Middle Atlantic Bight continental shelf. *Journal of Physical Oceanography*. 38(2008):1203-1221.
- Lentz S. 2017. Seasonal warming of the Middle Atlantic Bight cold pool. *Journal of Geophysical Research: Oceans*. 122(2):941-954. doi:10.1002/2016JC012201.
- Levin J, Wilkin J, Flemin N, Zavala-Garay J. 2018. Mean circulation of the Mid-Atlantic Bight from a climatological data assimilative model. *Ocean Modelling*. 128(2018):1-14.
- Li X, Chi L, Chen X, Ren Y, Lehner S. 2014. SAR observation and numerical modeling of tidal current wakes at the East China Sea offshore wind farm. *Journal of Geophysical Research: Oceans*. 119(8):4958-4971. doi:10.1002/2014JC009822.
- Middleton P, Barnhart B. 2022. Supporting National Environmental Policy Act documentation for offshore wind energy development related to high voltage direct current cooling systems. Washington (DC): US Department of the Interior, Bureau of Ocean Energy Management. 13 p. Report No.: OCS Study BOEM 2022-023.
- Miles T, Murphy S, Kohut J, Borsetti S, Munroe D. 2021. Offshore wind energy and the Mid-Atlantic cold pool: a review of potential interactions. *Marine Technology Society Journal*. 55(4):72-87. doi:10.4031/MTSJ.55.4.8.
- NOAA. 2021. Climate change in the northeast US shelf ecosystem. US Department of Commerce, National Oceanic and Atmospheric Administration. [accessed 2022 Nov 21].
<https://www.fisheries.noaa.gov/new-england-mid-atlantic/climate/climate-change-northeast-us-shelf-ecosystem>.

- NREL. 2023. New York Bight RPDE emerging technologies. Preliminary technical memo. National Renewable Energy Laboratory. Unpublished Report.
- Nye J, Link J, Hare W, Overholtz W. 2009. Changing spatial distribution of the fish stocks in relation to climate and population size on the Northeast United State continental shelf. *Marine Ecology Progress Series*. 393(2009):111-129.
- [NYSDEC] New York State Department of Environmental Conservation. 2020. The proposed final New York State 2018 section 303(d) list of impaired water requiring a TMDL/other strategy. New York State Department of Environmental Conservation. 31 p. [accessed 2023 Mar 08].
https://www.dec.ny.gov/docs/water_pdf/section303d2018.pdf.
- Reese A, Voigt N, Zimmermann T, Irrgeher J, Pröfrock D. 2020. Characterization of alloying components in galvanic anodes as potential environmental tracers for heavy metal emissions from offshore wind structures. *Chemosphere*. 257:127182.
- Schultze L, Merkelbach L, Horstmann J, Raasch S, Carpenter J. 2020. Increased mixing and turbulence in the wake of offshore wind farm foundations. *Journal of Geophysical Research: Oceans*. 125(2020):1-4. doi:10.1029/2019JC015858.
- Segtnan O, Christakos K. 2015. Offshore wind farm design on the vertical motion of the ocean. *Energy Procedia*. 80(15):213-222.
- Stevenson D, Chiarella L, Stephan D, Reid R, Willhiem K, McCarthy J, Pentony M. 2004. Characterization of the fishing practices and marine benthic ecosystems of the Northeast U.S. Shelf, and an evaluation of the potential effects of fishing on essential fish habitat. Woods Hole (MA): 194 p. Report No.: NMFS-NE-181.
- Tetra Tech Inc. 2022. Sediment transport analysis for empire offshore wind project. 47 p.
https://www.boem.gov/sites/default/files/documents/renewable-energy/Public_EOW%20COP%20Appendix%20J_Sedi%20Trans%20Analysis.pdf.
- Townsend D, Thomas A, Mayer L, Thomas M, Quinlan J. 2004. Chapter 5: Oceanography of the Northwest Atlantic Continental Shelf (1,W). Harvard University Press. 58 p.
- [UKHO] United Kingdom Hydrographic Office. 2009. Admiralty sailing directions, east coast of the United States pilot. United Kingdom Hydrographic Office. 1-2 p.
- USEPA. 2000. Ambient aquatic life water quality criteria for dissolved oxygen (saltwater): Cape Cod to Cape Hatteras. Office of Water. Report No.: EPA 822 R 00 012. [accessed 2022 Nov 21].
<https://nepis.epa.gov/Exe/ZyPDF.cgi/20003HYA.PDF?Dockey=20003HYA.PDF>.
- USEPA. 2017. National water quality inventory: Report to Congress. US Environmental Protection Agency. 22 p. Report No.: EPA 841-R-16-011.

- USEPA. 2021a. National coastal condition assessment: A collaborative survey of the Nation's estuaries and Great Lakes Nearshore waters. 87 p. Report No.: EPA 841 R 21 001. [accessed 2022 Nov 21]. https://www.epa.gov/system/files/documents/2021_09/nccareport_final_2021_09_01.pdf.
- USEPA. 2021b. U.S. EPA national coastal condition assessment 2015.1. [accessed 2022 Nov 21]. <https://coastalcondition.epa.gov/?&view=indicator&studypop=e&subpop=epa+region+3&label=none&condition=good&diff=1v3>.
- USEPA. 2022. How's my waterway. 1 p. [accessed 2022 Nov 22]. <https://mywaterway.epa.gov/state-and-tribal>.
- [USGS] US Geological Survey. 2018. Turbidity and water. 1 p. [accessed 2022 Nov 21]. <https://www.usgs.gov/special-topics/water-science-school/science/turbidity-and-water>.
- Van Berkel J, Burchard H, Christenson A, Mortensen L, Svenstrup Petersen O, Thomsen F. 2020. The effects of offshore wind farms on hydrodynamics and implications for fishes. *Oceanography*. 33(4):108-117.
- Vanhellemont Q, Ruddick K. 2014. Turbid wakes associated with offshore wind turbines observed with Landsat 8. *Remote Sensing of Environment*. 145:105-115. doi:10.1016/j.rse.2014.01.009.
- Vincent C, Swift P, Hillard B. 1981. Sediment transport in the New York Bight, North American Atlantic Shelf. *Marine Geology*. 42:369-398. [accessed 2023 Mar 08]. <https://www.sciencedirect.com/science/article/abs/pii/0025322781901717?via%3Dihub#preview-section-abstract>. doi:10.1016/0025-3227(81)90171-7.
- Wallace E, Looney L, Gong D. 2018. Multi-decadal trends and variability in temperature and salinity in the Mid-Atlantic Bight, Georges Bank, and Gulf of Maine. *Virginia Institute of Marine Science*. 54.
- World Ocean Database. 2021. US Department of Commerce, National Oceanic and Atmospheric Administration, National Centers for Environmental Education. [accessed 2022 Nov 21]. <https://www.ncei.noaa.gov/access/world-ocean-database/bin/getgeodata.pl?Depth=O&WorldOcean.x=590&WorldOcean.y=179>.

K.4.4 Section 3.5.1, Bats

- Ahlén I, Baagøe HJ, Bach L. 2009. Behavior of Scandinavian bats during migration and foraging at sea. *Journal of Mammalogy*. 90:1313-1323.
- Arnett EB, Brown K, Erickson WP, Fiedler J, Hamilton BL, Henry TH, Jain A, Johnson GD, Kerns J, Kolford RR, et al. 2008. Patterns of bat fatalities at wind energy facilities in North America. *Journal of Wildlife Management*. 72(1):61-78.
- Atlantic Shores. 2022. Atlantic Shores offshore wind construction and operations plan, lease area OCS-A 0499. US Department of the Interior, Bureau of Ocean Energy Management. 277 p. Report No.: OCS-

- A- 0499. [accessed 2023 Jan 01]. <https://www.boem.gov/renewable-energy/state-activities/atlantic-shores-offshore-wind-construction-and-operations-plan>.
- Baerwald E, Barclay R. 2009. Geographic variation in activity and fatality of migratory bats at wind energy facilities. *Journal of Mammalogy*. 90(2009):1341-1349.
- BOEM. 2015. Virginia Offshore Wind technology advancement project on the Atlantic Outer Continental Shelf Offshore Virginia: revised environmental assessment. US Department of the Interior, Bureau of Ocean Energy Management Office of Renewable Energy Programs. 239 p. Report No.: OCS EIS/EA BOEM 2015-031. [accessed 2023 Feb]. https://www.energy.gov/sites/default/files/2016/03/f30/EA-1985-FEA-2015_1.pdf.
- Brabant R, Laurent Y, Jonge Poerink B, Degraer S. 2021. The relation between migratory activity of *Pipistrellus* bats at sea and weather conditions offers possibilities to reduce offshore wind farm effects. *Animals (Basel)*. 11(12):3457. doi:10.3390/ani11123457.
- Cryan P, Barclay R. 2009. Cause of bat fatalities at wind turbines: hypotheses and predictions. *Journal of Mammalogy*. 90(2009):1330-1340.
- Cryan P, Brown A. 2007. Migration of bats past a remote island offers clues towards the problem of bat fatalities at wind turbines. *Biological Conservation*. 139(2007):1-11.
- Dominion Energy. 2022. Postconstruction bird and bat monitoring at the coastal Virginia offshore wind pilot project. Richmond (VA): Normandeau Associates, Inc. 127 p. Report No.: First Annual Report.
- Dowling Z, Sivert P, Baldwin E, Johnson L, von Oettingen S, Reichard J. 2017. Flight activity and offshore movements of nano-tagged bats on Martha's Vineyard, MA. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 43 p. Report No.: OCS Study BOEM 2017-054. <https://www.boem.gov/sites/default/files/environmental-stewardship/Environmental-Studies/Renewable-Energy/Flight-Activity-and-offshore-Movements-of-Nano-Tagged-Bats-on-Martha%27s-Vineyard%2C-MA.pdf>.
- Erickson WP, Johnson GD, Strickland MD, Young DP, Sernka KJ, Good RE, Bourassa M, Bay K, K S. 2002. Synthesis and comparison of baseline avian and bat use, raptor nesting and mortality information from proposed and existing wind developments. Portland (OR): Bonneville Power Administration. 129 p.
- Fiedler J. 2004. Assessment of bat mortality and activity at Buffalo Mountain Windfarm, Eastern Tennessee [Master's Thesis]. University of Tennessee. [accessed 2022 Sep 01]. https://trace.tennessee.edu/cgi/viewcontent.cgi?article=3488&context=utk_gradthes.
- Haddaway L, McGuire LP. 2022. Seasonal and nightly activity patterns of migrating silver-haired bats (*Lasionycteris noctivagans*) compared to non-migrating big brown bats (*Eptesicus fuscus*) at a fall migration stopover site. *Acta Chiropterologica*. 24(2022):83-90.

- Hamilton RM. 2012. Spatial and temporal activity of migratory bats at landscape features [Electronic Thesis and Dissertation Repository].
- Hann AZ, Hosler MJ, Mooseman Jr PR. 2017. Roosting habitats of two *Lasiurus borealis* (eastern red bat) in the Blue Ridge Mountains of Virginia. *Northeastern Naturalist*. 24(2):N15-N18. [accessed 2023 Jan]. https://www.researchgate.net/profile/Paul-Moosman/publication/317264718_Roosting_Habits_of_Two_Lasiurus_borealis_Eastern_Red_Bat_in_the_Blue_Ridge_Mountains_of_Virginia/links/592ec07445851553b6612788/Roosting-Habits-of-Two-Lasiurus-borealis-Eastern-Red-Bat-in-the-Blue-Ridge-Mountains-of-Virginia.pdf.
- Hatch KS, Connelly EE, Divoll JT, Stenhouse JJ, Williams AK. 2013. Offshore observations of eastern red bats (*Lasiurus borealis*) in the Mid-Atlantic United States using multiple survey methods. *PLOS ONE*. 8:1-7.
- Hein C, Williams AK, Jenkins E. 2021. Bat workgroup report for the state of science workshop on wildlife and offshore wind energy 2020: Cumulative Impacts. Albany (NY): New York State Energy Research and Development Authority. 21 p. [accessed 2022 Mar 25]. <https://tethys.pnnl.gov/sites/default/files/publications/Bat-Workgroup-Report.pdf>.
- Ingersoll TE, Sewall JB, Amelon KS. 2016. Effects of white-nose syndrome on regional population patterns of 3 hibernating bat species. *Conservation Biology*. 30(2016):1048-1059.
- Johnson BJ, Gates E, Zegre PN. 2011. Monitoring seasonal bat activity on a coastal barrier island in Maryland, USA. *Environmental Monitoring and Assessment*. 173(2011):685-699.
- Kerns J, Erickson WP, Arnett EB. 2005. Bat and bird fatality at wind energy facilities in Pennsylvania and West Virginia. 187 p. [accessed 2020 Oct 19]. <http://centrostudinataura.it/public2/documenti/687-50647.pdf>.
- Madsen AM, Reeve R, Desholm M, Fox AD, Furness WR, Haydon TD. 2012. Assessing the impact of marine wind farms on birds through movement modeling. 15 p.
- Maine Department of Inland Fisheries and Wildlife. 2021. Bats. [accessed 2021 Aug 27]. <https://www.maine.gov/ifw/fish-wildlife/wildlife/species-information/mammals/bats.html>.
- Maslo B, Leu K. 2013. The facts about bats in New Jersey. 5 p.
- New Hampshire Fish and Game. n.d. Bats of New Hampshire. [accessed 2021 Aug 27]. <https://wildlife.state.nh.us/nongame/bats-nh.html>.
- New Jersey Division of Fish and Wildlife. 2017. Bat Conservation in Winter.
- New Jersey Division of Fish and Wildlife. 2019. Nuisance wildlife control guidelines for bats. Endangered and Nongame Species Program. [accessed 2021 Aug 27]. https://www.njfishandwildlife.org/ensp/pdf/bat_control.pdf.

- NJDEP. 2010. Ocean/ wind power ecological baseline studies. 259 p.
- NJDEP. 2013. Special status review of terrestrial mammals. 54 p. [accessed 2022 Jun 02]. https://www.nj.gov/dep/fgw/ensp/pdf/mammal_status_rprt.pdf.
- North Carolina Wildlife Resources Commission. 2017. Bats of North Carolina. 2 p. [accessed 2021 Aug 27]. https://www.ncwildlife.org/Portals/0/Conserving/documents/Bats_Species_Profile.pdf.
- NYSDEC. n.d. Bats of New York. New York State Department of Environmental Conservation. 22 p. [accessed 2023 Jan 07]. https://www.dec.ny.gov/docs/administration_pdf/batsofny.pdf.
- NYSERDA. 2022. ReMOTe: Remote marine and onshore technology, NYSERDA metocean buoys. [accessed 2022 Feb 25]. https://remote.normandeau.com/portal_buoy_data.php?pj=21&public=1.
- Pelletier KS, Omland K, Watrous SK, Peterson ST. 2013. Information synthesis on the potential for bat interactions with offshore wind facilities. Herndon (VA): US Department of the Interior, Bureau of Ocean Energy Management. 112 p. Report No.: OCS Study BOEM No. 2013-01163. [accessed 2020 Sep 01]. https://tethys.pnnl.gov/sites/default/files/publications/BOEM_Bat_Wind_2013.pdf.
- Peschko V, Mendel B, Mercker M, Dierschke J, Garthe S. 2021. Northern gannets (*Morus bassanus*) are strongly affected by operating offshore wind farms during the breeding season. *Journal of Environmental Management*. 279:111509.
- Peterson ST, Pelletier KS, Boyden AS, Watrous SK. 2014. Offshore acoustic monitoring of bats in the Gulf of Maine. *Northeastern Naturalist*. 21(2014):154-163.
- Rhode Island Department of Environmental Management. n.d. Bats of Rhode Island. [accessed 2021 Aug 27]. <http://www.dem.ri.gov/programs/bnatres/fishwild/pdf/bat.pdf>.
- Schaub A, Ostwald J, Siemers MB. 2008. Foraging bats avoid noise. *Journal of Experimental Biology*. 211(2008):3147-3180. <https://journals.biologists.com/jeb/article/211/19/3174/18275/Foraging-bats-avoid-noise>.
- Simmons MA, Horn NK, Warnecke M, Simmons AJ. 2016. Broadband noise exposure does not affect hearing sensitivity in big brown bats (*Eptesicus fuscus*). *Journal of Experimental Biology*. 219(2016):1031-1040. <https://journals.biologists.com/jeb/article/219/7/1031/17807/Broadband-noise-exposure-does-not-affect-hearing>.
- Sjollema AL, Gates EJ, Hilderbrand HR, Sherwell J. 2014. Offshore activity of bats along the Mid-Atlantic Coast. *Northeastern Naturalist*. 21(2014):154-163.
- Smith A, Ostwald J, Siemers MB. 2016. Bat activity during autumn relates to atmospheric conditions: implications for coastal wind energy development. *Journal of Mammalogy*. 97(6):1565-1577.
- Solick DI, Newman CM. 2021. Oceanic records of North American bats and implications for offshore wind energy development in the United States. *Ecology and Evolution*. 00:1-15.

- Stantec Consulting Services Inc. 2016. Long-term bat monitoring on islands, offshore structures and coastal sites in the Gulf of Maine, Mid-Atlantic, and Great Lakes. Stantec. 49 p. [accessed 2018 Oct 30]. <https://tethys.pnnl.gov/sites/default/files/publications/Stantec-2016-Bat-Monitoring.pdf>.
- Stantec Consulting Services Inc. 2018. Vessel-based acoustic bat monitoring: South Fork wind farm and South Fork export cable. 24 p.
- Stantec Consulting Services Inc. 2020. Avian and bat acoustic survey final post-construction monitoring report 2017-2020. Block Island Wind Farm (RI): 49 p.
- Tetra Tech Inc. 2022. 2018 bat survey report. 38 p.
https://www.boem.gov/sites/default/files/documents/renewable-energy/Public_EOW%20COP%20Appendix%20R_Offshore%20Bat%20Survey%20Report.pdf.
- [USFWS] US Fish and Wildlife Service. 2015. White nose syndrome: the devastating disease of hibernating bats in North America. 2 p. [accessed 2021 Sep 20]. <https://www.fws.gov/mountain-prairie/pressrel/2015/WNS%20Fact%20Sheet%20Updated%2007012015.pdf>.
- USFWS. 2021. Information for planning and consultation threatened and endangered species list for the Empire Offshore Wind Project. 98 p.
- Virginia Department of Wildlife Resources. 2021. Bats. Virginia Department of Wildlife Resources. [accessed 2021 Aug 27]. <https://dwr.virginia.gov/wildlife/nuisance/bats/>.
- Whitaker Jr OJ. 1998. Life history and roost switching in six summer colonies of eastern Pipistrelles in buildings. *Journal of Mammalogy*. 79(2):651-659.
<https://academic.oup.com/jmammal/article/79/2/651/852716>.
- Whitenosesyndrome.org. 2021. Where is WNS now? [accessed 2021 Aug 27].
<https://www.whitenosesyndrome.org/where-is-wns>.

K.4.5 Section 3.5.2, Benthic Resources

- Albert L, Deschamps F, Jolivet A, Olivier F, Chauvaud L, Chauvaud S. 2020. A current synthesis on the effects of electric and magnetic fields emitted by submarine power cables on invertebrates. *Marine Environmental Research*. 159(104958). doi:10.1016/j.marenvres.2020.104958.
- Albert L, Maire O, Olivier F, Lambert C, Romero-Ramirez A, Jolivet A, Chauvaud L, Chauvaud S. 2022. Can artificial magnetic fields alter the functional role of the blue mussel, *Mytilus edulis*? *Marine Biology*. 169(7):75. doi:10.1007/s00227-022-04065-4.
- Amaral, J.L., R. Beard, R.J. Barham, A.G. Collett, J. Elliot, A.S. Frankel, D. Gallien, C. Hager, A.A. Khan, Y.-T. Lin, T. Mason, J.H. Miller, A.E. Newhall, G.R. Potty, K. Smith, and K.J. Vigness Raposa. 2018. Appendix D: Underwater Sound Monitoring Reports. In: HDR. 2018. Field Observations during Wind Turbine Foundation Installation at the Block Island Wind Farm, Rhode Island. Final Report to the U.S.

Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. OCS Study BOEM 2019-029. 175 p.

Arveson P, Vendittis D. 2000. Radiated noise characteristics of a modern cargo ship. *Journal of the Acoustical Society of America*. 2000(107):118-129.

Ashley G. 1990. Classification of large-scale subaqueous bedforms: A new look at an old problem-SEPM bedforms and bedding structures. *SEPM Journal of Sedimentary Research*. 60(1990).

Atlantic Renewable Energy Corporation and AWS Scientific Inc. 2004. New Jersey offshore wind energy: Feasible study. 236 p. [accessed 2023 Apr 04].
<https://www.njcleanenergy.com/files/file/FinalNewJerseyDEP.pdf>.

Atlantic Shores. 2022. Atlantic Shores offshore wind construction and operations plan, lease area OCS-A 0499. US Department of the Interior, Bureau of Ocean Energy Management. 277 p. Report No.: OCS-A- 0499. [accessed 2023 Jan 01]. <https://www.boem.gov/renewable-energy/state-activities/atlantic-shores-offshore-wind-construction-and-operations-plan>.

Avanti Corporation and Industrial Economics Inc. 2019. National Environmental Policy Act documentation for impact-producing factors in the offshore wind cumulative impacts scenario on the North Atlantic Continental Shelf. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. 201 p. Report No.: OCS Study BOEM 2019-036.

Barnthouse L. 2013. Impacts of entrainment and impingement on fish population: A review of the scientific evidence. *Environmental Science and Policy*. 149-156.

Bedore C, Kaijiura S. 2013. Bioelectric fields of marine organisms: voltage and frequency contributions to detectability by electroreceptive predators. *The University of Chicago Press Journals*. 86(3):1-15. doi:10.1086/669973.

Bennun L, van Bochove J, Ng C, Fletcher C, Wilson D, Phair N, Carbone G. 2021. Biodiversity Impacts Associated to Offshore Wind Power Projects. IUCN. https://www.iucn.org/sites/default/files/2022-06/01_biodiversity_impacts_associated_to_off-shore_wind_power_projects.pdf.

Bilinski J. 2021. Review of the impacts to marine fauna from electromagnetic frequencies (EMF) generated by energy transmitted through undersea electric transmission cables. NJDEP Division of Science and Research. [accessed 2022 Nov 29]. <https://www.nj.gov/dep/offshorewind/docs/njdep-marine-fauna-review-impacts-from-emf.pdf>.

Boehkert WG, Gill AB. 2010. Environmental and ecological effects of ocean renewable energy development: A current synthesis. *Oceanography*. 23(2):68-81. doi:10.5670/oceanog.2010.46.

BOEM. 2012. Commercial wind lease issuance and site assessment activities on the Atlantic Outer Continental Shelf offshore New Jersey, Delaware, Maryland, and Virginia, Final Environmental Assessment. US Department of the Interior, Bureau of Ocean Energy Management, Office of

Renewable Energy Programs. 336 p. Report No.: OCS EIS/EA BOEM 2012-003.

http://www.boem.gov/sites/default/files/uploadedFiles/BOEM/Renewable_Energy_Program/Smart_from_the_Start/Mid-Atlantic_Final_EA_012012.pdf.

BOEM. 2016. Commercial wind lease issuance and site assessment activities on the Atlantic Outer Continental Shelf Offshore New York: environmental assessment. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 352 p. Report No.: OCS EIS/EA BOEM 2016-042. [accessed 2021 Oct 13].

<https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/NY/NY-Public-EA-June-2016.pdf>.

BOEM. 2019. Guidelines for providing benthic habitat survey information for renewable energy development on the Atlantic Outer Continental Shelf pursuant to 30 CFR part 585, subpart F. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 9 p. www.boem.gov/sites/default/files/renewable-energy-program/Regulatory-Information/BOEM-Renewable-Benthic-Habitat-Guidelines.pdf.

BOEM. 2020. Guidelines for providing archaeological and historic property information pursuant to 30 CFR Part 585. May 27. US Department of the Interior, Bureau of Ocean Energy Management. 23 p.

<https://www.boem.gov/sites/default/files/documents/about-boem/Archaeology%20and%20Historic%20Property%20Guidelines.pdf>.

BOEM. 2021. Commercial and research wind lease and grant issuance and site assessment activities on the Atlantic Ocean Continental Shelf of the New York Bight, final environmental assessment. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. 167 p. Report No.: OCS EIS/EA BOEM 2021-073. [accessed 2022 Nov 28].

https://www.boem.gov/sites/default/files/documents//NYBightFinalEA_BOEM_2021-073.pdf.

BOEM. 2022. Sunrise Wind Farm project construction and operations plan. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. 933 p. [accessed 2023 Sep 18].

https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/SRW01_COP_Rev3_2022-08-19_508_0.pdf.

BOEM. 2023. Supporting National Environmental Policy Act documentation for offshore wind energy development related to glauconite sand. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 16 p. Report No.: OCS Study BOEM 2023-011.

https://www.boem.gov/sites/default/files/documents/renewable-energy/studies/GlauconiteSand_WhitePaper.pdf.

Boyd SE, Limpenny DS, Rees HL, Cooper KM. 2005. The effects of marine sand and gravel extraction on the macrobenthos at a commercial dredging site (results 6 years post-dredging). *ICES Journal of Marine Science*. 62:145-162. doi:10.1016/j.icesjms.2004.11.014.

- Brooks RA, Purdy CN, Bell SS, Sulak KJ. 2006. The benthic community of the Eastern US Continental Shelf: A literature synopsis of benthic faunal resources. *Continental Shelf Research*. 26(6):804-818. doi:10.1016/j.csr.2006.02.005.
- Callendar G, Ellis D, Goddard FK, Dix JK, Pilgrim JA, Erdmann M. 2021. Low computational cost model for convective heat transfer from submarine cables. *IEEE Transactions on Power Delivery*. 36(2):760-768. doi:10.1109/TPWRD.2020.2991783.
- Carpenter J, Merckelbach L, Callies U, Clark S, Gaslikova L, Baschek B. 2016. Potential impacts of offshore wind farms on North Sea stratification. *PLOS ONE*. 11(8):1-28. doi:10.1371/journal.pone.0160830.
- Carroll GA, Prezeslawski R, Duncan A, Gunning M, Bruce B. 2017. A critical review of the potential impacts of marine seismic surveys on fish and invertebrates. *Marine Pollution Bulletin*. 114(2017):9-24. doi:10.1016/j.marpolbul.2016.11.038.
- Causon P, Gill AB. 2018. Linking ecosystem services with epibenthic biodiversity change following installation of offshore wind farms. *Environmental Science & Policy*. 89(2018):340-347. <https://www.sciencedirect.com/science/article/pii/S1462901118304556/pdf?md5=b728b2b7a9e61e28e5901a5806772e71&pid=1-s2.0-S1462901118304556-main.pdf>.
- Cazenave PW, Torres R, Allen JJ. 2016. Unstructured grid modelling of offshore wind farm impacts on seasonally stratified shelf seas. *Progress in Oceanography*. 145:25-41. doi:10.1016/j.pocean.2016.04.004.
- Christiansen N, Daewel U, Djath B, Schrum C. 2022. Emergence of large-scale hydrodynamic structures due to atmospheric offshore wind farm wakes. *Frontiers in Marine Science*. 9(2022). doi:10.3389/fmars.2022.818501.
- Claire JT, Pondella II DJ, Milton L, Zahn AL, Williams CM, Williams PJ, Bull AS. 2014. Oil platforms off California are amongst the most productive marine fish habitats globally. *Proceedings of the National Academy of Sciences of the United States of America*. 111(43):14542-15467. [accessed 2023 Jan]. <https://doi.org/10.1073/pnas.1411477111>. doi:10.1073/pnas.1411477111.
- Coates DA, van Hoey G, Colson L, Vincx M, Vanaverbeke J. 2015. Rapid macrobenthic recovery after dredging activities in an offshore wind farm in the Belgian part of the North Sea. *Hydrobiologia*. 756(1):3-18. doi:10.1007/s10750-014-2103-2.
- Colden AM, Lipcius RN. 2015. Lethal and sublethal effects of sediment burial on the eastern oyster *Crassostrea virginica*. *Marine Ecology Progress Series*. 527(2015):105-117. doi:10.3354/meps11244.
- Copping A, Sather N, Hanna L, Whiting J, Zydlewski G, Staines G, Gill A, Hutchison I, O'Hagan A, Simas T, et al. 2016. Annex IV 2016 state of the science report: environmental effects of marine renewable energy development around the world. 224 p. [accessed 2021 Dec 03]. https://tethys.pnnl.gov/sites/default/files/publications/Annex-IV-2016-State-of-the-Science-Report_LR.pdf.

- Corte GN, Schlacher TA, Checon HH, Barboza CAM, Siegle E, Coleman RA, Amaral ACZ. 2017. Storm effects on intertidal invertebrates: increased beta diversity of few individuals and species. *Peer Journal* e3360. doi:10.7717/peerj.3360.
- Cresci A, Perrichon P, Durif MF, Sørhus E, Johnsen E, Bjelland R, Larsen T, Skiftesvik AB, Browman HI. 2022. Magnetic fields generated by the DC cables of offshore wind farms have no effect on spatial distribution or swimming behavior of lesser sandeel larvae (*Ammodytes marinus*). *Marine Environmental Research* 176:105609.
- CSA Ocean Sciences Inc and Exponent. 2019. Evaluation of potential EMF effects on fish species of commercial or recreational fishing importance in southern New England. 62 p. Report No.: OCS Study BOEM 2019-049. [accessed 2023 Jan].
- Dannheim J, Bergstrom L, Birchenough SNR, Brzana R, Boon RA, Coolen J, Dauvin J, De Mesel I, Derweduwen J, Gill A, et al. 2020. Benthic effects of offshore renewables: Identification of knowledge gaps and urgently needed research. *ICES Journal of Marine Science*. 77(3):1092-1108. doi:10.1093/icesjms/fsz018.
- Day Jr JW, Charles A, Hall S, Kemp Michael W, Yanez-Arancibia A. 1989. *Estuarine Ecology*, Second Edition. New York, New York: John Wiley Sons Inc. 20 p.
- De Boer WF. 2007. Seagrass–sediment interactions, positive feedbacks and critical thresholds for occurrence: a review. *Hydrobiologia*. 591:5-24. doi:10.1007/s10750-007-0780-9.
- Degraer S, Brabant R, Rumes B, Vigin L. 2018. Environmental impacts of offshore wind farms in the Belgian part of the North Sea: Assessing and managing effect spheres of influence. Brussels (Belgium): Royal Belgian Institute of Natural Sciences, Operational Directorate Natural Environment, Marine Ecology and Management. 138 p.
- Degraer S, Carey D, Coolen J, Hutchison Z, Kerckof F, Rumes B, Vanaverbeke J. 2020. Offshore wind farm artificial reefs effect ecosystem structure and functioning: A synthesis. *Oceanography*. 33(4):48-57.
- Dernie KM, Kaiser MJ, Warwick RM. 2003. Recovery rates of benthic communities following physical disturbance. *Journal of Animal Ecology*. 72(2003):1043-1056. doi:10.1046/j.1365-2656.2003.00775.x.
- Diez-Caballero K, Troiteiro S, Garcia-Alba J, Vidal JR, Gonzalez M, Ametller S, Juan R. 2022. Environmental compatibility of the Parc Tramuntana offshore wind project in relation to marine ecosystems. *Journal of Marine Science and Engineering*. 10(7):898. doi:10.3390/jmse10070898.
- Dominion Energy. 2020. Dominion Energy CVOW pilot project - revised protected species observer (PSO) monitoring report and pile driving noise monitoring report for WTG Construction and Observations. Aalst (BE): Jan de Nul NV: 140 p.

- Duncan CS, Goff JA, Austin Jr JA, Fulthorpe CS. 2000. Tracking the last sea-level cycle: seafloor morphology and shallow stratigraphy of the latest Quaternary New Jersey middle continental shelf. *Marine Geology*. 170(3-4):395-421.
- Edmonds N, Firmin C, Goldsmith D, Faulkner R, Wood D. 2016. A review of crustacean sensitivity to high amplitude underwater noise: Data needs for effective risk assessment in relation to UK commercial species. *Marine Pollution Bulletin*. 108(2016).
- Empire Offshore Wind LLC. 2022. Empire wind project (EW1 and EW2), construction and operations plan. US Department of the Interior, Bureau of Ocean Energy Management. 200 p. <https://www.boem.gov/renewable-energy/empire-wind-construction-and-operations-plan>.
- English PA, Mason T, Backstrom JT, Tibbles JB, Mackay AA, Smith MJ, Mitchell T. 2017. Improving efficiencies of National Environmental Policy Act documentation for offshore wind facilities case studies report. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 296 p. Report No.: OCS Study BOEM 2017-026. <https://tethys.pnnl.gov/sites/default/files/publications/English-et-al-2017-BOEM.pdf>.
- Erbe C, McPherson C. 2017. Underwater noise from geotechnical drilling and standard penetration testing. *Journal of the Acoustical Society of America*. 142(2017):EL281-EL285. doi:10.1121/1.5003328.
- Essink K. 1999. Ecological effects of dumping of dredged sediments; options for management. *Journal of Coastal Conservation*. 5(1999):69-80. doi:10.1007/BF02802741.
- Fautin D, Dalton P, Incze SL, Leong CAJ, Pautzke C, Rosenberg A, Sandifer P, Sedberry G, Tunnel WJ, Abbott I, et al. 2010. An overview of marine biodiversity in the United States waters. *PLOS ONE*. 5(8):e11914. doi:10.1371/journal.pone.0011914.
- Floeter J, Pohlmann T, Harmer A, Mollmann C. 2022. Chasing the offshore wind farm wind-wake-induced upwelling/downwelling dipole. *Frontiers in Marine Science*. 9:1-16. doi:10.3389/fmars.2022.884943.
- Floeter J, Van Beuskom E, Auch D, Callies U, Carpenter J, Dudeck T. 2017. Pelagic effects of offshore wind farm foundations in the stratified North Sea. *Oceanography*. 156(2017):154-173. doi:10.1016/j.pocean.2017.07.003.
- Friedland K, Miles T, Goode A, Powell E, Brady D. 2022. The Middle Atlantic Bight Cold Pool is warming and shrinking: Indices from in situ autumn seafloor temperatures. *Fisheries Oceanography*. 31.
- Geo-Marine Inc. 2010. Department of Environmental Protection ocean/wind power ecological baseline studies, January 2008–December 2009. Final report. Plano (TX): New Jersey Department of Environmental Protection, Office of Science. 923 p. [accessed 2023 Jan 05]. <http://www.nj.gov/dep/dsr/ocean-wind/>.

- Gill A, Degraer S, Lipski A, Mavraki N, Methratta E, Brabant R. 2020. Setting the context for offshore wind development effects on fish and fisheries. *Oceanography*. 33(4):118-127. doi:10.5670/oceanog.2020.411.
- Gill A, Desender M. 2020. Risk to animals from electro-magnetic fields emitted by electric cables and marine renewable energy devices. 86-100. doi:10.2172/1633088.
- Golbazi M, Archer CL, Alessandrini S. 2022. Surface impacts of large offshore wind farms. *Environmental Research Letters*. 17(6): 064021.
- Greene KJ, Anderson GM, Odell J, Steinberg N. 2010. The northwest Atlantic marine ecoregional assessment: species, habitats and ecosystems. Phase one. Boston (MA): The Nature Conservancy, Eastern US Division. 460 p. [accessed 2022 Nov 28]. <http://www.conservationgateway.org/conservationbygeography/northamerica/unitedstates/edc/documents/namera-phase1-fullreport.pdf>.
- Grothues TM, Iwicky MC, Taghon LG, Borsetti S, Hunter E. 2021. Literature synthesis of NY Bight fish, fisheries, and sand features; volume 1: Literature synthesis and gap analysis. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. 114 p. Report No.: OCS Study BOEM 2021-036. [accessed 2022 Nov 28]. https://espis.boem.gov/final%20reports/BOEM_2021-036D.pdf.
- Guida V, Drohan A, Welch H, McHenry J, Johnson D, Kentner V, Brink J, Timmons D, Pessutti J, Fromm S, et al. 2017. Habitat mapping and assessment of northeast wind energy areas. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 312 p. Report No.: OCS Study BOEM 2017-088. <https://espis.boem.gov/final%20reports/5647.pdf>.
- Hale SS, Buffum WH, Kiddon JA, Hughes MM. 2017. Subtidal benthic invertebrates shifting northward along the US Atlantic Coast. *Estuaries and Coast*. (40):1744-1756.
- Harsanyi P, Scott K, Easton BAA, de la Cruz Ortiz G, Chapman ECN, Piper AJR, Rochas CMV, Lyndon AR. 2022. The Effects of Anthropogenic Electromagnetic Fields (EMF) on the Early Development of Two Commercially Important Crustaceans, European Lobster, *Homarus gammarus* (L.) and Edible Crab, *Cancer pagurus* (L.). *Journal of Marine Science and Engineering* 10(5).
- Hawkins A, Popper A. 2014. Assessing the impact of underwater sounds on the fishes and other forms of marine life. *Acoustics Today*. 30-41.
- Hawkins A, Popper AN. 2017. A sound approach to assessing the impact of underwater noise on marine fishes and invertebrates. *ICES Journal of Marine Science*. 74(3):635-651. [accessed 2023 Jan]. <https://academic.oup.com/icesjms/article/74/3/635/2739034>. doi:10.1093/icesjms/fsw205.
- HDR. 2020. Seafloor disturbance and recovery monitoring at the block island wind farm, Rhode Island- summary report. US Department of the Interior, Bureau of Ocean Energy Management, Office of

Renewable Energy Programs. Report No.: OCS Study BOEM 2020-019. [accessed 2022 Nov 20].
https://espis.boem.gov/final%20reports/BOEM_2020-019.pdf.

- Heck K, Able WK, Fahay PM, Roman TC. 1989. Fishes and decapod crustaceans of Cape Cod eelgrass meadows: Species composition, seasonal abundance patterns and comparison with unvegetated substrates. *Estuaries*. 12(2):59-65.
- Heimbuch D, Dunning D, Ross Q, A B. 2007. Assessing potential effects of entrainment and impingement on fish stocks of the New York–New Jersey Harbor Estuary and Long Island Sound. *Transactions of The American Fisheries Society*. 136(2007):492-508.
- Henderson D, Hu B, Bielefeld E. 2008. Patterns and mechanisms of noise-induced cochlear pathology. In: Popper AN, Fay RR, editors. *Auditory Trauma, Protection, and Repair*. New York: Springer. p. 195-217.
- Hendrick JV, Hutchison LZ, Last SK. 2016. Sediment burial intolerance of marine macroinvertebrates. *PLOS ONE*. 11(2):e0149114. doi:10.1371/journal.pone.0149114.
- Hinz H, Prieto V, Kaiser MJ. 2009. Trawl disturbance on benthic communities: Chronic effects and experimental predictions. *Ecological Applications*. 19(3):761-773.
- Hobbs CH, III. 2006. Field Testing of a Physical/Biological Monitoring Methodology for Offshore Dredging and Mining Operations. Marine Minerals Branch, Herndon, VA. Report No. MMS 2005-056. p.
- Hogan F, Hooker B, Jensen B, Johnson L, Lipsky A, Methratta E, Silva A, Hawkins A. 2023. Fisheries and offshore wind interactions: Synthesis of science. Woods Hole (MA): US Department of Commerce, National Oceanic and Atmospheric Administration. 388 p. Report No.: NOAA Technical Memorandum NMFS-NE-291.
- Holme C, Simurda M, Gerlach S, Bellmann M. 2023. Relation between underwater noise and operating offshore wind turbines. In: 6th International Conference on the Effects of Noise on Aquatic Life; 2022 Jul 10-15; Berlin, Germany. p 1-14. http://dx.doi.org/10.1007/978-3-031-10417-6_66-1. doi:10.1007/978-3-031-10417-6_66-1.
- Horwitz R, Miles TN, Munroe D, Kohut J. 2023. Overlap between the Mid-Atlantic Bight Cold Pool and offshore wind lease areas. *ICES Journal of Marine Science*. <https://doi.org/10.1093/icesjms/fsad190>.
- Hourigan TF, Etnoyer PJ, McGuinn RP, Whitmire CE, Dorfman DS, Dornback M, Cross SL, Sallis DE. 2015. An introduction to NOAA's National Database for deep-sea corals and sponges. Silver Spring (MD): US Department of Commerce, National Oceanic and Atmospheric Administration. 27 p. Report No.: NOAA Technical Memorandum NOS NCCOS 191.
- Hudson DM, Krumholz SJ, Pochtar N, Dickenson CN, Dossot G, Phillips G, Baker PE, T ME. 2022. Potential impacts from simulated vessel noise and sonar on commercially important invertebrates. *Peer Journal* e12841. doi:10.7717/peerj.12841.

- Hutchison LZ, Sigray P, Gill A, Michelot T, King J. 2021. Electromagnetic field impacts on American eel movement and migration from direct current cables. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. 150 p. Report No.: OCS Study BOEM 2021-83. [accessed 2022 Nov 28]. https://espis.boem.gov/final%20reports/BOEM_2021-083.pdf.
- Hutchison LZ, Gill A, Sigray P, He H, King J. 2020. Anthropogenic electromagnetic fields (EMF) influence the behaviour of bottom-dwelling marine species. *Scientific Reports* 10(1):4219.
- Hutchison LZ, Sigray P, He H, Gill A, King J, Gibson C. 2018. Electromagnetic field (EMF) impacts on elasmobranch (sharks, rays, and skates) and American lobster movement and migration from direct current cables. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. 254 p. Report No.: OCS Study BOEM 2018-003. [accessed 2022 Nov 29]. <https://espis.boem.gov/final%20reports/5659.pdf>.
- ICF. 2021. Comparison of Environmental Effects from Different Offshore Wind Turbine Foundations. Report No. OCS Study BOEM 2021-053. 48 p.
- Jézéquel Y, Cones S, Jensen FH, Brewer H, Collins J, Mooney TA. 2022. Pile driving repeatedly impacts the giant scallop (*Placopecten magellanicus*). *Scientific Reports* 12(1):15380.
- Johnson TL, Jon van Berkel J, Mortensen LO, Bell MA, Tiong I, Hernandez B, Snyder DB, Thomsen F, Petersen OS. 2021. Hydrodynamic modeling, particle tracking and agent-based modeling of larvae in the U.S. Mid-Atlantic Bight. Lakewood (CO): US Department of the Interior, Bureau of Ocean Energy Management. 232 p. Report No.: OCS Study BOEM 2021-049.
- Jones EL, Stanley JA, Mooney TA. 2020. Impulsive pile driving noise elicits alarm responses in squid (*Doryteuthis pealeii*). *Marine Pollution Bulletin*. 150(2020). doi:10.1016/j.marpolbul. 2019.110792.
- Jones IT, Peyla FJ, Clark H, Song Z, Stanley JA, Mooney TA. 2021. Changes in feeding behavior of longfin squid (*Doryteuthis pealeii*) during laboratory exposure to pile driving noise. *Marine of Environmental Research*. 165(2021).
- Jumars PA, Dorgan MK, Lindsay MS. 2015. An update of polychaeta feeding guilds. *Annual Review of Marine Science*. 7(2015):497-520. doi:10.1146/annurev-marine-010814-020007.
- Kaiser M, Collie J, Hall S, Jennings S, Poiner I. 2002. Modification of marine habitats by trawling activities: Prognosis and solutions. *Fish and Fisheries*. 3:114-136.
- Kerckhof F, Rumes B, Degraer S. 2019. About “mytilisation” and “slimeification”: A decade of succession of the fouling assemblages on wind turbines off the Belgian coast. In: Degraer S, Brabant R, Rumes B, Vigin L, editors. *Environmental impacts of offshore wind farms in the Belgian Part of the North Sea: marking a decade of monitoring, research and innovation*. Royal Belgian Institute of Natural Sciences. p. 73-84.

- Kraus C, Carter L. 2018. Seabed recovery following protective burial of subsea cables - Observations from the continental margin. *Ocean Engineering*. 157(2018):251-261. doi:10.1016/j.oceaneng.2018.03.037.
- Kritzer JP, DeLucia M, Greene E, Shumway C, Topolski MF, Thomas-Blate J, Chiarella LA, Davy KB, Smith K. 2016. The importance of benthic habitats for coastal fisheries. *BioScience*. 66(4):274-284. doi:10.1093/biosci/biw014.
- LaFrance BM, King JW, Oakley BA, Caccioppoli BJ. 2022. Post-Hurricane Sandy benthic habitat mapping at Fire Island National Seashore, New York, USA, utilizing the coastal and marine ecological classification standard (CMECS). *Estuaries and Coasts*. 45(4):1070-1094. doi:10.1007/s12237-022-01047-z.
- Lefaible N, Colson L, Braeckman U, Moens T. 2019. Evaluation of turbine-related impacts on macrobenthic communities within two offshore wind farms during the operational phase. In: Degraer S, Brabant R, Rumes B, Vigin L, editors. *Environmental impacts of offshore wind farms in the Belgian Part of the North Sea: marking a decade of monitoring, research and innovation*. Royal Belgian Institute of Natural Sciences.
- Lentz S. 2017. Seasonal warming of the Middle Atlantic Bight cold pool. *Journal of Geophysical Research: Oceans*. 122(2):941-954. doi:10.1002/2016JC012201.
- Lentz S, Butman B, Harris C. 2014. The vertical structure of the circulation and dynamics in Hudson Shelf Valley. *Journal of Geophysical Research: Oceans*. 119(6). doi:10.1002/2014JC009883.
- Li C, Coolen PW, Scherer L, Mogollon MJ, Braeckman U, Vanaverbeke J, Tukker A, Steubing B. 2023. Offshore wind energy and marine biodiversity in the North Sea: Life cycle impact assessment for benthic communities. *Environmental Science and Technology*. 57(16):6455-6464.
- Lindholm J, Auste P, Valentine P. 2004. Role of a large marine protected area for conserving landscape attributes of sand habitats on Georges Bank (NW Atlantic). *Marine Ecology Progress Series*. 269:61-68.
- Love M, Nishimoto M, Clark S, Bull AS. 2016. *Renewable Energy in situ power cable observation*. Camarillo (CA): US Department of the Interior, Bureau of Ocean Energy Management. 106 p.
- Mardiana R. 2011. Parameters affecting the ampacity of HVDC submarine power cables. p 1-6. doi: 10.1109/EPECS.2011.6126847
- Mattila J, Chaplin G, Eilers M, Heck K, O'Neal J, Valentine J. 1999. Spatial and diurnal distribution of invertebrate and fish fauna of a *Zostera marina* bed and nearby unvegetated sediments in Damariscotta River, Maine. *Journal of Sea Research*. 41(4):321-322. [accessed 2021 Dec 04]. <http://www.glerl.noaa.gov/pubs/fulltext/2008/20080053.pdf>.

- Mavraki N, Degraer S, Vanaverbeke J. 2021. Offshore wind farms and the attraction–production hypothesis: Insights from a combination of stomach content and stable isotope analyses. *Hydrobiologia*. 848(2021):1639-1657.
- Methratta ET, Silva A, Lipsky A, Ford K, Christel D, Pfeiffer L. 2023. Science priorities for offshore wind and Fisheries research in the northeast US Continental shelf ecosystem: perspectives from scientists at the National Marine Fisheries Service. *Frontiers in Marine Science*, 10 <https://doi.org/10.3389/fmars.2023.1214949>.
- Miatta M, Snelgrove PVR. 2022. Sea pens as indicators of macrofaunal communities in deep-sea sediments: Evidence from the Laurentian Channel Marine Protected Area. *Deep Sea Research Part I: Oceanographic Research Papers*. 182:103702. doi:10.1016/j.dsr.2022.103702.
- Middleton P, Barnhart B. 2022. Supporting National Environmental Policy Act documentation for offshore wind energy development related to high voltage direct current cooling systems. Washington (DC): US Department of the Interior, Bureau of Ocean Energy Management. 13 p. Report No.: OCS Study BOEM 2022-023.
- Miles T, Murphy S, Kohut J, Borsetti S, Munroe D. 2021. Offshore wind energy and the Mid-Atlantic cold pool: a review of potential interactions. *Marine Technology Society Journal*. 55(4):72-87. doi:10.4031/MTSJ.55.4.8.
- MMS. 2007a. Gulf of Mexico OCS oil and gas lease sales: 2007-2012. Western Planning Area sales 204, 207, 210, 215, and 218; Central Planning Area sales 205, 206, 208, 213, 216, and 222. Final environmental impact statement. New Orleans (LA): US Department of the Interior, Minerals Management Service. 1095 p. Report No.: OCS EIS/EA MMS 2007-018.
- MMS. 2007b. Programmatic environmental impact statement for alternative energy development and production and alternate use of facilities on the Outer Continental Shelf: Final environmental impact statement. US Department of the Interior. 114 p. Report No.: OCS EIS/EA MMS 2007-046. <http://www.boem.gov/renewable-energy/guide-ocs-alternative-energy-final-programmatic-environmental-impact-statement-eis>.
- Munroe D, Narvaez D, Hennan D, Jacobson L, Mann R, Hofmann EE, Powell EN, Klinck MJ. 2016. Fishing and bottom water temperature as drivers of change in maximum shell length in Atlantic surfclams (*Spisula solidissima*). *Estuarine, Coastal and Shelf Science*. 170(2016):112-122. doi:10.1016/j.ecss.2016.01.009.
- National Academies of Sciences, Engineering, and Medicine. 2023. Potential Hydrodynamic Impacts of Offshore Wind Energy on Nantucket Shoals Regional Ecology: An Evaluation from Wind to Whales. Washington, DC: The National Academies Press. <https://doi.org/10.17226/27154>.
- [NOS] National Ocean Service. 2015. NOAA/NOS and USCGS seabed descriptions from hydrographic surveys. [accessed 2022 Nov 15]. <https://www.ncei.noaa.gov/products/nos-hydrographic-survey>.

- [NEFSC] Northeast Fisheries Science Center and [NMFS] National Marine Fisheries Service. 2016. Draft omnibus essential fish habitat amendment 2 EFH and HAPC designation alternatives and environmental impacts. Newburyport (MA): Northeast Fisheries Science Center and National Marine Fisheries Service. 452 p. [accessed 2022 Dec 15]. https://s3.us-east-1.amazonaws.com/nefmc.org/OA2-FEIS_Vol_2_FINAL_171025.pdf.
- New York Natural Heritage Program. 2023. Online conservation guide for marine eelgrass meadow. New York Natural Heritage Program. [accessed 2023 Mar 04]. <https://guides.nynhp.org/marine-eelgrass-meadow/>.
- Nilsson H, Rosenberg R. 2003. Effects on marine sedimentary habitats of experimental trawling analyzed by sediment profile imagery. *Journal of Experimental Marine Biology and Ecology*. 285-286(2003):453-463.
- NJDEP. 2021. Location of New Jersey artificial reefs. Trenton (NJ): New Jersey Department of Environmental Protection, Division of Fish and Wildlife. [accessed 2022 Nov 28]. <https://www.nj.gov/dep/fgw/artreef.htm>.
- NOAA. 2023. NOAA deep-sea coral and sponge map portal US Department of Commerce, NOAA Deep-Sea Coral Research and Technology Program. [accessed 2023 Sep 19]. <https://www.ncei.noaa.gov/maps/deep-sea-corals/mapSites.htm>.
- NOAA. n.d. NOAA ocean exploration facts. How do hurricanes impact the deep ocean? US Department of Commerce, National Oceanic and Atmospheric Administration. [accessed 2023 Sep 21]. <https://oceanexplorer.noaa.gov/facts/hurricane-impact.html>.
- Nordfjord S, Goff JA, Austin Jr JA, Duncan LS. 2009. Shallow stratigraphy and complex transgressive ravinement on the New Jersey middle and outer continental shelf. *Marine Geology*. 266(1-4):232-243.
- NEFSC [Northeast Fisheries Science Center]. 2017. Northeast regional stock assessment workshop (61st SAW) assessment report. Woods hole (MA): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northeast Fisheries Science Center. 466 p. Report No.: Northeast Fish Sci Cent Ref Doc. 17-05. [accessed 2022 Nov 28]. <https://repository.library.noaa.gov/view/noaa/13204>.
- [NROC] Northeast Regional Ocean Council. 2022. Northeast ocean data portal. Final Recommendations for USCG port access route study for Northern New York Bight. Northeast Regional Ocean Council. 4 p. [accessed 2022 Dec 01]. <https://www.northeastoceandata.org/final-recommendations-from-uscg-port-access-route-study-for-northern-new-york-bight/>.
- [NYDOS] New York Department of State. 2013. New York Department of State offshore Atlantic Ocean study. Albany (NY): 144 p. [accessed 2022 Dec 01]. https://dos.ny.gov/system/files/documents/2020/08/ny_dos_offshore_atlantic_ocean_study-compressed.pdf.

- New York State Coastal Management Program. 2020. 309 assessment and strategies Jul 1, 2021 through June 20, 2025. New York State Coastal Management Program. 165 p. [accessed 2023 Sep 21]. <https://dos.ny.gov/system/files/documents/2021/06/nys-2021-5-yr-assessment-and-strategy.pdf>.
- NYSDEC. 2021. NYSDEWC statewide seagrass map. New York State Department of Environmental Conservation. <https://www.arcgis.com/home/item.html?id=12ba9d56b75d497a84a36f94180bb5ef>.
- NYSDEC. 2022. Artificial reef locations. Albany (NY): New York State, Department of Conservation. [accessed 2022 Nov 28]. <https://www.dec.ny.gov/outdoor/71702.html#Map>.
- NYSDEC. n.d. New York State artificial reef guide. New York State Department of Environmental Conservation. 44 p. [accessed 2022 Nov 28]. https://www.dec.ny.gov/docs/fish_marine_pdf/dmrreefguide.pdf.
- NYSERDA. 2017a. New York State offshore wind master plan. 60 p. Report No.: NYSERDA Report 17-25b. [accessed 2023 Mar 10]. <https://www.nyserdera.ny.gov/All-Programs/Offshore-Wind/About-Offshore-Wind/Master-Plan>.
- NYSERDA. 2017b. New York State offshore wind master plan; fish and fisheries study. New York (NY): New York State Energy Research and Development Authority. 202 p. Report No.: NYSERDA Report 17-25j. [accessed 2022 Nov 29]. <https://www.nyserdera.ny.gov/All-Programs/Offshore-Wind/About-Offshore-Wind/Master-Plan>.
- NYSERDA. 2022. Draft offshore wind cable corridor constraints assessment. WSP USA. Report No.: NYSERDA Contract 155565.
- Ocean Wind LLC. 2022. Construction and operations plan, Ocean Wind Offshore Wind Farm. US Department of Interior, Bureau of Ocean Energy Management. 169 p. Report No.: Volumes I-III. <https://www.boem.gov/ocean-wind-construction-and-operations-plan/>.
- Office of Response and Restoration. 2023. NY/NJ metro area, Hudson River, and South Long Island 2016 BENTHIC polygons from 2010-06-15 to 2010-08-15. US Department of Commerce, NOAA National Centers for Environmental Information. 57 p. [accessed 2023 Sep 15]. <https://www.fisheries.noaa.gov/inport/item/51890>.
- Orth RJ. 1984. Faunal communities in seagrass beds: A review of the influence of plant structure and prey characteristics on predator-prey relationships. *Estuaries*. 7(4):339-350.
- Payne JF, Andrews AC, Fancey LL, Cook LA, Christian RJ. 2007. Pilot study on the effects of seismic air gun noise on lobster (*Homarus americanus*). Newfoundland (Canada): National Energy Board for the Minister of Natural Resources Canada. 34 p. Report No.: Environmental Studies Research Funds Report No. 171.
- Pederson J, Carlson TJ, Bastidas C, David A, Grady S, Green-Gavrielidis L, Hobbs N, Kennedy C, Knack J, McCuller M, et al. 2021. 2019 rapid assessment survey of marine bioinvasions of southern New

- England and New York, USA, with an overview of new records and range expansions. *BiolInvasions Records*. 10(2):227-237. doi:10.3391/bir.2021.10.2.01.
- Pezy J, Raoux A, Marmin S, Balay P, Dauvin J. 2018. What are the most suitable indices to detect the structural and functional changes of benthic community after a local and short-term disturbance? *Ecological Indicators*. 91(2018):232-240. doi:10.1016/j.ecolind.2018.04.009.
- Pitcher CR, Hiddink JG, Jennings S, Collie J, Parma AM, Amoroso R, Mazor T, Sciberras M, McConnaughey RA, Rijnsdorp AD, et al. 2022. Trawl impacts on the relative status of biotic communities of seabed sedimentary habitats in 24 regions worldwide. *Proceedings of the National Academy of Sciences*. 119(2):e2109449119. doi:10.1073/pnas.2109449119.
- Pohle GW, Thomas M. 2001. Monitoring protocol for marine benthos: Intertidal and subtidal macrofauna. Report by the Marine biodiversity Monitoring Committee (Atlantic Marine Ecological Science Cooperative, Huntsman Marine Science Centre) to the Ecological Monitoring and Assessment network of Environment Canada. Marine Biodiversity Monitoring. <http://www.biomareweb.org/downloads/mbm.pdf>.
- Popper AN, Hawkins AD. 2018. The importance of particle motion to fishes and invertebrates. *Journal of the Acoustical Society of America*. 143(1):470-488. <https://www.ncbi.nlm.nih.gov/pubmed/29390747>. doi:10.1121/1.5021594.
- Posey M, Lindberg W, Alphin T, Vose F. 1996. Influence of storm disturbance on an offshore benthic community. *Bulletin of Marine Science*. 59(3):523-529.
- Powell EN, Ewing MA, Kuykendall MK. 2020. Ocean quahogs (*Arctica islandica*) and Atlantic Surfclams (*Spisula solidissima*) on the Mid-Atlantic Bight continental shelf and Georges Bank: The death assemblage as a recorder of climate change and the reorganization of the continental shelf benthos. *Paleogeography, Palaeoclimatology, Paleoecology*. doi:10.1016/j.palaeo.2019.05.027.
- Raoux A, Tecchio S, Pezy J, Lassalle G, Degraer S, Wilhelmsson S, Cachera M, Ernande B, Le Guen C, Haraldsson M, et al. 2017. Benthic and fish aggregation inside an offshore wind farm: Which effects on the trophic web functioning? *Ecological Indicators*. 72:33-46. doi:10.1016/j.ecolind.2016.07.037.
- Robinson PS, Lepper PA, Ablitt J. 2007. The measurement of the underwater radiated noise from marine piling including Characterization of a “soft start” period. In: *Proceedings of Oceans 2007*; 6 p.
- Rutecki D, Dellapenna T, Nestler E, Scharf F, Rooker J, Glass C, Pembroke A. 2014. Understanding the habitat value and function of shoals and shoal complexes to fish and fisheries on the Atlantic and Gulf of Mexico Outer Continental Shelf. US Department of the Interior, Bureau of Ocean Energy Management. 176 p. Report No.: BOEM 2015-012. [accessed 2022 Nov 28]. <https://espis.boem.gov/final%20reports/5456.PDF>.

- Sciberras M, Parker R, Powell C, Robertson C, Kroger S, Bolam S, Hiddin J. 2016. Impacts of bottom fishing on the sediment infaunal community and biogeochemistry of cohesive and non-cohesive sediments. *Limnology and Oceanography*. 61(2016):2076-2089. doi:10.1002/lno.10354.
- Sharples M. 2011. Offshore electrical burial for wind farms: State of the art, standards and guidance and acceptable burial depths, separation distances and sand wave effect. US Department of the Interior, Bureau of Ocean Energy Management, Regulation & Enforcement. 220 p.
- Sigray P., Linné M, Andersson M, Nöjd A, Persson L, Gill, Thomsen F. 2022. Particle motion observed during offshore wind turbine piling operation. *Marine Pollution Bulletin* 180:113734.
- Slacum HW, Burton H, Methratta E, Weber ED, Llanso RJ, Dre-Baxter J. 2010. Assemblage structure in shoal and flat-bottom habitats on the inner continental shelf of the Middle Atlantic Bight, USA. Minerals Management Service. Report No.: MMS 1435-01-00-CT-85060. [accessed 2011 Jan 09].
- Slavik K, Lemmen C, Zhang W, Kerimoglu O, Klingbeil K, Wirtz WK. 2019. The large-scale impact of offshore wind farm structures on pelagic primary productivity in the southern North Sea. *Hydrobiologia*. 845(1):35-53.
- Smit MG, Holhaus IK, Trannum CH, Neff MJ, Kjeilen-Eilersten G, Jak GR, Singsass I, Huijbregts M, Hendriks JA. 2008. Species sensitivity distributions for suspended clays, sediment burial, and grain size change in the marine environment. *Environmental Toxicology and Chemistry*. 27(4):1006-1112. doi:10.1897/07-339.1.
- Smith J, Lowry M, Champion C, Suthers I. 2016. A designed artificial reef is among the most productive marine fish habitats: New metrics to address 'production versus attraction'. *Marine Biology*. 163. <http://www.famer.unsw.edu.au/publications/Smith2016a.pdf>. doi:10.1007/s00227-016-2967-y.
- Staudinger MD, Goyert H, Suca JJ, Coleman K, Welch L, Llopiz JK, Wiley D, Altman I, Applegate A, Auster P. 2020. The role of sand lances (*Ammodytes* sp.) in the Northwest Atlantic Ecosystem: A synthesis of current knowledge with implications for conservation and management. *Fish and Fisheries* 21(3):522-556.
- Steimle F, Zetlin C. 2000. Reef habitats in the Middle Atlantic Bight: abundance, distribution, associated biological communities, and fishery resource use. *Marine Fisheries Review*. 62.
- Stewart Van Pattn M, Yarish C. 2009. Seaweeds of Long Island Sound. 107 p. [accessed 2023 May 24]. <http://digitalcommons.conncoll.edu/arbbulletins/40>.
- Sunrise Wind LLC. 2022. Sunrise Wind Farm project construction and operations plan. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. [accessed 2023 Sept 18]. https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/SRW01_COP_Rev3_2022-08-19_508_0.pdf

- Taormina B, Bald J, Want A, Thouzeau G, Lejart M, Desroy N, Carlier A. 2018. A review of potential impacts of submarine power cables on the marine environment: Knowledge gaps, recommendations and future directions. *Renewable and Sustainable Energy Reviews*. 96:380-391.
https://www.researchgate.net/publication/327079114_A_review_of_potential_impacts_of_submarine_power_cables_on_the_marine_environment_Knowledge_gaps_recommendations_and_future_directions. doi:10.1016/j.rser.2018.07.026. hal-02405630.
- Tarr M, Zito P, Overton E, Olson G, Adhikari P, Reddy C. 2016. Weathering of oil spilled in the marine environment. *Oceanography*. 29(2016):126-135.
- Tetra Tech Inc. 2015. USCG final environmental impact statement for the Port Ambrose Project deepwater port application. Washington (DC): US Coast Guard Vessel and Facility Operating Standards. 549 p. Report No.: USCG-2013-0363.
- Tetra Tech Inc. 2021. Benthic resources characterization reports. Appendix T for Empire Offshore Wind: Empire Wind Project (EW1 and EW2) construction and operations plan. 841 p.
- Tetra Tech and Normandeau Associates Inc. 2023. SouthCoast Wind – National Pollutant Discharge Elimination System (NPDES) permit application. Prepared for SouthCoast Wind Energy LLC. April 2023.
- Thayer GW, Kenworthy W, Judson W, Fonesca MS, Pendleton E. 1984. Ecology of eelgrass meadows of the Atlantic Coast. 167 p. Report No.: FWS/OBS-84/02: 147.
- Thomsen F, Gill A, Kosecka M, Andersson M, Andre M, Degraer S, Folegot J, Gabriel J, Judd A, Neumann T, et al. 2016. Environmental impacts of noise, vibrations, and electromagnetic emissions from marine renewable energy. 82 p.
- Thrush SF, Dayton PK. 2002. Disturbance to marine benthic habitats by trawling and dredging: Implications for marine biodiversity. *Annual Review of Ecology and Systematics*. 33(1):449-473.
- Tougaard J, Hermannsen L, Madsen PT. 2020. How loud is the underwater noise from operating offshore wind turbines? *Journal of the Acoustical Society of America*. 148(5):2885.
<https://www.ncbi.nlm.nih.gov/pubmed/33261376>. doi:10.1121/10.0002453.
- Tranum CH, Nilsson H, Schaainning TM, Oxnevad S. 2010. Effects of sedimentation from water-based drill cuttings and natural sediment on benthic macrofaunal community structure and ecosystem processes. *Journal of Experimental Biology and Ecology*. 383(2010):111-121.
doi:10.1016/j.jembe.2009.12.004.
- USCG. 2011. Table 386: oil spills in U.S. water-number and volume. Pollution incidents in and around U.S. waters, a spill/release compendium: 1969–2004 and 2004–2009. US Coast Guard Marine Information for Safety and Law Enforcement (MISLE) System. 5 p. [accessed 2021 Aug 05].
<https://www2.census.gov/library/publications/2011/compendia/statab/131ed/tables/12s0386.xls>.

- [USGS] US Geological Survey. n.d. U.S. Geological Survey data series 118, usSEABED: Atlantic Coast Offshore surficial sediment data release, version 1.0. [accessed 2022 Dec 15]. http://pubs.usgs.gov/ds/2005/118/html/docs/data_cata.htm.
- Van Berkel J, Burchard H, Christenson A, Mortensen L, Svenstrup Petersen O, Thomsen F. 2020. The effects of offshore wind farms on hydrodynamics and implications for fishes. *Oceanography*. 33(4):108-117.
- Veirs S, Viers V, Wood D. 2016. Ship nose extends to frequencies used for echolocation by endangered killer whales. *Peer Journal* 4:e1657. doi:10.7717/peerj.
- Vincent C, Swift P, Hillard B. 1981. Sediment transport in the New York Bight, North American Atlantic Shelf. *Marine Geology*. 42:369-398. [accessed 2023 Mar 08]. <https://www.sciencedirect.com/science/article/abs/pii/0025322781901717?via%3Dihub#preview-section-abstract>. doi:10.1016/0025-3227(81)90171-7.
- Wilber DH, Clarke DG. 2007. Defining and assessing benthic recovery following dredging and dredged material disposal. Lake Buena Vista (FL): World Dredging Congress. 16 p. [accessed 2023 Sep 21]. https://www.westerndredging.org/phocadownload/ConferencePresentations/2007_WODA_Florida/Session3D-EnvironmentalAspectsOfDredging/3%20-%20Wilber%20-%20Defining%20Assessing%20Benthic%20Recovery%20Following%20Dredged%20Material%20Disposal.pdf.
- Williams JS, Arsenault AM, Poppe IL, Reid MJ, Reid AJ, Jenkins JC. 2007. Surficial sediment character of the New York-New Jersey offshore continental shelf region: Aa GIS compilation. Reston (VA): 74 p. Report No.: 2006-1046.
- Woods Hole Group. 2021. Sunrise Wind Farm converter station intake zone of influence & thermal discharge modeling report. Woods Hole (MA): Woods Hole Group. 40 p. https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/SRW01_COP_AppBB_HZI_Thermal%20Discharge_2022-04-08_508.pdf.
- Zhang Z, Capinha C, Karger ND, Turon X, MacIsaac JH, Zhan A. 2020. Impacts of climate change on geographical distributions of invasive ascidians. *Marine Environmental Research*. 159.
- Zieman JC. 1982. Ecology of the seagrasses of south Florida: A community profile. Charlottesville (VA): Virginia University. 165 p. Report No.: FWS/OBS-82/25.

K.4.6 Section 3.5.3, Birds

- Adams EM, Chilson BP, Williams AK. 2015. Using WSR-88 weather radar to identify patterns of nocturnal avian migration in the offshore environment. Portland (ME): 37 p. Report No.: BRI 2015-11.
- BOEM. 2012. Commercial wind lease issuance and site assessment activities on the Atlantic Outer Continental Shelf offshore New Jersey, Delaware, Maryland, and Virginia, Final Environmental

- Assessment. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 336 p. Report No.: OCS EIS/EA BOEM 2012-003.
http://www.boem.gov/sites/default/files/uploadedFiles/BOEM/Renewable_Energy_Program/Smart_from_the_Start/Mid-Atlantic_Final_EA_012012.pdf.
- BOEM. 2014a. Atlantic OSC proposed geological and geophysical activities: Mid-Atlantic and South Atlantic planning areas final programmatic environmental impact statement. New Orleans (LA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 788 p. Report No.: OCS EIS/EA BOEM 2014-001. [accessed 2021 Oct 13].
<https://www.boem.gov/oil-gas-energy/atlantic-geological-and-geophysical-gg-activities-programmatic-environmental-impact>.
- BOEM. 2014b. Commercial wind lease issuance and site assessment activities on the Atlantic Outer Continental Shelf Offshore Massachusetts: Revised environmental assessment. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 674 p. Report No.: OCS EIS/EA BOEM 2014-603. [accessed 2021 Oct 13].
<https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/Revised-MA-EA-2014.pdf>.
- BOEM. 2016. Commercial wind lease issuance and site assessment activities on the Atlantic Outer Continental Shelf Offshore New York: environmental assessment. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 352 p. Report No.: OCS EIS/EA BOEM 2016-042. [accessed 2021 Oct 13].
<https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/NY/NY-Public-EA-June-2016.pdf>.
- Briggs KT, Gershwin EM, Anderson WD. 1997. Consequences of petrochemical ingestion and stress on the immune system of seabirds. *ICES Journal of Marine Science*. 54(1997):718-725.
<https://academic.oup.com/icesjms/article/54/4/718/607510>.
- Bruderer B, Leitchi F. 1999. Bird migration across the Mediterranean. In: Proceedings of the 22nd International Ornithological Congress; Durban, Johannesburg, South Africa. 1983-1999 p.
- Buehler D. 2000. Bald eagle (*Haliaeetus leucocephalus*). The Cornell Lab of Ornithology.
- Causon P, Gill AB. 2018. Linking ecosystem services with epibenthic biodiversity change following installation of offshore wind farms. *Environmental Science & Policy*. 89(2018):340-347.
<https://www.sciencedirect.com/science/article/pii/S1462901118304556/pdf?md5=b728b2b7a9e61e28e5901a5806772e71&pid=1-s2.0-S1462901118304556-main.pdf>.
- Cook ASCP, Burton NHK. 2010. A review of potential impacts of marine aggregate extraction and seabirds. Marine Environmental Protection Fund Project. 114 p. [accessed 2022 Feb 25].
https://www.bto.org/sites/default/files/shared_documents/publications/research-reports/2010/rr563.pdf.

- Cornell University. 2019. Golden eagle identification. 5 p. [accessed 2021 Aug 19].
https://www.allaboutbirds.org/guide/Golden_Eagle/id.
- Curtice C, Cleary J, Schumchenia E, Halpin P. 2016. Marine-life data and analysis team (MDAT) technical report on the methods and development of marine-life data to support regional ocean planning and management. Marine-Life Data and Analysis Team. 81 p.
- Deluca WV, Woodworth KB, Rimmer CC, Marra PP, Taylor DP, McFarland PK, Mackenzie AS, Norris RD. 2015. Transoceanic migration by a 12 g songbird. 4 p.
- Desholm M, Kahlert J. 2005. Avian collision risk at an offshore wind farm. *Biology Letters*. 3:296-298. doi:10.1098/rsbl.2005.0336.
- DeSorbo CR, Persico C, Gilpatrick L. 2018. Studying migrant raptors using the Atlantic Flyway. Block Island Raptor Research Station, Block Island, RI: 2017 season. 41 p.
- DeSorbo CR, Wright GK, Gray R. 2012. Bird migration stopover sites: Ecology of nocturnal and diurnal raptors at Monhegan Island. 48 p. <http://www.briloon.org/raptors/monhegan>.
- Dolbeer RA, Begier M, Miller RP, Weller RJ, Anderson LA. 2019. Wildlife strikes to civil aircraft in the United States. Federal Aviation Administration National Wildlife Strike Database. 95 p. Report No.: 25.
- Drewitt A, Rowena H, Langston W. 2006. Assessing the impacts of wind farms on Birds. *Ibis*. 148(2006):29-42. doi:10.1111/j.1474-919X.2006.00516.x.
- eBird. 2024. Species Maps: Bald Eagle. [accessed 2024 April 12].
<https://ebird.org/map/baleag?neg=true&env.mi%20nX=&env.minY=&env.maxX=&env.maxY=&zh=false&gp=false&ev=Z&excludeExX=false&ex%20cludeExAll=false&mr=1-%2012&bmo=1&emo=12&yr=all&byr=1900&eyr=2%2024>.
- English PA, Mason T, Backstrom JT, Tibbles JB, Mackay AA, Smith MJ, Mitchell T. 2017. Improving efficiencies of National Environmental Policy Act documentation for offshore wind facilities case studies report. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 296 p. Report No.: OCS Study BOEM 2017-026.
<https://tethys.pnnl.gov/sites/default/files/publications/English-et-al-2017-BOEM.pdf>.
- Faaborg J, Holmes TR, Anders DA, Bildstein LK, Dugger MK, Gauthreaux AS, Heglund P, Hobson AK, Jahn EA, Johnson HD, et al. 2010. Recent advances in understanding migration systems of new world land birds. *Ecological Monographs*. 80:3-48. doi:10.1890/09-0395.1.
- Fox AD, Desholm M, Kahlert J, Christensen T, Peterson I. 2006. Information needs to support environmental and impact assessment of the effects of European marine offshore wind farms on birds. *Ibis*. 148:129-144.
- Fox AD, Peterson K. 2019. Offshore wind farms and their effects on birds. 113:86-101.

- Furness B, Wade H. 2012. Vulnerability of Scottish seabirds to offshore wind turbines. Marine Scotland Report. 40 p. [accessed 2020 Sept 23].
- Furness B, Wade H, Masden E. 2013. Assessing vulnerability of marine bird populations to offshore wind farms. *Journal of Environmental Management*. 119:56-66.
- Garthe S, Huppopp O. 2004. Scaling possible adverse effects of marine wind farms on seabirds: developing and applying a vulnerability index. *Journal of Applied Ecology*. 41:724-734.
- Gauthreaux AS, Belser GC. 1999. Bird migration in the region of the Gulf of Mexico. In: Adams NJ, Slotow HR, editors. *Proceedings of the 22nd International Ornithological Congress*; Durban, Johannesburg, South Africa. 1931-1947 p.
- Goodale M, Millman W, Millman A. 2016. Cumulative adverse effects of offshore wind energy development on wildlife. *Journal of Environmental Planning and Management*. 59(1):1-29. doi:10.1080/09640568.2014.973483.
- Gray CE, Gilbert TA, Stenhouse JJ, Berlin MA. 2016. Occurrence patterns and migratory pathways of Red-throated Loons wintering in the offshore Mid-Atlantic. In: *Determining fine-scale use and movement patterns of diving bird species in federal waters of the Mid-Atlantic United States using satellite telemetry*. Spiegel CS, Berlin, AM, Gilbert AT, Gray CO, Montevecchi WA, Stenhouse JJ, Ford SL, Olsen GH, Fiely JL, Savoy L, Goodale MW, Burke CM, editors. US Department of the Interior, Bureau of Ocean Energy Management. 2012-2016 p. Report No.: BOEM 2017-069.
- Haney JC, Jodice P, Montevecchi AW, Evers CD. 2017. Challenges to oil spill assessments for seabirds in the deep ocean. *Archive of Environmental Contamination and Toxicology*. 73:33-39. [accessed 2023 Jan]. https://ncbi.nlm.nih.gov/pmc/articles/PMC5511315/pdf/244_2016_Article_355.pdf.
- Hatch J. 2017. Comprehensive estimates of seabird-fishery interactions for the U.S. Northeast and Mid-Atlantic. *Aquatic Conservation: Marine and Freshwater Ecosystems*. 28(1):182-193.
- Hatch SK, Connelly EE, Divoll JT, Stenhouse JJ, Williams AK. 2013. Offshore observations of eastern red bats (*Lasiurus borealis*) in the Mid-Atlantic United States using multiple survey methods. *PLOS ONE*. 8:83803. doi:10.1371/journal.pone.0083803.
- Hüppop O, Dierschke J, Exo K, Frerich E, Hill R. 2006. Bird migration and potential collision risk with offshore wind turbines. *Ibis*. 148:90-109. [accessed 2023 Jan]. https://www.researchgate.net/publication/227769181_Bird_migration_studies_and_potential_collision_risk_with_wind_turbines.
- Johnston A, Cook A, Wright JL, Humphreys ME, Burton KN. 2014. Modeling flight heights of marine birds to more accurately assess collision risk with offshore wind turbines. *Journal of Applied Ecology*. 51:31-41.
- Kerlinger P. 1985. Water-crossing behavior of raptors during migration. *Wilson Bulletin*. 97:109-113.

- Kerlinger P, Gehring LJ, Erickson WP, Curry R, Jain A, Guarnaccia J. 2010. Night migrant fatalities and obstruction lighting at wind turbines in North America. *The Wilson Journal of Ornithology*. 122:744-754.
- Liang Y, I Rudik, EY Zou, A Johnston, AD Rodewald, and CL Kling. 2020. Conservation cobenefits from air pollution regulation: Evidence from birds. *Proceedings of the National Academy of Sciences*. 117 (49) 30900-30906. [Accessed 2024 June 19].
<https://www.pnas.org/doi/epdf/10.1073/pnas.2013568117>
- Madsen AM, Reeve R, Desholm M, Fox AD, Furness WR, Haydon TD. 2012. Assessing the impact of marine wind farms on birds through movement modeling. 15 p.
- Maggini I, Kennedy VL, Macmillan A, Elliot HK, Dean K, Guglielmo GC. 2017. Light oiling of feathers increases flight energy expenditure in a migratory shorebird. *Journal of Experimental Biology*. 220:2372-2379. <https://journals.biologists.com/jeb/article-pdf/220/13/2372/1896963/jeb158220.pdf>.
- MMS. 2007. Programmatic environmental impact statement for alternative energy development and production and alternate use of facilities on the Outer Continental Shelf: Final environmental impact statement. US Department of the Interior. 114 p. Report No.: OCS EIS/EA MMS 2007-046.
<http://www.boem.gov/renewable-energy/guide-ocs-alternative-energy-final-programmatic-environmental-impact-statement-eis>.
- Morris SR, Richmond EM, Holmes WD. 1994. Patterns of stopover by warblers during spring and fall migration on Appledore Island, Maine. *Wilson Bulletin*. 106:703-718.
- New York Natural Heritage Program. 2022. Online conservation guide for *Haliaeetus leucocephalus*. 14 p. [accessed 2022 Dec 20]. <https://guides.nynhp.org/bald-eagle/>.
- NJDEP. n.d. Bald eagle (*Haliaeetus leucocephalus*). New Jersey Division of Fish and Wildlife, Endangered and Nongame Species Program. 2 p. [accessed 2022 Dec 20].
<https://www.nj.gov/dep/fgw/ensp/pdf/end-threatened/baldeagle.pdf#:~:text=New%20Jersey%20bald%20eagles%20reside%20year-round%2C%20usually%20remaining,nearly%20any%20direction%20before%20returning%20to%20our%20area>.
- Normandeau Associates Inc. 2022. Remote marine and onshore technology, NYSERDA metocean buoys data. 1 p. [accessed 2022 Dec 20].
https://remote.normandeau.com/portal_buoy_data.php?pj=21&public=1.
- [NABCI] North American Bird Conservation Initiative. 2016. The state of birds 2016: Report on public lands and waters. Washington (DC): US Department of the Interior. 8 p. [accessed 2020 Sep 01].
<https://www.stateofthebirds.org/2016/wpcontent/uploads/2016/05/SoNAB-ENGLISH-web.pdf>.

- Northeast Ocean Data. 2022. Northern gannet, red throated loon, surf scoter- winter, spring, and fall migration utilization distribution. 3 p. [accessed 2022 Dec 16]. <https://www.northeastoceandata.org/data-explorer/>.
- NYSDERDA. 2022. Geographic Information System (GIS) of digital aerial baseline survey of marine wildlife in support of offshore wind energy. New York State Energy Research and Development Authority. 1 p. [accessed 2022 Dec 6]. <https://seamap.env.duke.edu/dataset/2073>.
- Paleczny M, Hammill E, Karpouzi V, Pauly D. 2015. Population trend of the world's monitored seabirds, 1950-2010. PLOS ONE. 10(6):e0129342. <https://doi.org/10.1371/journal.pone.0129342>. doi:10.1371/journal.pone.0129342.
- Paruk JD, Adams EM, Uher-Koch H, Kovach AK, Long D, Perkins C, Schoch N, Evers CD. 2016. Polycyclic aromatic hydrocarbons in blood related to lower body mass in common loons. Science of the Total Environment. 565:360-368. <https://www.sciencedirect.com/science/article/abs/pii/S0048969716308531>.
- Pezy J, Raoux A, Dauvin J, Degraer S. 2018. An ecosystem approach for studying the impact of offshore wind farms: a French case study. ICES Journal of Marine Science. [accessed 2018 Sep 12].
- Plonczkier P, Simms CI. 2012. Radar monitoring of migrating pink-footed geese: Behavioral responses to offshore wind farm development. Journal of Applied Ecology. 49:1187-1194.
- Raoux A, Tecchio S, Pezy J, Lassalle G, Degraer S, Wilhelmsson S, Cachera M, Ernande B, Le Guen C, Haraldsson M, et al. 2017. Benthic and fish aggregation inside an offshore wind farm: Which effects on the trophic web functioning? Ecological Indicators. 72:33-46. doi:10.1016/j.ecolind.2016.07.037.
- Regular P, Montevecchi AW, Hedd A, Roberson G, Wilhelm S. 2013. Canadian fisheries closure provides a large-scale test of the impact of gillnet bycatch on seabird populations. Biology Letters. 9(4):20130088. [accessed 2020 Sep 01]. <https://royalsocietypublishing.org/doi/pdf/10.1098/rsbl.2013.0088>. doi:10.1098/rsbl.2013.0088.
- Roberts AJ. 2019. Atlantic flyway harvest and population survey data book. Laurel (MD): US Fish and Wildlife Service. 47 p.
- Robinson Willmott J, Forcey G, Kent A. 2013. The relative vulnerability of migratory bird species to offshore wind energy projects on the Atlantic Outer Continental Shelf: An assessment method database. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. Report No.: OCS Study BOEM 2013-207. [accessed 2020 Sep 07]. <https://espis.boem.gov/final%20reports/5319.pdf>.
- Roman L, Hardesty DB, Hindell AM, Wilcox C. 2019. A quantitative analysis linking seabird mortality and marine debris ingestion. Scientific Reports. 9(1):1-7. <https://www.nature.com/articles/s41598-018-36585-9>.

- Schwemmer P, Mercker M, Haecker K, Kruckenberg H, Kampfer S, Bocher P, Fort J, Jiguet F, Franks S, Elts J, et al. 2023. Behavior responses to offshore windfarms during migration of a declining shorebird species revealed by GPS-telemetry. *Journal of Environmental Management*. 342 p.
- Sigourney D, Orphanides C, Hatch J. 2019. Estimates of seabird bycatch in commercial fisheries off the East Coast of the United States from 2015-2016. Woods Hole (MA): 27 p. Report No.: NMFS-NE-252. <https://repository.library.noaa.gov/view/noaa/23022>.
- Skov H, Heinanen S, Norman T, Ward MR, Mendez-Roldan S, Ellis I. 2018. ORJIP bird collision and avoidance study. United Kingdom: The Carbon Trust. 248 p.
- Spiegel S, Berlin MA, Gilbert TA, Gray OC, Montevecchi AW, Stenhouse JJ, Ford LS, Olsen HG, Fiely LJ, Savoy L, et al. 2017. Determining finescale use and movement patterns of diving bird species in federal waters of Mid-Atlantic United States using satellite telemetry. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 293 p. Report No.: OCS Study BOEM 2017-069. <https://www.boem.gov/espis/5/5635.pdf>.
- USFWS. 2021a. Threat to birds: migratory bird mortality- questions and answers. US Fish and Wildlife Service. <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.
- USFWS. 2021b. Birds of Conservation Concern. 2021. Migratory Bird Program. [accessed 2024 June 21]. <https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf>.
- Vattenfall. 2023. AOWFL - resolving key uncertainties of seabird flight and avoidance behaviours at offshore wind farms. RPS: 115 p.
- Vilela R, Burger C, Diederichs A, Bachl EF, Szostek L, Freund A, Braasch A, Bellebaum J, Beckers B, Piper W, et al. 2021. Use of an INLA latent gaussian modeling approach to assess bird population changes due to the development of offshore wind farms. *Frontiers in Marine Science*. 8:701332. doi:10.3389/fmars.2021.701332.
- Wang J, Zou X, Yu W, Zhang D, Wang T. 2019. Effects of established offshore wind farms on energy flow of coastal ecosystems: A case study of the Rudong Offshore Wind Farms in China. *Ocean & Coastal Management*. 171:111-118.
- Watts B. 2010. Wind and waterbirds: Establishing sustainable mortality limits within the Atlantic Flyway. Williamsburg (VA): College of William and Mary/Virginia Commonwealth University. 45 p. Report No.: CCBTR-10-15. [accessed 2020 Sep 01]. https://www.ccbbirds.org/wp-content/uploads/2013/12/ccbtr-10-05_Watts-Wind-and-waterbirds-Establishing-sustainable-mortality-limits-within-the-Atlantic-Flyway.pdf.
- Winship AJ, Kinlan PB, White PT, Leriness BJ, Christenson J. 2018. Modeling at-sea density of marine birds to support Atlantic marine renewable energy planning: final report. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy. 67 p. Report No.: OCS Study BOEM 2018-010. [accessed 2020 Sep 07].

https://coastalscience.noaa.gov/data_reports/modeling-at-sea-density-of-marine-birds-to-support-atlantic-marine-renewable-energy-planning-final-report/.

Winship AJ, Leirness JB, Coyne M, Howell J, Saba VS, and Christensen J. 2023. Modeling the distributions of marine birds at sea to inform planning of energy development on the US Atlantic Outer Continental Shelf. Sterling (VA): US Department of Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 55 p. Report No.: OCS Study BOEM 2023-060. [accessed 2024 June 19]. https://epis.boem.gov/Final%20Reports/BOEM_2023-060.pdf.

K.4.7 Section 3.5.4, Coastal Habitat and Fauna

BOEM and NOAA. 2018. Marine cadastre national viewer. Bureau of Ocean Energy Management. [accessed 2022 Dec 01]. <https://marinecadastre.gov/nationalviewer/>.

Cassotta S, Derkesen C, Ekaykin C, Hollowed A, Kofinas A, Mackintosh G, Melbourne-Thomas J, Muelbert C, Otterson G, Pritchard H, et al. 2019. Polar Regions. IPCC special report on the ocean and cryosphere in a changing climate. 173 p. https://www.ipcc.ch/site/assets/uploads/sites/3/2019/11/SROCC_FinalDraft_Chapter3.pdf.

Dooling R, Buehler D, Leek M, Popper AN. 2019. The impact of urban and traffic noise on birds. *Acoustical Society of America*. 15(3):19-27. doi:10.1121/AT.2019.15.3.19.

[ESI] Environmental Sensitivity Index. 2001. Rhode Island, Connecticut, New York, and New Jersey ESI. Metadata. 346 p. [accessed 2022 Nov 25].

Environmental Sensitivity Index. 2009. Coastal resource atlas: Long Island. Metadata. 14 p. [accessed 2022 Nov 25]. http://response.restoration.noaa.gov/sites/default/files/esimaps/gisdata/LongIs_NY_2009_Meta.pdf.

Erbe, C, and McPherson, C. 2017. Underwater noise from geotechnical drilling and standard penetration testing. *The Journal of the Acoustical Society of America*. 142(EL281–EL285). doi: 10.1121/1.5003328.

Glick P, Staudt A, Nunley B. 2008. Sea-level rise and coastal habitats of the Chesapeake Bay: A summary. *National Wildlife Federation*. 11 p.

Goodwin S, Shriver G. 2010. Effects of traffic noise on occupancy patterns of forest birds. *Conservation Biology*. 2(2011):406-411. doi:10.1111/j.1523-1739.2010.01602.x.

Lauriat G. 2022. Northeast ports: Expanding infrastructure and seeking new opportunities. *American Journal of Transportation*. (739):7. <https://ajot.com/premium/ajot-northeast-ports-expanding-infrastructure-and-seeking-new-opportunities>.

MMS. 2007. Programmatic environmental impact statement for alternative energy development and production and alternate use of facilities on the Outer Continental Shelf: final environmental impact

- statement. US Department of the Interior, Minerals Management Service. 114 p. Report No.: OCS EIS/EA MMS 2007-046. <http://www.boem.gov/renewable-energy/guide-ocs-alternative-energy-final-programmatic-environmental-impact-statement-eis>.
- NJDEP. 2002. What is the New Jersey coast? Fact sheet. The New Jersey Coastal Management Program. 2 p. [accessed 2023 Apr 25]. <http://www.nj.gov/dep/cmp/fact2.pdf>.
- Pinelands Preservation Alliance. 2018. Pinelands habitat. [accessed 2023 Jan]. <http://www.pinelandsalliance.org/ecology/habitats/>.
- Pinelands Preservation Alliance. 2021. Pine barrens wildlife. Southampton (NJ): Pinelands Preservation Alliance. [accessed 2022 Nov 25]. <https://pinelandsalliance.org/learn-about-thepinelands/ecosystem/wildlife/>.
- Roberts C, Palmer M, McNeall D. 2015. Quantifying the likelihood of a continued hiatus in global warming. *Natural Climate Change*. 5:337-342. <https://www.nature.com/articles/nclimate2531>.
- Sacatelli C, Lathrop R, Kaplan B. 2020. Impacts of climate change on the coastal forests in the Northeast US. Rutgers University. 48 p.
- State of New Jersey. 2021a. Pinelands National Reserve, plants. New Lisbon (NJ): Pinelands Commission. [accessed Nov 25]. <https://nj.gov/pinelands/reserve/plants/>.
- State of New Jersey. 2021b. Pinelands National Reserve, animals. New Lisbon (NJ): Pinelands Commission. [accessed Nov 25]. <https://nj.gov/pinelands/reserve/anim/>.
- Stockton University. 2015. NJ shoreline protection and vulnerability. 5 p. [accessed 2022 Nov 25]. <http://intraweb.stockton.edu/eyos/page.cfm?siteID=149&pageID=4>.
- Tanski K. 2012. Long Island's dynamic south shore - A primer on the forces and trends shaping our coast. New York Sea Grant. 28 p. <http://www.seagrant.sunysb.edu/cprocesses/pdfs/LIDynamicSouthShore.pdf>.
- USEPA. 2012. National coastal conditions report IV. Washington (DC): Office of Water and Office of Research and Development. 334 p. Report No.: US Environmental Protection Agency. National Coastal Conditions Report IV.
- USFWS. 2021. Birds of conservation concern 2021: Migratory bird program. 48 p. <https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf>.
- White E, Ury E, Bernhardt E, Yang X. 2021. Climate change driving widespread loss of coastal forested wetlands throughout the North American coastal plain. *Ecosystems*. 1-16.

K.4.8 Section 3.5.5, Finfish, Invertebrates, and Essential Fish Habitat

- Aguilar de Soto N, Delorme N, Atkins J, Howard S, Williams J, Johnson M. 2013. Anthropogenic noise causes body malformations and delays development in marine larvae. *Scientific Reports*. 3:2831. doi:10.1038/srep02831.
- Ainslie MA, Halvorsen MB, Muller RAJ, Lippert T. 2020. Application of damped cylindrical spreading to assess range to injury threshold for fishes from impact pile driving. *Journal of Acoustical Society of America*. 148(1):108. doi:10.1121/10.0001443.
- Amaral JL, Beard R, Barham RJ, Collett AG, Elliot J, Frankel AS, Gallien D, Hager C, Khan AA, Lin Y-T. 2018. Field observations during wind turbine foundation installation at the Block Island Wind Farm, Rhode Island. Appendix D: Underwater sound monitoring reports. Washington (DC): US Department of Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 95 p. Report No.: OCS Study 2018-029.
- Andre M, Sole M, Lenoir M, Durfort M, Quero C, Mas A, Lombarte A, van der Schaar M, Lopez-Bejar M, Morell M, et al. 2011. Low-frequency sounds induce acoustic trauma in cephalopods. *Frontiers in Ecology and the Environment*. 9(9):489-493. doi:10.1890/100124.
- Andres M. 2016. On the recent destabilization of the Gulf Stream path downstream of Cape Hatteras. *Geophysical Research Letters*. 43(18):9836-9842. doi:10.1002/2016GL069966.
- [ASSRT] Atlantic Sturgeon Status Review Team. 2007. Status review of Atlantic sturgeon (*acipenser oxyrinchus oxyrinchus*). National Marine Fisheries Service, Northeast Regional Office. 174 p.
- Avanti Corporation and Industrial Economics Inc. 2019. National Environmental Policy Act documentation for impact-producing factors in the offshore wind cumulative impacts scenario on the North Atlantic Continental Shelf. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. 201 p. Report No.: OCS Study BOEM 2019-036.
- Baker K, Howson U. 2021. Data collection and site survey activities for renewable energy on the Atlantic Outer Continental Shelf. Biological Assessment. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 152 p.
- Balazik MT, Reine KJ, Spells AJ, Fredrickson CA, Fine ML, Garman GC, McIninch SP. 2012. The potential for vessel interactions with adult Atlantic sturgeon in the James River, Virginia. *North American Journal of Fisheries Management*. 32(6):1062-1069.
- Baudron AR, Brunel T, A BM, Hidalgo M, Chust G, Brown EJ, Kleisner KM, Millar C, MacKenzie BR, Nikolioudakis N, et al. 2020. Changing fish distributions challenge the effective management of European fisheries. *Ecography*. 43:494-505. doi:10.1111/ecog.04864.
- Bedore C, Kaijura S. 2013. Bioelectric fields of marine organisms: voltage and frequency contributions to detectability by electroreceptive predators. *Physiological and Biochemical Zoology*. 86(3):298-311. doi:10.1086/669973.

- Bejarano AC, Michel J, Rowe Z, Li D, French Mcay L, Ekin D. 2013. Environmental risks, fate and effects of chemicals associated with wind turbines on the Atlantic outer continental shelf. Herndon (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 355 p. Report No.: OCS Study BOEM 2013-213.
- Bellmann MA, Brinkmann J, May J, Wendt T, Gerlach S, Remmers P. 2020. Underwater noise during the impulse pile-driving procedure: Influencing factors on pile-driving noise and technical possibilities to comply with noise mitigation values. The Federal Maritime and Hydrographic Agency (Bundesamt für Seeschifffahrt und Hydrographie). 137 p. Report No.: FKZ UM16 881500.
- Bemis WE, Kynard B. 1997. Sturgeon rivers: An introduction to Acipenseriform biogeography and life history. *Environmental Biology of Fishes*. 48:167-183.
- BOEM. 2012. Commercial wind lease issuance and site assessment activities on the Atlantic Outer Continental Shelf offshore New Jersey, Delaware, Maryland, and Virginia, Final Environmental Assessment. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 336 p. Report No.: OCS EIS/EA BOEM 2012-003.
http://www.boem.gov/sites/default/files/uploadedFiles/BOEM/Renewable_Energy_Program/Smart_from_the_Start/Mid-Atlantic_Final_EA_012012.pdf.
- BOEM. 2014. Atlantic OSC proposed geological and geophysical activities: Mid-Atlantic and South Atlantic planning areas final programmatic environmental impact statement. New Orleans (LA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 788 p. Report No.: OCS EIS/EA BOEM 2014-001. [accessed 2021 Oct 13].
<https://www.boem.gov/oil-gas-energy/atlantic-geological-and-geophysical-gg-activities-programmatic-environmental-impact>.
- BOEM. 2021a. Vineyard Wind 1 offshore wind energy project final environmental impact statement. Volume I. 25 p. Report No.: OCS EIS/EA BOEM 2021-0012. <https://www.boem.gov/vineyard-wind>.
- BOEM. 2021b. Guidelines for lighting and marking of structures supporting renewable energy development. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 9 p.
- BOEM. 2022. Empire Offshore Wind draft environmental impact statement volume 1. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy. 512 p. Report No.: BOEM 2022-069.
- Bolle L, de Jong C, Blom E, Wessels PW, van Damme CJ, Winter HV. 2014. Effect of pile-driving sound on the survival of fish larvae. Den Haag (Netherlands): Institute for Marine Resources & Ecosystem Studies.
- Bolle LJ, de Jong CA, Bierman SM, van Beek PJ, van Keeken OA, Wessels PW, van Damme CJ, Winter HV, de Haan D, Dekeling RP. 2012. Common sole larvae survive high levels of pile-driving sound in

- controlled exposure experiments. PLOS One. 7(3):e33052.
<https://www.ncbi.nlm.nih.gov/pubmed/22431996>. doi:10.1371/journal.pone.0033052.
- Booman C, Dalen J, Leivestad H, Levsen A, van der Meeren T, Toklum K. 1996. Effekter av luftkanonskyting på egg, larver og yngel. Bergen (Norway): Norwegian Institute of Marine Sciences. 83 p. Report No.: Fisker og havet NR 3-1966.
- Boyd SE, Limpenny DS, Rees HL, Cooper KM. 2005. The effects of marine sand and gravel extraction on the macrobenthos at a commercial dredging site (results 6 years post-dredging). ICES Journal of Marine Science. 62:145-162. doi:10.1016/j.icesjms.2004.11.014.
- Brooks RA, Purdy CN, Bell SS, Sulak KJ. 2006. The benthic community of the Eastern US Continental Shelf: A literature synopsis of benthic faunal resources. Continental Shelf Research. 26(6):804-818. doi:10.1016/j.csr.2006.02.005.
- Bruintjes R, Purser J, Everley KA, Mangan S, Simpson SD, Radford AN. 2016. Rapid recovery following short-term acoustic disturbance in two fish species. Royal Society Open Science. 3(1):150686. doi:10.1098/rsos.150686.
- Budelmann BU. 1992. Hearing in crustacea. In: Webster DB, Fay RR, Popper AN, editors. The evolutionary biology of hearing. New York (NY): Springer-Verlag. p. 131-139.
- Buehler D, Molnar M, Oestman R, Reyff J, Pommerenck K, Mitchell B. 2020. Technical guidance for the assessment of hydroacoustic effects of pile driving on fish. Sacramento (CA): California Department of Transportation, Division of Environmental Analysis. 533 p.
- Bullard SG, Lambert G, Carman MR, Byrnes J, Whitlatch RB, Ruiz G, Miller RJ, Harris L, Valentine PC, Collie JS, et al. 2007. The colonial ascidian didemnum sp. A: current distribution, basic biology, and potential threat to marine communities of the northeast and west coasts of North America. Journal of Experimental Marine Biology and Ecology. 342(1):99-108. doi:10.1016/j.jembe.2006.10.020.
- Burkill PH, Reid PC. 2010. Plankton biodiversity of the North Atlantic: Changing patterns revealed by the continuous plankton recorder survey.
- Butler, J.M. and Maruska, K.P. 2020. Underwater noise impairs social communication during aggressive and reproductive encounters. Animal Behaviour, 164, pp.9-23.
<https://www.sciencedirect.com/science/article/abs/pii/S0003347220300816>
- Caltrans. 2004. Fisheries and hydroacoustic monitoring program compliance report for the San Francisco-Oakland Bay Bridge east span seismic safety project. Sacramento (CA): Report No.: EA 012023.
- Carlton J, Reid DM, van Leeuwen H. 1995. The role of shipping in the introduction of nonindigenous aquatic organisms to the coastal waters of the United States (other than the Great Lakes) and an analysis of control options. Washington (DC): US Coast Guard. 373 p. Report No.: CG-D-11-95.

- Carroll, A.G., Przeslawski, R., Duncan, A., Gunning, M. and Bruce, B. 2017. A critical review of the potential impacts of marine seismic surveys on fish & invertebrates. *Marine Pollution Bulletin*, 114(1), pp.9-24. <https://www.sciencedirect.com/science/article/pii/S0025326X16309584>
- Casper BM, Halvorsen MB, Matthews F, Carlson TJ, Popper AN. 2013a. Recovery of barotrauma injuries resulting from exposure to pile driving sound in two sizes of hybrid striped bass. *PLOS ONE*. 8(9):e73844. <https://www.ncbi.nlm.nih.gov/pubmed/24040089>. doi:10.1371/journal.pone.0073844.
- Casper BM, Popper AN, Matthews F, Carlson TJ, Halvorsen MB. 2012. Recovery of barotrauma injuries in Chinook salmon, *Oncorhynchus tshawytscha* from exposure to pile driving sound. *PLOS ONE*. 7(6):e39593. <https://www.ncbi.nlm.nih.gov/pubmed/22745794>. doi:10.1371/journal.pone.0039593.
- Casper BM, Smith ME, Halvorsen MB, Sun H, Carlson TJ, Popper AN. 2013b. Effects of exposure to pile driving sounds on fish inner ear tissues. *Comparative Biochemistry and Physiology, Part A*. 166(2):352–360. <https://www.ncbi.nlm.nih.gov/pubmed/23850719>. doi:10.1016/j.cbpa.2013.07.008.
- Celi M, Filiciotto F, Maricchiolo G, Genovese L, Quinci EM, Maccarrone V, Mazzola S, Vazzana M, Buscaino G. 2016. Vessel noise pollution as a human threat to fish: assessment of the stress response in gilthead sea bream (*Sparus aurata*, Linnaeus 1758). *Fish Physiology and Biochemistry*. 42(2):631-641. doi:10.1007/s10695-015-0165-3.
- Christian RJ, Mathieu A, Thomson DH, White D, Buchanan RA. 2003. Effect of seismic energy on snow crab (*Chionoecetes opilio*). Calgary (Alberta): Environmental Studies Research Fund. 106 p. Report No.: CAL-1-00364.
- Claire JT, Pondella II DJ, Milton L, Zahn AL, Williams CM, Williams PJ, Bull AS. 2014. Oil platforms off California are amongst the most productive marine fish habitats globally. *Proceedings of the National Academy of Sciences of the United States of America*. 111(43):14542-15467. [accessed 2023 Jan]. <https://doi.org/10.1073/pnas.1411477111>. doi:10.1073/pnas.1411477111.
- Collins MR, Rogers SG, Smith TIJ, Moser ML. 2000. Primary factors affecting sturgeon populations in the southeastern United States: Fishing mortality and degradation of essential habitats. *Bulletin of Marine Science*. 66(3):917-928.
- Cones S, Jezequel Y, Ferguson D, Aoki N, Mooney TA. 2022. Pile driving noise induces transient gait disruptions in the longfin squid (*Doryteuthis pealeii*). *Frontiers in Marine Science*. 2556:1-13. doi:10.3389/fmars.2022.1070290.
- Cones, S.F., Jézéquel, Y. and Mooney, T.A. 2023. Marine bivalve sound detection and associated noise impacts. In *The Effects of Noise on Aquatic Life: Principles and Practical Considerations* (pp. 1-11). Cham: Springer International Publishing.
- Corbett WT. 2018. The behavioral and physiological effects of pile-driving noise on marine species. Exeter (UK): University of Exeter.

- Corwin JT. 1981. Postembryonic production and aging of inner ear hair cells in sharks. *Journal of Comparative Neurology*. 201(4):541–553. doi:10.1002/cne.902010406.
- Crocker SE, Fratantonio FD. 2016. Characteristics of sounds emitted during high-resolution marine geophysical surveys. Sterling (VA): US Department of the Interior. 266 p. Report No.: BOEM 2016-044, NUWC-NPT Technical Report 12,203.
- CSA Ocean Sciences Inc and Exponent. 2019. Evaluation of potential EMF effects on fish species of commercial or recreational fishing importance in southern New England. 62 p. Report No.: OCS Study BOEM 2019-049. [accessed 2023 Jan]. https://epis.boem.gov/final%20reports/BOEM_2019-049.pdf.
- Day RD, McCauley RD, Fitzgibbon QP, Hartmann K, Semmens JM. 2017. Exposure to seismic air gun signals causes physiological harm and alters behavior in the scallop (*Pecten fumatus*). *Proceedings of the National Academy of Sciences*. 114(40):E8537-E8546. doi:10.1073/pnas.1700564114.
- Dahl PH, Jenkins AK, Casper B, Kotecki SE, Bowman V, Boerger C, Dall'Osto DR, Babina MA, Popper AN. 2020. Physical effects of sound exposure from underwater explosions on Pacific sardines (*Sardinops sagax*). *Journal of Acoustical Society of America*. 147:2382-2395. <https://doi.org/10.1121/10.0001064>. doi:10.1121/10.0001064.
- Dannheim J, Bergstrom L, Birchenough SNR, Brzana R, Boon RA, Coolen J, Dauvin J, De Mesel I, Derweduwen J, Gill A, et al. 2020. Benthic effects of offshore renewables: Identification of knowledge gaps and urgently needed research. *ICES Journal of Marine Science*. 77(3):1092-1108. doi:10.1093/icesjms/fsz018.
- Day RD, McCauley RD, Fitzgibbon QP, Hartmann K, Semmens JM. 2016a. Assessing the impact of marine seismic surveys on southeast Australian scallop and lobster fisheries. Hobart (Australia): Fisheries Research and Development Corporation. Report No.: FRDC Project No 2012/008.
- Day RD, McCauley RD, Fitzgibbon QP, Semmens JM. 2016b. Seismic air gun exposure during early-stage embryonic development does not negatively affect spiny lobster *Jasus edwardsii* larvae (*Decapoda: Palinuridae*). *Scientific Reports*. 6:22723. doi:10.1038/srep22723.
- Day, R.D., McCauley, R.D., Fitzgibbon, Q.P., Hartmann, K. and Semmens, J.M. 2019. Seismic air guns damage rock lobster mechanosensory organs and impair righting reflex. *Proceedings of the Royal Society B*, 286(1907), p.20191424.
- Day, R.D., Fitzgibbon, Q.P., McCauley, R.D., Baker, K.B. and Semmens, J.M. 2022. The impact of seismic survey exposure on the righting reflex and moult cycle of Southern Rock Lobster (*Jasus edwardsii*) puerulus larvae and juveniles. *Environmental Pollution*, 309, p.119699.
- De Robertis A, Handegard NO. 2013. Fish avoidance of research vessels and the efficacy of noise-reduced vessels: A review. *ICES Journal of Marine Science*. 70(1):34-45.

- Debusschere E, De Coesnsel B, Bajek A, Botteldooren D, Hostens K, Vanaverbeke J, Vandendriessche S, Van Ginderdeuren K, Vincx M, Degraer S. 2014. *In Situ* mortality experiments with juvenile sea bass (*Dicentrarchus labrax*) in relation to impulsive sound levels caused by pile driving of windmill foundations. PLOS ONE. 9(10):e109280.
- Debusschere E, Hostens K, Adriaens D, Ampe B, Botteldooren D, De Boeck G, De Muynck A, Sinha AK, Vandendriessche S, L. Van Hoorebeke L. 2016. Acoustic stress responses in juvenile sea bass *Dicentrarchus labrax* induced by offshore pile driving. Environmental Pollution. 208:747-757. doi:10.1016/j.envpol.2015.10.055.
- Degraer S, Brabant R, Rumes B, Vigin L. 2018. Environmental impacts of offshore wind farms in the Belgian part of the North Sea: Assessing and managing effect spheres of influence. Brussels (Belgium): Royal Belgian Institute of Natural Sciences, Operational Directorate Natural Environment, Marine Ecology and Management. 138 p.
- Degraer, S., D.A. Carey, J.W.P. Coolen, Z.L. Hutchison, F. Kerckhof, B. Rumes, and J. Vanaverbeke. 2020. "Offshore wind farm artificial reefs affect ecosystem structure and functioning." Oceanography 33(4):48-57.
- Dernie KM, Kaiser MJ, Warwick RM. 2003. Recovery rates of benthic communities following physical disturbance. Journal of Animal Ecology. 72(2003):1043-1056. doi:10.1046/j.1365-2656.2003.00775.x.
- Di Iorio L, Gervaise C, Jaud V, Robson AA, Chauvaud L. 2012. Hydrophone detects cracking sounds: non-intrusive monitoring of bivalve movement. Journal of Experimental Marine Biology and Ecology. 432-433:9-16. doi:10.1016/j.jembe.2012.07.010.
- Drake LA. 2015. Review of Global maritime transport and ballast water management. Biological Invasions. 8:3063-3065. doi:10.1007/978-94-017-9367-.
- Edmonds, N.J., Firmin, C.J., Goldsmith, D., Faulkner, R.C., Wood, D.T. 2016. A review of crustacean sensitivity to high amplitude underwater noise: data needs for effective risk assessment in relation to UK commercial species. Mar. Pollut. Bull. 108, 5–11.
- Elliott J, Khan AA, Lin YT, Mason T, Miller JH, Newhall AE, Potty GR, Vigness-Raposa K. 2019. Field observations during wind turbine operations at the Block Island Wind Farm, Rhode Island. 281 p. Report No.: OCS Study BOEM 2019-028.
- Epifanio CE. 2013. Invasion biology of the Asian shore crab *Hemigrapsus sanguineus*: A review. Journal of Experimental Marine Biology and Ecology. 441(2013):33-49. doi:10.1016/j.jembe.2013.01.010.
- Fabrizio MC, Manderson J, Pessutti JP. 2014. Home range and seasonal movements of black sea bass (*Centropristis striata*) during their inshore residency at a reef in the Mid-Atlantic Bight. Fishery Bulletin. 112(2014):82-97. [accessed 2023 Jan].
https://www.researchgate.net/publication/272708889_Home_range_and_seasonal_movements_of

_Black_Sea_Bass_Centropristis_striata_during_their_inshore_residency_at_a_reef_in_the_mid-Atlantic_Bight. doi:10.7755/FB.112.1.5.

Farr ER, Johnson MR, Nelson MW, Hare JA, Morrison WE, Lettrich MD, Vogt B, Meaney C, Howson US, Auster PJ, et al. 2021. An assessment of marine, estuarine, and riverine habitat vulnerability to climate change in the Northeast U.S. PLOS One. 16(12):e0260654. doi:10.1371/journal.pone.0260654.

Fautin D, Dalton P, Incze SL, Leong CAJ, Pautzke C, Rosenberg A, Sandifer P, Sedberry G, Tunnel WJ, Abbott I, et al. 2010. An overview of marine biodiversity in the United States waters. PLOS ONE. 5(8):e11914. doi:10.1371/journal.pone.0011914.

Fay RR. 2009. Soundscapes and the sense of hearing of fishes. Integrative Zoology. 4(1):26-32. <https://www.ncbi.nlm.nih.gov/pubmed/21392274>. doi:10.1111/j.1749-4877.2008.00132.x.

Fay RR, Popper AN. 2000. Evolution of hearing in vertebrates: The inner ears and processing. Hearing Research. 149:1-10.

Ferrari MC, McCormick MI, Meekan MG, Simpson SD, Nedelec SL, Chivers DP. 2018. School is out on noisy reefs: the effect of boat noise on predator learning and survival of juvenile coral reef fishes. Proceedings of the Royal Society B: Biological Sciences. 285(1871):20180033.

Filiciotto F, Vazzana M, Celi M, Maccarrone V, Ceraulo M, Buffa G, Di Stefano V, Mazzola S, Buscaino G. 2014. Behavioural and biochemical stress responses of *Palinurus elephas* after exposure to boat noise pollution in tank. Marine Pollution Bulletin. 84(1-2):104-114. doi:10.1016/j.marpolbul.2014.05.029.

Fisheries Hydroacoustic Working Group. 2008. Agreement in Principle for Interim Criteria for Injury to Fish from Pile Driving Activities.

Gaichas SK, Hare J, Pinsky M, Depiper G, Jensen O, Lederhouse T, Link J, Lipton D, Seagraves R, Manderson J, et al. 2015. Climate change and variability: A white paper to inform the Mid-Atlantic Fishery Management Council on the impact of climate change on fishery science and management. 43 p.

[GARFO] Greater Atlantic Regional Fisheries Office. 2020. Section 7: Consultation technical guidance in the greater Atlantic region. NOAA Fisheries. [accessed 2022 Oct 25]. <https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-consultation-technical-guidance-greater-atlantic>.

Geortner JF, Wiley ML, Young GA, McDonald WW. 1994. Effects of underwater explosions on fish without swimbladders. Naval Surface Warfare Center. 113 p. Report No.: NSWC TR88-114.

Gill A, Degraer S, Lipski A, Mavraki N, Methratta E, Brabant R. 2020. Setting the context for offshore wind development effects on fish and fisheries. Oceanography. 33(4):118-127. doi:10.5670/oceanog.2020.411.

- Gill AB, Bartlett M, Thomsen F. 2012. Potential interactions between diadromous fishes of U.K. conservation importance and the electromagnetic fields and subsea noise from marine renewable energy developments. *Journal of Fish Biology*. 81:664-695.
- Glasby TM, Connell SD, Holloway MG, Hewitt CL. 2007. Nonindigenous biota on artificial structures: could habitat creation facilitate biological invasions? *Marine Biology*. 151(3):887-895. doi:10.1007/s00227-006-0552-5.
- Goertner JF. 1978. Fish killing potential of a cylindrical charge exploded above the water surface. Silver Spring (MD): Naval Surface Weapons Center. Report No.: Technical Report NSWC/WOL TR 77-90.
- Golbazi M, Archer CL, Alessandrini S. 2022. Surface impacts of large offshore wind farms. *Environmental Research Letters*. 17(6): 064021.
- Govoni JJ, West MA, Settle LR, Lynch RT, Greene MD. 2008. Effects of underwater explosions on larval fish: Implications for a coastal engineering project. *Journal of Coastal Research*. 2:228-233. doi:10.2112/05-0518.1.
- Greene KJ, Anderson GM, Odell J, Steinberg N. 2010. The northwest Atlantic marine ecoregional assessment: species, habitats and ecosystems. Phase one. Boston (MA): The Nature Conservancy, Eastern U.S. Division. 460 p. [accessed 2022 Nov 28]. <http://www.conservationgateway.org/conservationbygeography/northamerica/unitedstates/edc/documents/namera-phase1-fullreport.pdf>.
- Guida V, Drohan A, Welch H, McHenry J, Johnson D, Kentner V, Brink J, Timmons D, Pessutti J, Fromm S, et al. 2017. Habitat mapping and assessment of northeast wind energy areas. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 312 p. Report No.: OCS Study BOEM 2017-088. <https://espis.boem.gov/final%20reports/5647.pdf>.
- Halvorsen MB, Casper BM, Matthews F, Carlson TJ, Popper AN. 2012a. Effects of exposure to pile-driving sounds on the lake sturgeon, Nile tilapia and hogchoker. *Proceedings of the Royal Society B: Biological Sciences*. 279(1748):4705–4714. <https://www.ncbi.nlm.nih.gov/pubmed/23055066>. doi:10.1098/rspb.2012.1544.
- Halvorsen MB, Casper BM, Woodley CM, Carlson TJ, Popper AN. 2011. Hydroacoustic impacts on fish from pile installation. National Cooperative Highway Research Program Transportation Research Board. 25-28 p.
- Halvorsen MB, Casper BM, Woodley CM, Carlson TJ, Popper AN. 2012b. Threshold for onset of injury in Chinook salmon from exposure to impulsive pile driving sounds. *PLOS ONE*. 7(6):e38968. <https://www.ncbi.nlm.nih.gov/pubmed/22745695>. doi:10.1371/journal.pone.0038968.

- Hamernik RP, Hsueh KD. 1991. Impulse noise: Some definitions, physical acoustics and other considerations. *Journal of the Acoustical Society of America*. 90(1):189–196. [accessed 2017Apr 20]. <http://dx.doi.org/10.1121/1.401287>. doi:10.1121/1.401287.
- Handegard NO, Michalsen K, Tjøstheim D. 2003. Avoidance behavior in cod (*Gadus morhua*) to a bottom-trawling vessel. *Aquatic Living Resources*. 16(3):265-270.
- Harding HR, Gordon TAC, Wong K, McCormick MI, Simpson SD, Radford AN. 2020. Condition-dependent responses of fish to motorboats. *Biology Letters*. 6(11):20200401. doi:10.1098/rsbl.2020.0401.
- Hare JA, Morrison WE, Nelson MW, Stachura MM, Teeters EJ, Griffis RB. 2016. A vulnerability assessment of fish and invertebrates to climate change on the northeast U.S. Continental Shelf. *PLOS One*. 11(2):e0146756. [accessed 2023 Jan]. https://www.researchgate.net/publication/292978736_A_Vulnerability_Assessment_of_Fish_and_Invertebrates_to_Climate_Change_on_the_Northeast_US_Continental_Shelf. doi:10.1371/journal.pone.0146756.
- Harsanyi P, Scott K, Easton BAA, de la Cruz Ortiz G, Chapman ECN, Piper ARJ, Rochas CMZ, Lyndon AR. 2022. The effects of anthropogenic electromagnetic fields (EMF) on the early development of two commercially important crustaceans, European lobster, *Homarus gammarus* (L.) and Edible crab, *Cancer pagurus* (L.). *Journal of Marine Science and Engineering*. 10:564. <https://doi.org/10.3390/jmse10050564> doi:10.3390/jmse10050564.
- Hastings M. 2008. Sound exposure metrics for aquatic animals. *Bioacoustics*. 17(1-3):118-120.
- Haver SM, Adams JD, Hatch LT, Van Parijs SM, Dziak RP, Haxel J, Heppell SA, McKenna MR, Mellinger DK, Gedamke J. 2021. Large vessel activity and low-frequency underwater sound benchmarks in United States waters. *Frontiers in Marine Science*. 8. doi:10.3389/fmars.2021.669528.
- Hawkins AD, Hazelwood RA, Popper AN, Macey PC. 2021. Substrate vibrations and their potential effects upon fishes and invertebrates. *Journal of the Acoustical Society of America*. 149(4):2782. doi:10.1121/10.0004773.
- Hawkins AD, Roberts L, Cheesman S. 2014. Responses of free-living coastal pelagic fish to impulsive sounds. *The Journal of the Acoustical Society of America*. 135(5):3101–3116. doi:10.1121/1.4870697.
- HDR. 2020. Benthic and epifaunal monitoring during wind turbine installation and operation at the Block Island Wind Farm, Rhode Island – Project report. Englewood (CO): US Department of the Interior, Bureau of Ocean Energy Management. 263 p. Report No.: OCS Study BOEM 2020-044.
- Herbert-Read JE, Kremer L, Bruintjes R, Radford AN, Ioannou CC. 2017. Anthropogenic noise pollution from pile driving disrupts the structure and dynamics of fish shoals. *Proceedings of the Royal Society B: Biological Sciences*. 284(1863):1-9. doi:10.1098/rspb.2017.1627.

- Hogan F, Hooker B, Jensen B, Johnson L, Lipsky A, Methratta E, Silva A, Hawkins A. 2023. Fisheries and offshore wind interactions: Synthesis of science. Woods Hole (MA): US Department of Commerce, National Oceanic and Atmospheric Administration. 388 p. Report No.: NOAA Technical Memorandum NMFS-NE-291.
- Holles S, Simpson SD, Radford AN, Berten L, Lecchini D. 2013. Boat noise disrupts orientation behaviour in a coral reef fish. *Marine Ecology Progress Series*. 485:295-300. doi:10.3354/meps10346.
- Holliday DV, Clarke ME, Peiper RE, Greenlaw CF. 1987. The effects of airgun energy releases on the eggs, larvae, and adults of the northern anchovy (*Engraulis mordax*). American Petroleum Institute. 35 p. Report No.: 034-022.
- Holmes LJ, McWilliam J, Ferrari MC, McCormick MI. 2017. Juvenile damselfish are affected but desensitize to small motor boat noise. *Journal of Experimental Marine Biology and Ecology*. 494:63-68.
- Hopkins TE, Cech JJ. 2003. The influence of environmental variables on the distribution and abundance of three elasmobranchs in Tomales Bay, California. *Environmental Biology of Fishes*. 66(3):279-291.
- Horwitz R, Miles TN, Munroe D, Kohut J. 2023. Overlap between the Mid-Atlantic Bight Cold Pool and offshore wind lease areas. *ICES Journal of Marine Science*. <https://doi.org/10.1093/icesjms/fsad190>.
- Hubbs CL, Rehnitz AB. 1952. Report on experiments designed to determine effects of underwater explosions on fish. La Jolla (CA): Scripps Institution of Oceanography. 34 p.
- Hudson DM, Krumholz JS, Pochtar DL, Dickenson NC, Dossot G, Phillips G, Baker EP, Moll TE. 2022. Potential impacts from simulated vessel noise and sonar on commercially important invertebrates. *Peer Journal* 10:e12841. doi:10.7717/peerj.12841.
- Hutchison DHS, Gall AB. 2020. The interaction between resource species and electromagnetic fields associated with electricity production by offshore wind farms. *Oceanography*. 33(4):96-107. <https://www.jstor.org/stable/10.2307/26965753>. doi: 10.2307/26965753.
- Hutchison ZL, Sigray P, He H, Gill AB, King J, Gibson C. 2018. Electromagnetic field (EMF) impacts on elasmobranch (shark, rays, and skates) and American lobster movement and migration from direct current cables. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 259 p. Report No.: OCS Study BOEM 2018-003. <https://espis.boem.gov/final%20reports/5659.pdf>.
- ICF. 2021. Comparison of Environmental Effects from Different Offshore Wind Turbine Foundations. Report No. OCS Study BOEM 2021-053. 48 p.
- Jenkins AK, Dahl PH, Kotecki SE, Bowman V, Casper B, Boerger C, Popper AN. 2022. Physical effects of sound exposure from underwater explosions on Pacific mackerel (*Scomber japonicus*): Effects on

- non-auditory tissues. *Journal of Acoustical Society of America*. 151(6):1-11. <https://doi.org/10.1121/10.0011587>. doi:10.1121/10.0011587.
- Jézéquel Y, Jones IT, Bonnel J, Chauvaud L, Atema J, Mooney TA. 2021. Sound detection by the American lobster (*Homarus americanus*). *Journal of Experimental Biology*. 224(2021):1-10. doi:10.1242/jeb.240747.
- Jézéquel, Y., Cones, S. and Mooney, T.A. 2023a. Sound sensitivity of the giant scallop (*Placopecten magelanicus*) is life stage, intensity, and frequency dependent. *The Journal of the Acoustical Society of America*, 153(2), pp.1130-1137. <https://pubs.aip.org/asa/jasa/article-abstract/153/2/1130/2866882/Sound-sensitivity-of-the-giant-scallop-Placopecten?redirectedFrom=fulltext>
- Jézéquel, Y., Jandial, P., Cones, S.F., Ferguson, S., Aoki, N., Girdhar, Y. and Mooney, T.A. 2023b. Short-term habituation of the longfin squid (*Doryteuthis pealeii*) to pile driving sound. *ICES Journal of Marine Science*, p.fsad157. DOI:10.1093/icesjms/fsad157
- Jézéquel, Y. and Mooney, T.A. In press. Impulsive pile driving sound does not induce hearing loss in the longfin squid (*Doryteuthis pealeii*).
- Johnson TL, Jon van Berkel J, Mortensen LO, Bell MA, Tiong I, Hernandez B, Snyder DB, Thomsen F, Petersen OS. 2021. Hydrodynamic modeling, particle tracking and agent-based modeling of larvae in the U.S. Mid-Atlantic Bight. Lakewood (CO): US Department of the Interior, Bureau of Ocean Energy Management. 232 p. Report No.: OCS Study BOEM 2021-049.
- Jones EL, Stanley JA, Mooney TA. 2020. Impulsive pile driving noise elicits alarm responses in squid (*Doryteuthis pealeii*). *Marine Pollution Bulletin*. 150(2020). doi:10.1016/j.marpolbul.2019.110792.
- Jones IT, Peyla FJ, Clark H, Song Z, Stanley JA, Mooney TA. 2021. Changes in feeding behavior of longfin squid (*Doryteuthis pealeii*) during laboratory exposure to pile driving noise. *Marine of Environmental Research*. 165(2021).
- Jones, I. T., Schumm, M., Stanley, J. A., Hanlon, R. T. and Mooney, T. A. 2023. Longfin squid reproductive behaviours and spawning withstand wind farm pile driving noise. *ICES J. Mar. Sci.*, p.fsad117.
- Kaifu, K., Akamatsu, T., Segawa, S. 2008. Underwater sound detection by cephalopod statocyst. *Fish. Sci.* 74, 781–786. <https://doi.org/10.1111/j.1444-2906.2008.01589.x>.
- Kane J. 2011. Inter-decadal variability of zooplankton abundance in the Middle Atlantic Bight. *Journal of Northwestern Atlantic Fisheries Science*. 43:81-92. doi:10.2960/J.v43.m674.
- Kaplan MB, Mooney TA. 2016. Coral reef soundscapes may not be detectable far from the reef. *Scientific Reports*. 6:31862. doi:10.1038/srep31862.
- Kaplan MB, Mooney TA, Partan J, Solow AR. 2015. Coral reef species assemblages are associated with ambient soundscapes. *Marine Ecology Progress Series*. 533:93-107. doi:10.3354/meps11382.

- Kastelein RA, Jennings N, Kommeren A, Helder-Hoek L, Schop J. 2017. Acoustic dose-behavioral response relationship in sea bass (*Dicentrarchus labrax*) exposed to playbacks of pile-driving sounds. *Marine Environmental Research*. 130:315-324. doi:10.1016/j.marenvres.2017.08.010.
- Kavet RM, Wyman M, Klimley A, Vergara X. 2016. Assessment of potential impact of electromagnetic fields from undersea cable on migratory fish behavior. Electric Power Research Institute for Bureau of Ocean Energy Management and US Department of Energy. Report No.: OCS Study BOEM 2015-041.
- Keevin TM, Hempen GL. 1997. The environmental effects of underwater explosions with methods to mitigate impacts. US Army Corps of Engineers, St. Louis District. 100 p.
- Kenyon T. 1996. Ontogenetic changes in the auditory sensitivity of damselfishes (*Pomacentridae*). *Journal of Comparative Physiology A*. 179:553-561.
- Kleisner KM, Fogarty MJ, S M, Hare JA, Moret S, T PC. 2017. Marine species distribution shifts on the U.S. northeast continental shelf under continued ocean warming. *Progress in Oceanography*. 153:24-36. doi:10.1016/j.pocean.2017.04.001.
- Kohut J, Brodie J. 2019. Final report and white paper; Partners in science workshop: Offshore wind and the Mid-Atlantic cold pool. Coastal Education Center at the Jacques Cousteau National Estuarine Research Reserve. 15 p.
- Kostyuchenko LP. 1973. Effect of elastic waves generated in marine seismic prospecting on fish eggs in the Black Sea. *Hydrobiological Journal*. 9(5):45-48.
- Kraus C, Carter L. 2018. Seabed recovery following protective burial of subsea cables - Observations from the continental margin. *Ocean Engineering*. 157(2018):251-261. doi:10.1016/j.oceaneng.2018.03.037.
- Krebs J, Jacobs F, Popper AN. 2016. Avoidance of pile-driving noise by Hudson River sturgeon during construction of the new NY Bridge at Tappan Zee. In: Krebs J, Popper AN, editors. *The Effects of Noise on Aquatic Life II*. Dublin, Ireland: Springer Science + Business Media New York. p. 555-563.
- Kritzer JP, DeLucia M, Greene E, Shumway C, Topolski MF, Thomas-Blate J, Chiarella LA, Davy KB, Smith K. 2016. The importance of benthic habitats for coastal fisheries. *BioScience*. 66(4):274-284. doi:10.1093/biosci/biw014.
- Ladich F, Bass AH. 2011. Vocal behavior of fishes. In: Farrell AP, editor. *Encyclopedia of fish physiology: from genome to environment*. San Diego (CA): Academic Press.
- Lafrate JD, Watwood SL, Reyier EA, Scheidt DM, Dossot GA, Crocker SE. 2016. Effects of pile driving on the residency and movement of tagged reef fish. *PLOS One*. 11(11):e0163638. doi:10.1371/journal.pone.0163638.

- Lefcheck JS, Hughes BB, Johnson AJ, Pfirrmann BW, Rasher DB, Smyth AR, Williams BL, Beck MW, Orth RJ. 2019. Are coastal habitats important nurseries? A meta-analysis. *Conversation Letters*. 12(4):e12645. doi:10.1111/conl.12645.
- Lillis A, Bohnenstiehl DR, Eggleston DB. 2015. Soundscape manipulation enhances larval recruitment of a reef-building mollusk. *Peer Journal* 3:e999. <https://www.ncbi.nlm.nih.gov/pubmed/26056624>. doi:10.7717/peerj.999.
- Lillis A, Eggleston DB, Bohnenstiehl DR. 2013. Oyster larvae settle in response to habitat-associated underwater sounds. *PLOS One*. 8(10):e79337. <https://www.ncbi.nlm.nih.gov/pubmed/24205381>. doi:10.1371/journal.pone.0079337.
- Lucey SM, Nye JA. 2010. Shifting species assemblages in the Northeast US Continental Shelf large marine ecosystem. *Marine Ecology Progress Series*. 415(2010):23-33. doi:10.3354/meps08743.
- Mann DA, Higgs DM, Tavalga WN, Souza MJ, Popper AN. 2001. Ultrasound detection by clupeiform fishes. *Journal of the Acoustical Society of America*. 109(6):3048-3054.
- McCormick CA. 2011. Auditory/lateral line CNS: Anatomy. In: Farrell AP, editor. *Encyclopedia of fish physiology: from genome to environment*. San Diego (CA): Academic Press.
- McWilliam JN, Hawkins AD. 2013. A comparison of inshore marine soundscapes. *Journal of Experimental Marine Biology and Ecology*. 446:166-176. doi:10.1016/j.jembe.2013.05.012.
- Mickle MF, Higgs DM. 2022. Towards a new understanding of elasmobranch hearing. *Marine Biology*. 169(12):1-13. doi:10.1007/s00227-021-03996-8.
- Middleton P, Barnhart B. 2022. Supporting National Environmental Policy Act documentation for offshore wind energy development related to high voltage direct current cooling systems. Washington (DC): US Department of the Interior, Bureau of Ocean Energy Management. 13 p. Report No.: OCS Study BOEM 2022-023.
- Montgomery JC. 2006. Sound as an orientation cue for the pelagic larvae of reef fishes and decapod crustaceans. *Advances in Marine Biology*. 51:143-196.
- Mooney TA, Hanlon RT, Christensen-Dalsgaard J, Madsen PT, Ketten DR, Nachtigall PE. 2010. Sound detection by the longfin squid (*Loligo pealeii*) studied with auditory evoked potentials: Sensitivity to low-frequency particle motion and not pressure. *Journal of Experimental Biology*. 213(Pt 21):3748-3759. <https://www.ncbi.nlm.nih.gov/pubmed/20952625>. doi:10.1242/jeb.048348.
- Morris CJ, Cote D, Martin SB, Mullowney D. 2020. Effects of 3D seismic surveying on snow crab fishery. *Fisheries Research*. 232. doi:10.1016/j.fishres.2020.105719.
- Moser J, Shepard GR. 2009. Seasonal distribution and movement of Black sea bass (*Centropristis striata*) in the northwest Atlantic as determined from a mark-recapture experiment. *Journal of Northwest Atlantic Fisheries Science*. 40:17-28. <https://journal.nafo.int/Volumes/Articles/ID/445/Seasonal->

Distribution-and-Movement-of-Black-Sea-Bass-emCentropristis-striataem-in-the-Northwest-Atlantic-as-Determined-from-a-Mark-Recapture-Experiment. doi:10.2960/J.v40.m638.

Moser ML, Conway J, Thorpe T, Robin Hall J. 2000. Effects of recreational electrofishing on sturgeon habitat in the Cape Fear river drainage. Raleigh (NC): North Carolina Sea Grant, Fishery Resource Grant Program. 36 p.

Moser ML, Ross SW. 1995. Habitat use and movements of shortnose and Atlantic sturgeons in the lower Cape Fear River, North Carolina. Transactions of the American Fisheries Society. 124(1995):225-234.

Mueller-Blenkle C, McGregor PK, Gill AB, Andersson MH, Metcalfe J, Bendall V, Sigra P, Wood D, Thomsen F. 2010. Effects of pile-driving noise on the behaviour of marine fish. Lowestoft (UK): Cefas Lowestoft Laboratory. 62 p. Report No.: Cefas Ref: C3371.

Nedelec SL, Mills SC, Lecchini D, Nedelec B, Simpson SD, Radford AN. 2016. Repeated exposure to noise increases tolerance in a coral reef fish. Environmental Pollution. 216:428-436. doi:10.1016/j.envpol.2016.05.058.

Nedelec SL, Radford AN, Pearl L, Nedelec B, McCormick MI, Meekan MG, Simpson SD. 2017. Motorboat noise impacts parental behaviour and offspring survival in a reef fish. Proceedings of the Royal Society B: Biological Sciences. 284. doi:10.1098/rspb.2017.0143.

Neo YY, Hubert J, Bolle L, Winter HV, Ten Cate C, Slabbekoorn H. 2016. Sound exposure changes European seabass behaviour in a large outdoor floating pen: Effects of temporal structure and a ramp-up procedure. Environmental Pollution. 214(26-34). doi:10.1016/j.envpol.2016.03.075.

Neo YY, Hubert J, Bolle LJ, Winter HV, Slabbekoorn H. 2018. European seabass respond more strongly to noise exposure at night and habituate over repeated trials of sound exposure. Environmental Pollution. 239:367-374. doi:10.1016/j.envpol.2018.04.018.

Neo YY, Kastelein RA, Winter HV, Ten Cate C, Slabbekoorn H. 2014. Temporal structure of sound affects behavioural recovery from noise impact in European seabass. Biological Conservation. 178:65-73. doi:10.1016/j.biocon.2014.07.012.

Nichols TA, Anderson TW, Sirovic A. 2015. Intermittent noise induces physiological stress in a coastal marine fish. PLOS ONE. 10(9):e0139157. doi:10.1371/journal.pone.0139157.

Nilsson H, Rosenberg R. 2003. Effects on marine sedimentary habitats of experimental trawling analysed by sediment profile imagery. Journal of Experimental Marine Biology and Ecology. 285-286(2003):453-463.

[NMFS] National Marine Fisheries Service. 1998. Recovery plan for the Shortnose sturgeon (*Acipenser brevirostrum*). Silver Spring (MD): Shortnose Sturgeon Recovery Team. 104 p.

- NMFS. 2006. Final consolidated Atlantic highly migratory species fishery management plan. Silver Spring (MD): National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Sustainable Fisheries, Highly Migratory Species Management Division. 1629 p.
- NMFS. 2017. Final Amendment 10 to the 2006 consolidated Atlantic highly migratory species fishery management plan: Essential fish habitat and environmental assessment. Silver Spring (MD): National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Sustainable Fisheries, Highly Migratory Species Management Division. 442 p.
- NMFS. 2022. Species directory, Giant manta ray *Manta birotris*. National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2022 Dec 09].
<https://www.fisheries.noaa.gov/species/giant-manta-ray>.
- NOAA. 2019. U.S. national bycatch report first edition update. US Department of Commerce, National Oceanic and Atmospheric Administration. 95 p. Report No.: NOAA Technical Memorandum NMFS-F/SPO-190. https://media.fisheries.noaa.gov/dam-migration/nbr_update_3.pdf.
- NOAA. 2021. State of the ecosystem mid-Atlantic. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 52 p.
- Normandeau Associates Inc and Exponent Inc. 2011. Effects of EMFs from undersea power cables on elasmobranchs and other marine species. Final report. Camarillo (CA): US Department of the Interior, Bureau of Ocean Energy Management, Regulation and Enforcement, Pacific OCS Region. 426 p. Report No.: OCS Study BOEM 2011-09. <https://epis.boem.gov/final%20reports/5115.pdf>.
- NYDOS. 2013. Significant coast fish & wildlife habitats. [accessed 2022 Dec 07].
<http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=318>.
- NYSERDA. 2017. New York State offshore wind master plan; fish and fisheries study. New York (NY): New York State Energy Research and Development Authority. 202 p. Report No.: NYSERDA Report 17-25j. [accessed 2022 Nov 29]. <https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/About-Offshore-Wind/Master-Plan>.
- Ocean Wind LLC. 2022. Construction and operations plan, Ocean Wind Offshore Wind Farm. US Department of Interior, Bureau of Ocean Energy Management. 169 p. Report No.: Volumes I-III. <https://www.boem.gov/ocean-wind-construction-and-operations-plan/>.
- Patek SN. 2002. Squeaking with a sliding joint: Mechanics and motor control of sound production in palinurid lobsters. *The Journal of Experimental Biology*. 205:2375-2385.
- Payne JF, Andrews AC, Fancey LL, Cook LA, Christian RJ. 2007. Pilot study on the effects of seismic air gun noise on lobster (*Homarus americanus*). Newfoundland (Canada): National Energy Board for the Minister of Natural Resources Canada. 34 p. Report No.: Environmental Studies Research Funds Report No. 171.

- Pearson WH, Skalski JR, Sulkin SD, Malme C. 1994. Effects of seismic energy releases on the survival and development of zoeal larvae of Dungeness Crab (*Cancer magister*). *Marine Environmental Research*. 38:93-113.
- Pederson J. 2005. Marine bioinvasions. In: First International Conference; 2003; Cambridge (MA). MIT Sea Grant College Program. p 46. [accessed 2022 Nov 30].
https://www.buzzardsbay.org/download/marine_invaders_in_the_northeast_2003.pdf.
- Pijanowski BC, Villanueva-Rivera LJ, Dumyahn SL, Farina A, Krause BL, Napoletano BM, Gage SH, Pieretti N. 2011. Soundscape ecology: The science of sound in the landscape. *BioScience*. 61(3):203-216.
doi:10.1525/bio.2011.61.3.6.
- Pinsky M, Worm B, Fogarty M, Sarmiento J, Levin S. 2013. Marine taxa track local climate velocities. *Science*. 341(6151):123901242. <https://doi.org/10.1126/science.1239352>.
doi:10.1126/science.1239352.
- Pohle, G.W., and M.L.H. Thomas. 2001. Marine biodiversity Monitoring. Monitoring protocol for marine benthos: Intertidal and subtidal macrofauna. Report by the Marine biodiversity Monitoring Committee (Atlantic Marine Ecological Science Cooperative, Huntsman Marine Science Centre) to the Ecological Monitoring and Assessment network of Environment Canada. Accessed: November 15, 2022. Retrieved from: <http://www.biomareweb.org/downloads/mbm.pdf>.
- Popper AN, Salmon M, Horch KW. 2001. Acoustic detection and communication by decapod crustaceans. *Journal of Comparative Physiology A*. 187:83-89. doi:10.1007/s003590100184.
- Popper AN, Smith ME, Cott PA, Hanna BW, MacGillivray AO, Austin ME, Mann DA. 2005. Effects of exposure to seismic airgun use on hearing of three fish species. *Journal of the Acoustical Society of America*. 117(6):3958–3971. doi:10.1121/1.1904386.
- Popper AN, Hawkins AD. 2018. The importance of particle motion to fishes and invertebrates. *Journal of the Acoustical Society of America*. 143(1):470-488.
<https://www.ncbi.nlm.nih.gov/pubmed/29390747>. doi:10.1121/1.5021594.
- Popper AN, Hawkins AD. 2019. An overview of fish bioacoustics and the impacts of anthropogenic sounds on fishes. *Journal of Fish Biology*. 94(5):692–713.
<https://www.ncbi.nlm.nih.gov/pubmed/30864159>. doi:10.1111/jfb.13948.
- Popper AN, Hawkins AD, Fay RR, Mann DA, Bartol S, Carlson TJ, Coombs S, Ellison WT, Gentry RL, Halvorsen MB, et al. 2014. Sound exposure guidelines for fishes and sea turtles: A technical report prepared by ANSI-accredited standards committee S3/SC1 and registered with ANSI. Melville (NY): Acoustical Society of America. 87 p. Report No.: ASA S3/SC1.4 TR-2014.
https://www.researchgate.net/publication/279347068_Sound_Exposure_Guidelines/link/5596735d08ae99aa62c777b9/download.

- Popper AN, Hawkins AD, Halvorsen MB. 2019. Anthropogenic sound and fishes. Olympia (WA): 170 p. Report No.: WA-RD 891.1.
- Popper AN, Hawkins AD, Sisneros JA. 2021. Fish hearing "specialization" - A re-valuation. Hearing Research 108393. <https://www.ncbi.nlm.nih.gov/pubmed/34823877>. doi:10.1016/j.heares.2021.108393.
- Popper AN, Hice-Dunton L, Jenkins E, Higgs DM, Krebs J, Mooney A, Rice A, Roberts L, Thomsen F, Vigness-Raposa K. 2022. Research priorities for sound and vibration effects on fishes and aquatic invertebrates. Journal of Acoustical Society of America. 151(1):205. doi:10.1121/10.0009237.
- Radford AN, Lebre L, Lecaillon G, Nedelec SL, Simpson SD. 2016. Repeated exposure reduces the response to impulsive noise in European seabass. Global Change Biology. 22(10):3349-3360. doi:10.1111/gcb.13352.
- Radford C, Jeffs A, Tindle C, Montgomery JC. 2008a. Resonating sea urchin skeletons create coastal choruses. Marine Ecology Progress Series. 362:37-43. doi:10.3354/meps07444.
- Radford CA, Jeffs AG, Montgomery JC. 2007. Directional swimming behavior by five species of crab postlarvae in response to reef sound. Bulletin of Marine Science. 80(2):369-378.
- Radford CA, Jeffs AG, Tindle CT, Montgomery JC. 2008. Temporal patterns in ambient noise of biological origin from a shallow water temperate reef. Oecologia. 156(4):921-929. <https://www.ncbi.nlm.nih.gov/pubmed/18461369>. doi:10.1007/s00442-008-1041-y.
- Rheuban JE, Kavanaugh MT, Doney SC. 2017. Implications of future northwest Atlantic bottom temperatures on the American Lobster (*Homarus americanus*) fishery. Journal of Geophysical Research: Oceans. 122:9387-9398. doi:10.1002/2017JC012949.
- Rice AN, Farina SC, Makowski AJ, Kaatz IM, Lobel PS, Bemis WE, Bass AH. 2022. Evolutionary patterns in sound production across fishes. Ichthyology & Herpetology. 110(1). doi:10.1643/i2020172.
- Roberts L, Breithaupt T. 2016. Sensitivity of crustaceans to substrate-borne vibration. In: Popper AN, Hawkins A, editors. The Effects of Noise on Aquatic Life II. New York (NY): Springer Science + Business Media New York. p. 925-931.
- Roberts L, Cheesman S, Breithaupt T, Elliott M. 2015. Sensitivity of the mussel *Mytilus edulis* to substrateborne vibration in relation to anthropogenically generated noise. Marine Ecology Progress Series. 538:185-195. doi:10.3354/meps11468.
- Roberts L, Cheesman S, Hawkins AD. 2016. Effects of sound on the behavior of wild, unrestrained fish schools. Advances in Experimental Medicine and Biology. 875:917-924. <https://www.ncbi.nlm.nih.gov/pubmed/26611050>. doi:10.1007/978-1-4939-2981-8_113.
- Roberts L, Laidre ME. 2019. Finding a home in the noise: Cross-modal impact of anthropogenic vibration on animal search behaviour. Biology Open. 8(7). doi:10.1242/bio.041988.

- Robins CR, Ray GC. 1986. A field guide to the Atlantic coast fishes. New York (NY): Peterson Field Guide Series, Houghton Mifflin. 942 p.
- Rogers P, Debusschere E, de Haan D, Martin B, Slabbekoorn H. 2021. North Sea soundscapes from a fish perspective: Directional patterns in particle motion and masking potential from anthropogenic noise. *Journal of the Acoustical Society of America*. 150(3):2174-2188. doi:10.1121/10.0006412.
- Ruppel CD, Weber TC, Staaterman ER, Labak SJ, Hart PE. 2022. Categorizing active marine acoustic sources based on their potential to affect marine animals. *Journal of Marine Science and Engineering*. 10(9). doi:10.3390/jmse10091278.
- Saetre R, Ona E. 1996. The effects of seismic surveys on fish eggs and larvae. *Fiskens Og Havet*. 8:24.
- Sciberras M, Parker R, Powell C, Robertson C, Kroger S, Bolam S, Hiddin J. 2016. Impacts of bottom fishing on the sediment infaunal community and biogeochemistry of cohesive and non-cohesive sediments. *Limnology and Oceanography*. 61(2016):2076-2089. doi:10.1002/lno.10354.
- Secor DH, Zhang F, O'Brien MHP, Li M. 2019. Ocean destratification and fish evacuation caused by a Mid-Atlantic tropical storm. *ICES Journal of Marine Science*. 76(2):573-584. <https://doi.org/10.1093/icesjms/fsx241>. doi:10.1093/icesjms/fsx241.
- [SEER] Synthesis of Environmental Effects Research. 2022. Electromagnetic Field Effects on Marine Life. Tethys research brief. Summer 2022. 13p. [accessed 2023 Sep 22]. <https://tethys.pnnl.gov/summaries/electromagnetic-field-effects-marine-life>.
- Shelledy K, Phelan B, Stanley J, Soulen H. 2018. Could offshore wind energy construction affect black sea bass behavior?
- Simpson SD, Meekan MG, Montgomery JC, McCauley RD, Jeffs AG. 2005. Homeward sound. *Science*. 308:221. doi:10.1126/science.1107406.
- Simpson SD, Radford AN, Nedelec SL, Ferrari MC, Chivers DP, McCormick MI, Meekan MG. 2016. Anthropogenic noise increases fish mortality by predation. *Nature Communications*. 7(1):10544.
- Sims DW, Genner MJ, Southward AJ, Hawkins SJ. 2001. Timing of squid migration reflects North Atlantic climate variability. *Proceedings of the Royal Society of London Series B: Biological Sciences*. 268(1485):2607-2611. doi:10.1098/rspb.2001.1847.
- Smith J, Lowry M, Champion C, Suthers I. 2016. A designed artificial reef is among the most productive marine fish habitats: New metrics to address 'production versus attraction'. *Marine Biology*. 163. <http://www.famer.unsw.edu.au/publications/Smith2016a.pdf>. doi:10.1007/s00227-016-2967-y.
- Smith ME, Accomando AW, Bowman V, Casper BM, Dahl PH, Jenkins AK, Kotecki S, Popper AN. 2022. Physical effects of sound exposure from underwater explosions on Pacific mackerel (*Scomber japonicus*): Effects on the inner ear. *Journal of Acoustical Society of America*. 152(2). <https://doi.org/10.1121/10.0012991>. doi:10.1121/10.0012991.

- Solé M, De Vreese S, Fortuno JM, Van der Schaar M, Sánchez AM, M A. 2022. Commercial cuttlefish exposed to noise from offshore windmill construction show short-range acoustic trauma. *Environmental Pollution*. 321:119853.
- Solé M, Lenoir M, Durfort M, Lopez-Bejar M, Lombarte A, Adré M. 2013. Ultrastructural damage of *Loligo vulgaris* and *Illex coindetii* statocysts after low frequency sound exposure. *PLOS ONE*, 8(10):e78825. <https://doi.org/10.1371/journal.pone.0078825>. doi: 10.1371/journal.pone.0078825
- Solé M, Sigray P, Lenoir M, van der Schaar M, Lalander E, Andre M. 2017. Offshore exposure experiments on cuttlefish indicate received sound pressure and particle motion levels associated with acoustic trauma. *Scientific Reports*. 7:45899. <https://www.ncbi.nlm.nih.gov/pubmed/28378762>. doi:10.1038/srep45899.
- Song J, Mann DA, Cott PA, Hanna BW, Popper AN. 2008. The inner ears of Northern Canadian freshwater fishes following exposure to seismic air gun sounds. *Journal of the Acoustical Society of America*. 124(2):1360–1366. doi:10.1121/1.2946702.
- Spiga I, Caldwell GS, Bruintjes R. 2016. Proceedings of Meetings on Acoustics: Influence of pile driving on the clearance rate of the blue mussel, *Mytilus edulis* (L.). In: Fourth International Conference on the Effects of Noise on Aquatic Life; Dublin, Ireland. Acoustical Society of America. 1-9 p.
- Staaterman ER, Clark CW, Gallagher AJ, deVries MS, Claverie T, Patek SN. 2011. Rumbling in the benthos: Acoustic ecology of the California mantis shrimp *Hemisquilla californiensis*. *Aquatic Biology*. 13(2):97-105. doi:10.3354/ab00361.
- Staaterman ER, Gallagher AJ, Holder PE, Reid CH, Altieri AH, Ogburn MB, Rummer JL, Cooke SJ. 2020. Exposure to boat noise in the field yields minimal stress response in wild reef fish. *Aquatic Biology*. 29:93-103. doi:10.3354/ab00728.
- Staaterman ER, Paris CB, Kough AS. 2014. First evidence of fish larvae producing sounds. *Biology Letters*. 10(10):20140643. doi:10.1098/rsbl.2014.0643.
- Stanley JA, Caiger PE, Jones IT, Van Parijs S, Phelan B, Shelledy K, Mooney TA. 2023. Behavioral effects of sound sources from offshore renewable energy construction on the black sea bass (*Centropristis striata*) and longfin squid (*Doryteuthis pealeii*). US Department of the Interior, Bureau of Ocean Energy Management. 140 p. Report No.: OCS Study BOEM 2022-004. Contract No.: M17PG00029. https://espis.boem.gov/final%20reports/BOEM_2022-004.pdf.
- Stanley JA, Caiger PE, Phelan B, Shelledy K, Mooney TA, Van Parijs SM. 2020. Ontogenetic variation in the auditory sensitivity of black sea bass (*Centropristis striata*) and the implications of anthropogenic sound on behavior and communication. *Journal of Experimental Biology*. 223(13):1-11. doi:10.1242/jeb.219683.

- Stanley JA, Hesse J, Hinojosa IA, Jeffs AG. 2015. Inducers of settlement and molting in post-larval spiny lobster. *Oecologia*. 178(3):685-697. <https://www.ncbi.nlm.nih.gov/pubmed/25682060>. doi:10.1007/s00442-015-3251-4.
- Stanley JA, Radford CA, Jeffs AG. 2012. Location, location, location: Finding a suitable home among the noise. *Proceedings of the Royal Society B: Biological Sciences*. 279(1742):3622-3631. doi:10.1098/rspb.2012.0697.
- Stanley JA, Van Parijs SM, Hatch LT. 2017. Underwater sound from vessel traffic reduces the effective communication range in Atlantic cod and haddock. *Scientific Reports*. 7(1):14633. doi:10.1038/s41598-017-14743-9.
- Stephenson JR, Gingerich AJ, Brown RS, Pflugrath BD, Deng Z, Carlson TJ, Langeslay MJ, Ahmann ML, Johnson RL, Seaburg AG. 2010. Assessing barotrauma in neutrally and negatively buoyant juvenile salmonids exposed to simulated hydro-turbine passage using a mobile aquatic barotrauma laboratory. *Fisheries Research*. 106(3):271-278. doi:10.1016/j.fishres.2010.08.006.
- Taormina B, Bald J, Want A, Thouzeau G, Lejart M, Desroy N, Carlier A. 2018. A review of potential impacts of submarine power cables on the marine environment: Knowledge gaps, recommendations and future directions. *Renewable and Sustainable Energy Reviews*. 96:380-391. https://www.researchgate.net/publication/327079114_A_review_of_potential_impacts_of_submarine_power_cables_on_the_marine_environment_Knowledge_gaps_recommendations_and_future_directions. doi:10.1016/j.rser.2018.07.026. hal-02405630.
- Tetra Tech Inc. 2015. USCG final environmental impact statement for the Port Ambrose Project deepwater port application. Washington (DC): US Coast Guard Vessel and Facility Operating Standards. 549 p. Report No.: USCG-2013-0363.
- Thomsen F, Gill AB, Kosecka M, Andersson M, Andre M, Degraer S, Folegot J, Gabriel J, Judd A, Neumann T, et al. 2015. *MaRVEN—Environmental impacts of noise, vibrations and electromagnetic emissions from marine renewable energy*. Luxembourg: Publications Office of the European Union. 82 p. <https://tethys.pnnl.gov/publications/marven-environmental-impacts-noise-vibrations-electromagnetic-emissions-marine>.
- USCG. 2011. Table 386: Oil spills in U.S. water-number and volume. Pollution incidents in and around U.S. waters, a spill/release compendium: 1969–2004 and 2004–2009. US Coast Guard Marine Information for Safety and Law Enforcement (MISLE) System. 5 p. [accessed 2021 Aug 05]. <https://www2.census.gov/library/publications/2011/compendia/statab/131ed/tables/12s0386.xls>.
- USEPA. 2023. Climate change indicators; Marine species distribution. US Environmental Protection Agency. [accessed 2023 Sep 22]. <https://www.epa.gov/climate-indicators/climate-change-indicators-marine-species-distribution>.
- USFWS and NMFS. 2018. Recovery plan for the Gulf of Maine distinct population segment of Atlantic salmon (*Salmo salar*). US Department of the Interior, US Fish and Wildlife Service, Ecological Services

and Fisheries and US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 74 p.

Vabø R, Olsen K, Huse I. 2002. The effect of vessel avoidance of wintering Norwegian spring spawning herring. *Fisheries Research*. 58(1):59-77.

Van Berkel J, Burchard H, Christenson A, Mortensen L, Svenstrup Petersen O, Thomsen F. 2020. The effects of offshore wind farms on hydrodynamics and implications for fishes. *Oceanography*. 33(4):108-117.

Vazzana, M., Mauro, M., Ceraulo, M., Dioguardi, M., Papale, E., Mazzola, S., Arizza, V., Beltrame, F., Inguglia, L. and Buscaino, G. 2020. Underwater high frequency noise: Biological responses in sea urchin *Arbacia lixula* (Linnaeus, 1758). *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology*, 242, p.110650.

Vermeij MJA, Marhaver KL, Huijbers CM, Nagelkerken I, Simpson SD. 2010. Coral larvae move toward reef sounds. *PLOS One*. 5(5). doi:10.1371/journal.pone.0010660.

Vieira, M., Beauchaud, M., Amorim, M.C.P. and Fonseca, P.J. 2021. Boat noise affects meagre (*Argyrosomus regius*) hearing and vocal behaviour. *Marine Pollution Bulletin*, 172, p.112824.

Wale MA, Briers RA, Diele K. 2021. Marine invertebrate anthropogenic noise research - Trends in methods and future directions. *Marine Pollution Bulletin*. 173(pt. A):112958. doi:10.1016/j.marpolbul.2021.112958.

Wale MA, Simpson SD, Radford AN. 2013. Size-dependent physiological responses of shore crabs to single and repeated playback of ship noise. *Biology Letters*. 9(2):20121194. doi:10.1098/rsbl.2012.1194.

Wiernicki CJ, Liang D, Bailey H, Secor DH. 2020. The effect of swim bladder presence and morphology on sound frequency detection for fishes. *Reviews in Fisheries Science & Aquaculture*.1-19. doi:10.1080/23308249.2020.1762536.

Wysocki LE, Dittami JP, Ladich F. 2006. Ship noise and cortisol secretion in European freshwater fishes. *Biological Conservation*. 128(4):501-508.

Yelverton JT. 1975. The relationship between fish size and their response to underwater blast. Albuquerque, N.M.: Lovelace Foundation for Medical Education and Research. Report No.: Technical progress report DNA-3677T.

Zydlewski GB, Kinnison MT, Dionne PE, Zydlewski J, Wipplehauer GS. 2011. Shortnose sturgeon use small coastal rivers: The importance of habitat connectivity. *Journal of Applied Ichthyology*. 27:41-44.

K.4.9 Section 3.5.6, Marine Mammals

- APEM and Normandeau Associates. 2018. Digital aerial baseline survey of marine wildlife in support of offshore wind energy prepared for New York State Energy Research and Development Authority - OPA 2016. New York State Energy Research and Development Authority. [accessed 2022 Nov 27]. <http://seamap.env.duke.edu/dataset/1817>.
- Atlantic Shores. 2022. Atlantic Shores offshore wind construction and operations plan, lease area OCS-A 0499. US Department of the Interior, Bureau of Ocean Energy Management. 277 p. Report No.: OCS-A-0499. [accessed 2023 Jan 01]. <https://www.boem.gov/renewable-energy/state-activities/atlantic-shores-offshore-wind-construction-and-operations-plan>.
- Austin ME, Hannay DE, Broker KC. 2018. Acoustic characterization of exploration drilling in the Chukchi and Beaufort seas. *Journal of the Acoustical Society of America*. 144(1):1-115. doi:10.1121/1.5044417.
- Azzara AJ, von Zharen WM, Newcomb JJ. 2013. Mixed-methods analytic approach for determining potential impacts of vessel noise on sperm whale click behavior. *Journal of the Acoustical Society of America*. 134(6):4566-4574. <http://scitation.aip.org/content/asa/journal/jasa/134/6/10.1121/1.4828819>. doi:10.1121/1.4828819.
- Baulch S, Perry C. 2014. Evaluating the impacts of marine debris on cetaceans. *Marine Pollution Bulletin*. 80:210-221. [accessed 2023 Jan]. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwibhLySt4j6AhV-j2oFHVjhD3kQFnoECBgQAQ&url=https%3A%2F%2Fwww.researchgate.net%2Ffile.PostFileLoader.html%3Ffid%3D523ff97fcf57d74e7d043cb9%26assetKey%3DAS%253A272142459965441%25401441895226384&usg=AOvVaw0JCZW81NT0UAQIZD0G_9X1.
- Bejarano AC, Michel J, Rowe Z, Li D, French Mcay L, Ekin D. 2013. Environmental risks, fate and effects of chemicals associated with wind turbines on the Atlantic outer continental shelf. Herndon (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 355 p. Report No.: OCS Study BOEM 2013-213.
- Bejder L, Samuels A, Whitehead H, Finn H, Allen S. 2009. Impact assessment research: Use and misuse of habituation, sensitisation and tolerance in describing wildlife responses to anthropogenic stimuli. *Marine Ecology Progress Series*. 395:177-185. doi:10.3354/meps07979.
- Bellmann MA, Brinkmann J, May J, Wendt T, Gerlach S, Remmers P. 2020. Underwater noise during the impulse pile-driving procedure: Influencing factors on pile-driving noise and technical possibilities to comply with noise mitigation values. The Federal Maritime and Hydrographic Agency (Bundesamt für Seeschifffahrt und Hydrographie). 137 p. Report No.: FKZ UM16 881500.

- Benaka L, Bullock D, Hoover A, Olsen N. 2019. U.S. National Bycatch Report First Edition Update 3. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 95 p. Report No.: NOAA Technical Memorandum NMFS-F/SPO-190.
- Benhemma-Le Gall A, Graham IM, Merchant ND, Thompson PM. 2021. Broad-scale responses of harbor porpoises to pile-driving and vessel activities during offshore windfarm construction. *Frontiers in Marine Science*. 8. doi:10.3389/fmars.2021.664724.
- Benjamins S, Harnois V, Smith HCM, Johanning L, Greenhill L, Carter C, Wilson B. 2014. Understanding the potential for marine megafauna entanglement risk from renewable marine energy developments. Scottish Natural Heritage. Report No.: Commissioned Report No. 791.
- Betke K, Bellmann MA. 2023. Operational underwater noise from offshore wind farms. In: *The Effects of Noise on Aquatic Life*. p. 1-12.
- Bilinski J. 2021. Review of the impacts to marine fauna from electromagnetic frequencies (EMF) generated by energy transmitted through undersea electric transmission cables. NJDEP Division of Science and Research. [accessed 2022 Nov 29]. <https://www.nj.gov/dep/offshorewind/docs/njdep-marine-fauna-review-impacts-from-emf.pdf>.
- Blackwell SB, Nations CS, McDonald TL, Greene CR, Thode AM, Guerra M, Macrander AM. 2013. Effects of airgun sounds on bowhead whale calling rates in the Alaskan Beaufort Sea. *Marine Mammal Science*. 29(4):E342-E365. <http://dx.doi.org/10.1111/mms.12001>. doi:10.1111/mms.12001.
- Blackwell SB, Nations CS, Thode AM, Kauffman ME, Conrad AS, Norman RG, Kim KH. 2017. Effects of tones associated with drilling activities on bowhead whale calling rates. *PLOS ONE*. 12(11):e0188459. doi:10.1371/journal.pone.0188459.
- BOEM. 2021a. South Fork Wind Farm and South Fork Export Cable project final environmental impact statement. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 1317 p. Report No.: OCS EIS/EA, BOEM 2020-057. [accessed 2022 Dec]. <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/SFWF%20FEIS.pdf>.
- BOEM. 2021b. Vineyard Wind 1 Offshore Wind Energy Project Final Environmental Impact Statement. OCS EIS/EA BOEM 2021-0012. Available: <https://www.boem.gov/renewable-energy/state-activities/vineyard-wind-1>.
- BOEM. 2021c. Data collection and site survey activities for renewable energy on the Atlantic Outer Continental Shelf. Biological Assessment. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 152 p. <https://www.boem.gov/sites/default/files/documents/renewable-energy/OREP-Data-Collection-BA-Final.pdf>.

- BOEM. 2023a. Guidelines for providing information on fisheries for renewable energy development on the Atlantic Outer Continental Shelf pursuant to 30 CFR Part 585. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 22 p.
<https://www.boem.gov/sites/default/files/documents/about-boem/Fishery-Survey-Guidelines.pdf>.
- BOEM. 2023b. Coastal Virginia Offshore Wind Commercial Project Final Environmental Impact Statement. OCS EIS/EA BOEM 2023-052. Docket Number: BOEM-2023-0047.
<https://www.boem.gov/renewable-energy/state-activities/coastal-virginia-offshore-wind-commercial-project-final>.
- BOEM. 2023c. Empire Offshore Wind Final Environmental Impact Statement. OCS EIS/EA BOEM 2023-049. Available: <https://www.boem.gov/renewable-energy/state-activities/empire-wind-final-eis>.
- BOEM. 2023d. Ocean Wind 1 Offshore Wind Farm Final Environmental Impact Statement. OCS EIS/EA BOEM 2023-020. Docket Number: BOEM-2023-0029. <https://www.boem.gov/renewable-energy/state-activities/ocean-wind-1-final-environmental-impact-statement-feis-commercial>.
- BOEM. 2023e. Revolution Wind Farm and Revolution Wind Export Cable Project Final Environmental Impact Statement. OCS EIS/EA BOEM 2023-0038. <https://www.boem.gov/renewable-energy/state-activities/revolution-wind-final-eis>.
- BOEM. 2024. BOEM and NOAA Fisheries North Atlantic right whale and offshore wind strategy. US Department of the Interior, Bureau of Ocean and Energy Management, and US Department of Commerce, National Oceanic and Atmospheric Administration Fisheries 78 p.
- Bradbury JW, Vehrencamp SL. 2011. Principles of animal communication. Sinauer Associates.
- Brandt MJ, Diederichs A, Betke K, Nehls G. 2011. Responses of harbour porpoises to pile driving at the Horns Rev II offshore wind farm in the Danish North Sea. Marine Ecology Progress Series. 421:205-216.
- Brandt MJ, Dragon AC, Diederichs A, Schubert A, Kosarev V, Nehls G, Wahl V, Michalik A, Braasch A, Hinz C, et al. 2016. Effects of offshore pile driving on harbour porpoise abundance in the German Bight. IBL Umweltplanung GmbH, Institut für Angewandte Ökosystemforschung & BioConsult SH. 262 p.
- Branstetter BK, Bowman VF, Houser DS, Tormey M, Banks P, Finneran JJ, Jenkins K. 2018. Effects of vibratory pile driver noise on echolocation and vigilance in bottlenose dolphins (*Tursiops truncatus*). Journal of the Acoustical Society of America. 143(1):429.
<https://www.ncbi.nlm.nih.gov/pubmed/29390736>. doi:10.1121/1.5021555.
- Broström G. 2008. On the influence of large wind farms on the upper ocean circulation. Journal of Marine Systems. 74:585-591. doi:10.1016/j.jmarsys.2008.05.001.
- Brown DM, Sieswerda PL, Parsons ECM. 2019. Potential encounters between humpback whales (*Megaptera novaeangliae*) and vessels in the New York Bight apex, USA. Marine Policy. 17 p. Report No.: 106:103527.

- Browne DM, Underwood AJ, Chapman MG, Williams R, Thomson CR, van Franeker JA. 2015. Linking effects of anthropogenic debris to ecological impacts. *Proceedings of the Royal Society B: Biological Sciences*. 282:20142929. <https://royalsocietypublishing.org/doi/10.1098/rspb.2014.2929>. doi:10.1098/rspb.2014.2929.
- Bruggeman G, Middleton P, Barnhart B. 2023. Supporting National Environmental Policy Act Documentation for Offshore Wind Energy Development Related to Glauconite Sand. Washington (DC): U.S. Department of the Interior, Bureau of Ocean Energy Management. OCS Study BOEM 2023-011. 16 p.
- Bryant PJ, Lafferty CM, Lafferty SK. 1984. Reoccupation of Laguna Guerrero Negro, Baja California, Mexico, by grey whales. In: Jones ML, editor. *The grey whale *Eschrichtius robustus**. Orlando (FL): Academic Press. p. 375-387.
- Buckstaff KC. 2006. Effects of watercraft noise on the acoustic behavior of bottlenose dolphins, *Tursiops truncatus* in Sarasota Bay, Florida. *Marine Mammal Science*. 20(4):709-725. doi:10.1111/j.1748-7692.2004.tb01189.x.
- Burek KA, Gulland FM, O'Hara TM. 2008. Effects of climate change on Arctic marine mammal health. *Ecological Applications*. 18(sp2):S126-S134.
- Burge CA, Eakin MC, Friedman CS, Froelich B, Hershberger PK, Hofmann EE, Petes LE, Prager KC, Weil E, Willis BL, et al. 2014. Climate change influences on marine infectious diseases: Implications for management and society. *Annual Review of Marine Sciences*. 6:249-277. doi:10.1146/annurev-marine-010213-135029.
- Carpenter J, Merckelbach L, Callies U, Clark S, Gaslikova L, Baschek B. 2016. Potential impacts of offshore wind farms on North Sea stratification. *PLOS ONE*. 11(8):1-28. doi:10.1371/journal.pone.0160830.
- Castellote M, Clark CW, Lammers MO. 2012. Acoustic and behavioural changes by fin whales (*Balaenoptera physalus*) in response to shipping and airgun noise. *Biological Conservation*. 147(1):115-122. doi:10.1016/j.biocon.2011.12.021.
- Causon P, Gill AB. 2018. Linking ecosystem services with epibenthic biodiversity change following installation of offshore wind farms. *Environmental Science & Policy*. 89(2018):340-347. <https://www.sciencedirect.com/science/article/pii/S1462901118304556/pdf?md5=b728b2b7a9e61e28e5901a5806772e71&pid=1-s2.0-S1462901118304556-main.pdf>.
- Cazenave PW, Torres R, Allen JJ. 2016. Unstructured grid modelling of offshore wind farm impacts on seasonally stratified shelf seas. *Progress in Oceanography*. 145:25-41. doi:10.1016/j.pocean.2016.04.004.
- Cerchio S, Strindberg S, Collins T, Bennett C, Rosenbaum H. 2014. Seismic surveys negatively affect humpback whale singing activity off northern Angola. *PLOS One*. 9(3):e86464. <https://www.ncbi.nlm.nih.gov/pubmed/24618836>. doi:10.1371/journal.pone.0086464.

- [CETAP] Cetacean and Turtle Assessment Program. 1981. A characterization of marine mammals and turtles in the mid- and north Atlantic areas of the U.S. outer continental shelf. Washington (DC): Cetacean and Turtle Assessment Program, University of Rhode Island. 77 p. Report No.: Final Report #AA55 1-CT8-48.
- Chen C, Beardsley R, Qi J, Lin H. 2016. Use of finite-volume modeling and the Northeast Coastal Ocean Forecast System in offshore wind energy resource planning. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 131 p. Report No.: BOEM 2016-050.
- Chen Z, Curchitser E, Chant R, Kang D. 2018. Seasonal variability of the cold pool over the Mid-Atlantic Bight continental shelf. *Journal of Geophysical Research: Oceans*. 123:8203-8226. <https://doi.org/10.1029/2018JC014148>. doi:10.1029/2018JC014148.
- Chen C. 2021. Assessing potential impacts of offshore wind facilities on regional sea scallop larval and early juvenile transports. US Department of Commerce, National Oceanic and Atmospheric Administration, Woods Hole Oceanographic Institution. 1-11 p. Report No.: 2020 Scallop RSA Share Day.
- Chen Z, Curchitser E. 2020. Interannual variability of the Mid-Atlantic Bight Cold Pool. *J Geophys Res-Oceans*. 125(8):1-20. doi:10.1029/2020JC016445.
- Cholewiak D, DeAngelis AI, Palka D, Corkeron PJ, Van Parijs SM. 2017. Beaked whales demonstrate a marked acoustic response to the use of shipboard echosounders. *Royal Society Open Science*. 4(12):170940. <https://www.ncbi.nlm.nih.gov/pubmed/29308236>. doi:10.1098/rsos.170940.
- Christiansen N, Daewel U, Djath B, Schrum C. 2022. Emergence of large-scale hydrodynamic structures due to atmospheric offshore wind farm wakes. *Frontiers in Marine Science*. 9(2022). doi:10.3389/fmars.2022.818501.
- Clark CW, Ellison WT, Southall BL, Hatch L, Van Parijs SM, Frankel A, Ponirakis D. 2009. Acoustic masking in marine ecosystems: Intuitions, analysis, and implication. *Marine Ecology Progress Series*. 395:201-222. doi:10.3354/meps08402.
- Clark CW, Gagnon GJ. 2002. Low-frequency vocal behaviors of baleen whales in the north Atlantic: Insights from integrated undersea surveillance system detections, locations, and tracking from 1992 to 1996. *Journal of Underwater Acoustics*. 52:609-640.
- Conn PB, Silber GK. 2013. Vessel speed restrictions reduce risk of collision mortality for North Atlantic right whales. *Ecosphere*. 4.4(2013):1-16. doi:10.1890/ES13-00004.1.
- Cooke JG. 2020. *Eubalaena glacialis*. The IUCN red list of threatened species 2020. International Union for Conservation of Nature and Natural Resources. [accessed 2022 Nov 19]. <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T41712A178589687.en>. doi:10.2305/IUCN.UK.2020-2.RLTS.T41712A178589687.en

- Cranford TW, Krysl P. 2015. Fin whale sound reception mechanisms: Skull vibration enables low-frequency hearing. *PLOS One*. 10(1):e0116222. <https://www.ncbi.nlm.nih.gov/pubmed/25633412>. doi:10.1371/journal.pone.0116222.
- Cremer MJ, Barreto AS, Hardt FAS, Junior AJT, Mounayer R. 2009. Cetacean occurrence near an offshore oil platform in southern Brazil. *Biotemas*. 23(3):247-251.
- CSA Ocean Sciences Inc and Exponent. 2019. Evaluation of potential EMF effects on fish species of commercial or recreational fishing importance in southern New England. 62 p. Report No.: OCS Study BOEM 2019-049. [accessed 2023 Jan]. https://espis.boem.gov/final%20reports/BOEM_2019-049.pdf.
- Curtice C, Cleary J, Schumchenia E, Halpin PN. 2019. Marine-life data and analysis team (MDAT) technical report on the methods and development of marine-life data to support regional ocean planning and management. Marine-life Data and Analysis Team. 81 p. <http://seamap.env.duke.edu/models/mdat/MDAT-Technical-Report.pdf>.
- Daewel U, Akhtar N, Christiansen N, Schrum C. 2022. Offshore wind farms are projected to impact primary production and bottom water deoxygenation in the North Sea. *Communications Earth & Environment*. 3(1):292. doi:10.1038/s43247-022-00625-0.
- Dahne M, Gilles A, Lucke K, Peschko V, Adler S, Krugel K, Sundermeyer J, Siebert U. 2013. Effects of pile-driving on harbour porpoises (*Phocoena phocoena*) at the first offshore wind farm in Germany. *Environmental Research Letters*. 8:16. http://iopscience.iop.org/1748-9326/8/2/025002/pdf/1748-9326_8_2_025002.pdf. doi:10.1088/1748-9326/8/2/025002.
- Dam M, Bloch D. 2000. Screening of mercury and persistent organochlorine pollutants in long-finned pilot whale (*Globicephala melas*) in the Faroe Islands. *Marine Pollution Bulletin*. 40(12):1090-1099.
- Danil K, Ledger JA. 2011. Seabird and dolphin mortality associated with underwater detonation exercises. *Marine Technology Society Journal*. 45(6):89-95.
- Davis GE, Baumgartner MF, Bonnell JM, Bell J, Berchok C, Thornton JB, Brault S, Buchanan G, Charif RA, Cholewiak D, et al. 2017. Long-term passive acoustic recordings track the changing distribution of North Atlantic right whales (*Eubalaena glacialis*) from 2004 to 2014. *Scientific Reports*. 7:e13460. doi:10.1038/s41598-017-13359-3.
- Davis GE, Baumgartner MF, Corkeron PJ, Berchok C, Bonnell JM, Thornton BJ, Brault S, Buchanan GA, Cholewiak DM, Clark CW. 2020. Exploring movement patterns and changing distributions of baleen whales in the western North Atlantic using a decade of passive acoustic data. *Global Change Biology*. 26:4812-4840. doi:10.1111/gcb.15191.
- Davis GE, Tennant SC, Van Parijs SM, Northridge S. 2023. Upcalling behaviour and patterns in North Atlantic right whales, implications for monitoring protocols during wind energy development. *ICES Journal of Marine Science*.

- Degraer S, Carey D, Coolen J, Hutchison Z, Kerckhof F, Rumes B, Vanaverbeke J. 2020. Offshore wind farm artificial reefs effect ecosystem structure and functioning: A synthesis. *Oceanography*. 33(4):48-57.
- Department of the Navy. 2017. Technical report: Criteria and thresholds for U.S. Navy Acoustic and Explosive Effects Analysis (Phase III). San Diego (CA): SSC Pacific.
- Di Iorio L, Clark CW. 2010. Exposure to seismic survey alters blue whale acoustic communication. *Biology Letters*. 6(1):51-54.
- Diederichs A, Brandt MJ, Nehls G. 2010. Does sand extraction near Sylt affect harbour porpoises? *Wadden Sea Ecosystem*. 26 p.
- Dolman S, Williams-Grey V, Asmutis-Silvia R, Issac S. 2006. Vessel collisions and cetaceans: What happens when they don't miss the boat?
- Dorrell RM, Lloyd CJ, Lincoln BJ, Rippeth TP, Taylor JR, Caulfield CCP, Sharples J, Polton JA, Scannell BD, Greaves DM, et al. 2022. Anthropogenic mixing in seasonally stratified shelf seas by offshore wind farm infrastructure. *Frontiers in Marine Science*. 9:830927.
- Dunlop RA, Noad MJ, McCauley RD, Kneist E. 2017. The behavioural response of migrating humpback whales to a full seismic airgun array. *Proceedings of the Royal Society B: Biological Sciences*. 284(1869):e20171901. doi:10.1098/rspb.2017.1901.
- Ecology and Environment Engineering. 2017. New York state offshore wind master plan marine mammals and sea turtle study final report. New York (NY): New York State Energy Research and Development Authority. 164 p. Report No.: Report 17-25.
- Elliot J, Smith K, Gallien DR, Khan A. 2017. Observing cable laying and particle settlement during the construction of the Block Island wind farm. Englewood (CO): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 252 p. Report No.: OCS Study BOEM 2017-027. <https://tethys.pnnl.gov/sites/default/files/publications/Elliot-et-al-2017.pdf>.
- Ellison WT, Southall BL, Clark CW, Frankel AS. 2012. A new context-based approach to assess marine mammal behavioral responses to anthropogenic sounds. *Conservation Biology*. 26(1):21-28. <https://www.ncbi.nlm.nih.gov/pubmed/22182143>. doi:10.1111/j.1523-1739.2011.01803.x.
- Emeana CJ, Hughes TJ, Dix JK, Gernon TM, Henstock TJ, Thompson CEL, Pilgrim JA. 2016. The thermal regime around buried submarine high-voltage cables. *Geophysical Journal International*. 206(2):1051-1064. doi:10.1093/gji/ggw195.
- [Empire] Empire Offshore Wind LLC. 2022. Empire wind project (EW1 and EW2), construction and operations plan. US Department of the Interior, Bureau of Ocean Energy Management. 200 p. <https://www.boem.gov/renewable-energy/empire-wind-construction-and-operations-plan>.
- English PA, Mason T, Backstrom JT, Tibbles JB, Mackay AA, Smith MJ, Mitchell T. 2017. Improving efficiencies of National Environmental Policy Act documentation for offshore wind facilities case

- studies report. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 296 p. Report No.: OCS Study BOEM 2017-026.
<https://tethys.pnnl.gov/sites/default/files/publications/English-et-al-2017-BOEM.pdf>.
- Erbe C, Marley SA, Schoeman RP, Smith JN, Trigg LE, Embling CB. 2019. The effects of ship noise on marine mammals—A review. *Frontiers in Marine Science*. 6. doi:10.3389/fmars.2019.00606.
- Erbe C, Reichmuth C, Cunningham K, Lucke K, Dooling R. 2016. Communication masking in marine mammals: A review and research strategy. *Marine Pollution Bulletin*. 103(1-2):15-38.
<https://www.ncbi.nlm.nih.gov/pubmed/26707982>. doi:10.1016/j.marpolbul.2015.12.007.
- Estabrooke BJ, Harris DV, Hodge KB, Salisbury DP, Ponirakis D, Zeh J, Parks SE, Rice AN. 2019. Year 1 annual survey report for New York whale monitoring passive acoustic surveys October 2017-July 2018. East Setauket (NY): New York State Department of Environmental Conservation. 136 p. Report No.: Contract C009925.
- Evans PG, Bjørge A. 2013. Impacts of climate change on marine mammals. *Marine Climate Change Impacts Partnership (MCCIP) Science Review*. 134-148.
- Exponent Engineering, P.C. 2018. Deepwater wind south fork wind farm offshore electric and magnetic field assessment. Appendix K1 in construction and operations plan south fork wind farm. New York (NY): Exponent Engineering. 101 p. https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/NY/App-K1_SFWF_EMF_Offshore_Report_2018-06-06.pdf.
- Finley KJ. 1990. The impacts of vessel traffic on the behaviour of belugas. In: Prescott J, Gauquelin M, editors. *For the culture of the beluga, proceedings of the international forum for future of the beluga*. Quebec (Canada): Presses de l'Université du Québec. p. 133-140.
- Finley, K. J., G. W. Miller, R. A. Davis, and C. R. Greene. 1990. Reactions of belugas, *Delphinapterus leucas*, and narwhals, *Monodon monoceros*, to ice-breaking ships in the Canadian High Arctic. *Canadian Bulletin of Fisheries and Aquatic Sciences* 224:97–117.
- Finley KJ. 1990. The impacts of vessel traffic on the behaviour of belugas. In: Prescott J, Gauquelin M, editors. *For the culture of the beluga, proceedings of the international forum for future of the beluga*. Quebec (Canada): Presses de l'Université du Québec. p. 133-140.
- Finneran JJ. 2015. Noise-induced hearing loss in marine mammals: A review of temporary threshold shift studies from 1996 to 2015. *Journal of Acoustical Society of America*. 138(3):1702-1726.
- Finneran JJ. 2016. Auditory weighting functions and TTS/PTS exposure functions for marine mammals exposed to underwater noise. San Diego (CA): Report No.: Technical Report #3026.
- Floeter J, Pohlmann T, Harmer A, Mollmann C. 2022. Chasing the offshore wind farm wind-wake-induced upwelling/downwelling dipole. *Frontiers in Marine Science*. 9:1-16.
doi:10.3389/fmars.2022.884943.
- Frankel AS. 2002. Sound production. In: San Diego, CA: Academic Press. p. 1126-1138.

- Geo-Marine Inc. 2010. Ocean/wind power ecological baseline studies: January 2008-December 2009. Final report. Volume III: Marine mammal and sea turtle studies. Plano (TX): New Jersey Department of Environmental Protections, Office of Science. 218 p.
<https://tethys.pnnl.gov/sites/default/files/publications/Ocean-Wind-Power-Baseline-Volume3.pdf>.
- Gerstein E, Blue J, Forsythe S. 2006. Ship strike acoustics: A paradox and parametric solution. *Journal of the Acoustical Society of America*. 119(5):3289-3289. doi:10.1121/1.4786213.
- Gill AB, Gloyne-Phillips I, Neal KJ, Kimber JA. 2005. The potential effects of electromagnetic fields generated by sub-sea power cables associated with offshore wind developments on electrically and magnetically sensitive marine organisms – A review. United Kingdom: Cranfield University and the Center for Marine and Coastal Studies, Collaborative Offshore Wind Energy Research Into the Environment (COWRIE), Ltd. 128 p. Report No.: COWRIE-EM FIELD 2-06-2004.
https://tethys.pnnl.gov/sites/default/files/publications/The_Potential_Effects_of_Electromagnetic_Fields_Generated_by_Sub_Sea_Power_Cables.pdf.
- Goertner JF. 1982. Prediction of underwater explosion, safe ranges for sea mammals. Dahlgren, Va: Naval Surface Weapons Center. 1-5 p.
- Graham IM, Pirota E, Merchant ND, Farcas A, Barton TR, Cheney B, Hastie GD, Thompson PM. 2017. Responses of bottlenose dolphins and harbor porpoises to impact and vibration piling noise during harbor construction. *Ecosphere*. 85(6):1-16.
- Grashorn S, Stanev EV. 2016. Kármán vortex and turbulent wake generation by wind park piles. *Ocean Dynamics*. 66:1543-1557. doi:10.1007/s10236-016-0995-2.
- Guerra M, Dawson SM, Brough TE, Rayment WJ. 2014. Effects of boats on the surface and acoustic behaviour of an endangered population of bottlenose dolphins. *Endangered Species Research*. 24(3):221-236. doi:10.3354/esr00598.
- Gulland FM, Baker K, Howell M, LaBrecque E, Leach L, Moore SE, Reeves RR, Thomas PO. 2022. A review of climate change effects on marine mammals in United States waters: Past predictions, observed impacts, current research and conservation imperatives. *Climate Change Ecology*. 3(2022):e100054. doi:10.1016/j.ecochg.2022.100054.
- Hall AJ, McConnell BJ, Schwacke LH, Ylitalo GM, Williams R, Rowles TK. 2018. Predicting the effects of polychlorinated biphenyls on cetacean populations through impacts on immunity and calf survival. *Environmental Pollution*. 233:407-418.
- Hamilton PK, Knowlton AR, Hagbloom MN, Howe KR, Pettis HM, Marx MK, Zani MA, Kraus SD. 2019. Maintenance of the North Atlantic right whale catalog, whale scarring and visual health databases, anthropogenic injury case studies, and near real-time matching for biopsy effort entangled, injured, sick, or dead right whales. Boston (MA): New England Aquarium. 105 p. Report No.: Contract No. 1305M2-18-P-NFFM-0108.

- Hannay D, Zykov M. 2022. Underwater acoustic modeling of detonations of unexploded ordnance (UXO) for Ørsted farm construction, US East coast. Silver Spring (MD): JASCO Applied Sciences Inc. 43 p.
- Hastie GD, Wilson B, Tufft LH, Thompson PM. 2006. Bottlenose dolphins increase breathing synchrony in response to boat traffic. *Marine Mammal Science*. 19(1):74-84. doi:10.1111/j.1748-7692.2003.tb01093.x.
- Hatch LT, Clark CW, Van Parijs SM, Frankel AS, Ponirakis DW. 2012. Quantifying loss of acoustic communication space for Right Whales in and around a U.S. national marine sanctuary. *Conservation Biology*. 26(6):983-994.
- Hayes SA, Josephson E, Maze-Foley K, Rosel PE. 2019. U.S. Atlantic and Gulf of Mexico marine mammal stock assessments – 2018. Woods Hole (MA): US Department of Commerce, National Fisheries Science Center. 298 p. Report No.: NOAA Technical Memorandum NMFS-NE-258. <https://repository.library.noaa.gov/view/noaa/20611>.
- Hayes SA, Josephson E, Maze-Foley K, Rosel PE. 2020. U.S. Atlantic and Gulf of Mexico marine mammal stock assessments – 2019. Woods Hole (MA): US Department of Commerce, National Fisheries Science Center. 479 p. Report No.: NOAA Technical Memorandum NMFS-NE 264. https://media.fisheries.noaa.gov/dam-migration/2019_sars_atlantic_508.pdf.
- Hayes SA, Josephson E, Maze-Foley K, Rosel PE, Turek J. 2021. U.S. Atlantic and Gulf of Mexico marine mammal stock assessments – 2020. Woods Hole (MA): US Department of Commerce, National Fisheries Science Center. Report No.: NOAA Technical Memorandum NMFS-NE 271. <https://repository.library.noaa.gov/view/noaa/32072>.
- Hayes SA, Josephson E, Maze-Foley K, Rosel PE, Wallace E. 2022. U.S. Atlantic and Gulf of Mexico marine mammal stock assessments – 2021. Woods Hole (MA): US Department of Commerce, National Fisheries Science Center. 386 p. <https://media.fisheries.noaa.gov/2022-08/U.S.%20Atlantic%20and%20Gulf%20of%20Mexico%202021%20Stock%20Assessment%20Report.pdf>.
- Hayes SA, Josephson E, Maze-Foley K, Rosel P, McCordic J, Wallace J. 2023. U.S. Atlantic and Gulf of Mexico marine mammal stock assessments – 2022. US Department of Commerce, National Oceanic and Atmospheric Administration. 262 p. <https://media.fisheries.noaa.gov/2023-08/Final-Atlantic-and-Gulf-of-Mexico-SAR.pdf>.
- Heinis F, de Jong C, Ainslie M, Borst W, Vellinga T. 2013. Monitoring programme for the Maasvlakte 2, Part III - The effects of underwater sound. *Terra et Aqua*. 132:21-32.
- Henderson D, Hu B, Bielefeld E. 2008. Patterns and mechanisms of noise-induced cochlear pathology. In: Popper AN, Fay RR, editors. *Auditory Trauma, Protection, and Repair*. New York: Springer. p. 195-217.

- Henry AG, Garron M, Morin D, Reid A, Ledwell W, Cole TVN. 2020. Serious injury and mortality determinations for Baleen Whale stocks along the Gulf of Mexico, United States East Coast, and Atlantic Canadian Provinces, 2013-2017. Woods Hole (MA): US Department of Commerce, Northeast Fisheries Science Center Reference Document 20-06. [accessed 2022 Feb 20].
<https://repository.library.noaa.gov/view/noaa/25359>
- Hoffman CA. 2012. Mitigating impacts of underwater noise from dredging on beluga whales in Cook Inlet, Alaska. *Advances in Experimental Medicine and Biology*. 730:617-619.
<https://www.ncbi.nlm.nih.gov/pubmed/22278577>. doi:10.1007/978-1-4419-7311-5_140.
- Holt MM, Noren DP, Veirs V, Emmons CK, Veirs S. 2009. Speaking up: Killer whales (*Orcinus orca*) increase their call amplitude in response to vessel noise. *Journal of the Acoustical Society of America*. 125:EL27-EL32.
<http://scitation.aip.org/docserver/fulltext/asa/journal/jasa/125/1/1.3040028.pdf?expires=1428693301&id=id&accname=guest&checksum=D16505CA10AFC96EC75DD2D8DDF45447>.
- Holt MM, Noren DP, Dunkin RC, Williams TM. 2015. Vocal performance affects metabolic rate in dolphins: Implications for animals communicating in noisy environments. *Journal of Experimental Biology*. 218(11):1647-1654. <https://www.ncbi.nlm.nih.gov/pubmed/25852069>.
doi:10.1242/jeb.122424.
- Holt MM, Tennessen JB, Hanson MB, Emmons CK, Giles DA, Hogan JT, Ford MJ. 2021. Vessels and their sounds reduce prey capture effort by endangered killer whales (*Orcinus orca*). *Marine Environmental Research*. 170:105429. <https://www.ncbi.nlm.nih.gov/pubmed/34333339>.
doi:10.1016/j.marenvres.2021.105429.
- Houser DS, Yost W, Burkard R, Finneran JJ, Reichmuth C, Mulsow J. 2017. A review of the history, development and application of auditory weighting functions in humans and marine mammals. *Journal of the Acoustical Society of America*. 141(3):1371.
<https://www.ncbi.nlm.nih.gov/pubmed/28372133>. doi:10.1121/1.4976086.
- Hunt KE, Stimmelmayer R, George C, Hanns C, Suydam R, Brower Jr H, Rolland RM. 2014. Baleen hormones: A novel tool for retrospective assessment of stress and reproduction in bowhead whales (*Balaena mysticetus*). *Conservation Physiology*. 2(1):1-12.
<https://www.ncbi.nlm.nih.gov/pubmed/27293651>. doi:10.1093/conphys/cou030.
- Hutchison LZ, Sigray P, He H, Gill A, King J, Gibson C. 2018. Electromagnetic field (EMF) impacts on elasmobranch (sharks, rays, and skates) and American lobster movement and migration from direct current cables. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. 254 p. Report No.: OCS Study BOEM 2018-003. [accessed 2022 Nov 29].
<https://espis.boem.gov/final%20reports/5659.pdf>.
- Inspire Environmental. 2019. Sediment profile and plan view imaging benthic assessment survey in support of the south fork wind farm aide assessment. Appendix N1 in the construction and

operations plan south fork wind farm. Newport (RI): Inspire Environmental. 313 p.
https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/NY/App-N_SFWF_BenthicHabitat_DataReport_2019-05-15.pdf.

Jansen HW, de Jong C. 2016. Underwater noise measurements in the North Sea in and near the Princess Amalia Wind Farm in operation. The Hague (NL): TNO.

Jensen AS, Silber GK, Calambokidis J. 2003. Large whale ship strike database. Silver Spring (MD): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 39 p. Report No.: NOAA Technical Memorandum. NMFS-ORP.
https://repository.library.noaa.gov/view/noaa/23127/noaa_23127_DS1.pdf.

Jepson PD, Deaville R, Barber JL, Aguilar À, Borrell A, Murphy S, Barry J, Brownlow A, Barnett J, Berrow S, et al. 2016. PCB pollution continues to impact populations of orcas and other dolphins in European waters. *Scientific Reports*. 6(1):18573. doi:10.1038/srep18573.

Johnson TL, Jon van Berkel J, Mortensen LO, Bell MA, Tiong I, Hernandez B, Snyder DB, Thomsen F, Petersen OS. 2021. Hydrodynamic modeling, particle tracking and agent-based modeling of larvae in the U.S. Mid-Atlantic Bight. Lakewood (CO): US Department of the Interior, Bureau of Ocean Energy Management. 232 p. Report No.: OCS Study BOEM 2021-049.

Johnson A, Salvador G, Kenney J, Robbins J, Kraus SD, Landry S, Clapham P. 2005. Fishing gear involved in entanglement of right and humpback whales. *Marine Mammal Science*. 21(4):635-645.

Johnson SR. 2002. Marine mammal mitigation and monitoring program for the 2001 Odoptu 3-D seismic survey, Sakhalin Island, Russia: Executive summary. Sidney (Canada): LGL Limited. 49 p.

Johnston ST, Painter KJ. 2024. Avoidance, confusion or solitude? Modelling how noise pollution affects whale migration. *Movement Ecology*. 12(1):17.

Joy R, Tollit D, Wood J, MacGillivray A, Li Z, Trounce K, Robinson O. 2019. Potential benefits of vessel slowdowns on endangered southern resident killer whales. *Frontiers in Marine Science*. 6.doi:10.3389/fmars.2019.00344.

Kann L, Wishner K. 1995. Spatial and temporal patterns of zooplankton on baleen whale feeding grounds in the southern Gulf of Maine. *Journal of Plankton Research*. 17(2):235-262.

Kastelein RA, Huijser LAE, Cornelisse S, Helder-Hoek L, Jennings N, de Jong CAF. 2019. Effect of pile-driving playback sound level on fish-catching efficiency in harbor porpoises (*Phocoena phocoena*). *Aquatic Mammals*. 45(4):398-410. doi:10.1578/am.45.4.2019.398.

Kates Varghese H, Miksis-Olds J, DiMarzio N, Lowell K, Linder E, Mayer L, Moretti D. 2020. The effect of two 12 kHz multibeam mapping surveys on the foraging behavior of Cuvier's beaked whales off of southern California. *Journal of the Acoustical Society of America*. 147(6):3849.
<https://www.ncbi.nlm.nih.gov/pubmed/32611139>. doi:10.1121/10.0001385.

- Kates Varghese H, Lowell K, Miksis-Olds J, DiMarzio N, Moretti D, Mayer L. 2021. Spatial analysis of beaked whale foraging during two 12 kHz multibeam echosounder surveys. *Frontiers in Marine Science*. 8. doi:10.3389/fmars.2021.654184.
- Kellar NM, Speakman TR, Smith CR, Lane SM, Balmer BC, Trego ML, Catelani KN, Robbins MN, Allen CD, Wells RS, et al. 2017. Low reproductive success rates of common bottlenose dolphins *tursiops truncatus* in the northern Gulf of Mexico following the Deepwater Horizon disaster (2010-2015). *Endangered Species Research*. 33:143-158. <https://repository.library.noaa.gov/view/noaa/20458>. doi:10.3354/esr00775.
- Kellison G, Sedberry G. 1998. The effects of artificial reef vertical profile and hole diameter on fishes off South Carolina. *Bulletin of Marine Science*. 62(3):763-780.
- Ketten DR. 1994. Functional analyses of whale ears: Adaptations for underwater hearing. In: *Proceedings of OCEANS'94*. p 1/264-1/270.
- Ketten DR. 2004. Marine mammal auditory systems: A summary of audiometric and anatomical data and implications for underwater acoustic impacts. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Fisheries Science Center. 97 p. Report No.: NOAA-TN-NMFS-SWFSC-256.
- Kight CR, Swaddle JP. 2011. How and why environmental noise impacts animals: An integrative, mechanistic review. *Ecology Letters*. 14(10):1052-1061. <https://www.ncbi.nlm.nih.gov/pubmed/21806743>. doi:10.1111/j.1461-0248.2011.01664.x.
- Kilfoyle AK, Jermain RF, Dhanak MR, Huston JP, Speiler RE. 2018. Effects of EMF emissions from undersea electric cables on coral reef fish. *Bioelectromagnetics*. 39:35052. doi:10.1111/j.1461-0248.2011.01664.x.
- King K, Joblon M, McNally K, Clayton L, Pettis H, Corkeron P, F N. 2021. Assessing northern Atlantic right whale (*Eubalaena glacialis*) welfare. *Journal of Zoological and Botanical Gardens*. 2(4):728-239. doi:10.3390/jzbg2040052.
- Kite-Powell HL, Knowlton A, Brown M. 2007. Modeling the effect of vessel speed on right whale ship strike risk. Woods Hole (MA): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Services. Report No.: Unpublished Report for NOAA/NMFS Project NA04NMF47202394. [accessed 2023 Jan]. <https://tethys.pnnl.gov/sites/default/files/publications/Kite-Powell-et-al-2007.pdf>.
- Knowlton AR, Hamilton PK, Marx MK, Pettis HP, Kraus SD. 2012. Monitoring northern Atlantic right whale *Eubalaena glacialis* entanglement rates: A 30 year retrospective. *Marine Ecology Progress Series*. 466:293-302. doi:10.3354/meps09923.

- Kraus SD, Kenney RD, Thomas L. 2019. A framework for studying the effects of offshore wind development on marine mammals and turtles. Boston (MA): Massachusetts Clean Energy Center and US Department of the Interior, Bureau of Ocean Energy Management. 48 p.
- LaBrecque E, Curtice C, Harrison J, Van Parijs SM, Halpin PN. 2015. Biologically important areas for cetaceans within U.S. waters – East coast region. *Aquatic Biology*. 41(1):17-29.
https://www.researchgate.net/profile/Erin-Labrecque/publication/273003941_Biologically_Important_Areas_for_Cetaceans_Within_US_Waters_-_East_Coast_Region/links/54f753560cf28d6dec9e79bf/Biologically-Important-Areas-for-Cetaceans-Within-US-Waters-East-Coast-Region.pdf. doi:10.1578/AM.41.1.2015.17.
- Laist DW, Knowlton AR, Mead JG, Collett AS, Podesta M. 2001. Collisions between ships and whales. *Marine Mammal Science*. 17(1):35-75. <https://www.mmc.gov/wp-content/uploads/shipstrike.pdf>.
- Laist DW, Knowlton AR, Pendleton D. 2014. Effectiveness of mandatory vessel speed limits for protecting North Atlantic Right whales. *Endangered Species Research*. 23:133-147.
- Lentz S. 2017. Seasonal warming of the Middle Atlantic Bight cold pool. *Journal of Geophysical Research: Oceans*. 122(2):941-954. doi:10.1002/2016JC012201.
- Lesage V, Barrette C, Kingsley MCS, Sjare B. 1999. The effect of vessel noise on the vocal behavior of belugas in the St. Lawrence River estuary, Canada. *Marine Mammal Science*. 15(1):65-84.
<http://dx.doi.org/10.1111/j.1748-7692.1999.tb00782.x>. doi:10.1111/j.1748-7692.1999.tb00782.x.
- Lesage V, Gavrilchuk K, Andrews RD, Sears R. 2017. Foraging areas, migratory movements and winter destinations of blue whales from the western North Atlantic. *Endangered Species Research*. 34:27-43. doi:10.3354/esr00838.
- Lesage V, Gosselin J-F, Lawson JW, McQuinn I, Moors-Murphy H, Pourde S, Sears R, Simard Y. 2018. Habits important to blue whales (*Balaenoptera musculus*) in the western North Atlantic. Quebec: Canadian Science Advisory Secretariat. 56 p. Report No.: Research Document 2016/080.
- Lewison RL, Crowder LB, Wallace BP, Moore JE, Cox T, Zydelis R, McDonald S, DiMatteo A, Dunn DC, Kot CY, et al. 2014. Global patterns of marine mammals, seabird, and sea turtle bycatch reveal tax-specific and cumulative megafauna hotspots. *Proceedings of the National Academy of Sciences*. 111(14):5271-5276 www.pnas.org/cgi/doi/10.1073/pnas.1318960111. doi:10.1073/pnas.1318960111.
- Li X, Chi L, Chen X, Ren Y, Lehner S. 2014. SAR observation and numerical modeling of tidal current wakes at the East China Sea offshore wind farm. *Journal of Geophysical Research: Oceans*. 119(8):4958-4971. doi:10.1002/2014JC009822.
- Long C. 2017. Analysis of the possible displacement of bird and marine mammal species related to the installation and operation of marine energy conversion systems. *Scottish Natural Heritage*. 339 p.

Report No.: Commissioned Report No. 947.

<https://tethys.pnnl.gov/sites/default/files/publications/Long-2017-SNH-947.pdf>.

- Love M, Baldera A, Young C, Robbins C. 2013. The GoM ecosystem: A coastal and marine atlas. New Orleans (LA): Ocean Conservancy, Gulf Restoration Center. 232 p. [accessed 2023 Jan 27]. <https://oceanconservancy.org/wp-content/uploads/2017/05/gulf-atlas.pdf>.
- Lucke K, Lepper PA, Hoeve B, Everaarts E, van Elk N, Siebert U. 2007. Perception of low-frequency acoustic signals by a harbour porpoise (*Phocoena phocoena*) in the presence of simulated offshore wind turbine noise. *Aquatic Mammals*. 33(1):55-68. doi:10.1578/am.33.1.2007.55.
- Ludewig E. 2015. On the effect of offshore wind farms on the atmosphere and ocean dynamics. Cham: Springer International Publishing. 162 p.
- Lyssikatos MC. 2015. Estimates of cetacean and pinniped bycatch in Northeast and Mid-Atlantic bottom Trawl Fisheries, 2008–2013. Woods Hole (MA): US Department of Commerce, Northeast Fisheries Science Center. 28 p. Report No.: Reference Document 15-19.
- Maar M, Bolding K, Petersen J, Hansen K, Timmermann K. 2009. Local effects of blue mussels around turbine foundations in an ecosystem model of Nysted Offshore Wind Farm, Demark. *Journal of Sea Research*. 62(2-3):159-174. <https://doi.org/10.1016/j.seares.2009.01.008>. doi:10.1016/j.seares.2009.01.008.
- Madsen PT, Surlykke A. 2013. Functional convergence in bat and toothed whale biosonars. *Physiology (Bethesda)*. 28(5):276-283. <https://www.ncbi.nlm.nih.gov/pubmed/23997187>. doi:10.1152/physiol.00008.2013.
- Malme CI, Wursig B, Bird JE, Tyack P. 1986. Behavioral responses of gray whales to industrial noise: Feeding observations and predictive modeling. Final report. Outer Continental Shelf Environmental Assessment Program Research Unit 675. 207 p.
- Malme CI, Wursig B, Bird JE, Tyack P. 1988. Observations of feeding gray whale responses to controlled industrial noise exposure. In: Sackinger WM, editor. Port and ocean engineering under arctic conditions. II ed. Fairbanks (AK): University of Alaska. p. 55-73.
- Martin J, Sabatier Q, Gowan TA, Giraud C, Guraire E, Calleson CS, Oretga-Ortiz JG, Deutsch CJ, Rycyk A, Koslovsky SM. 2016. A quantitative framework for investigating risk of deadly collisions between marine wildlife and boats. *Methods in Ecology and Evolution*. 7(1):42-50. doi:10.1111/2041-210X.12447.
- Martin MJ, Halliday WD, Storrie L, Citta JJ, Dawson J, Hussey NE, Juanes F, Loseto LL, MacPhee SA, Moore L, Nicoll A. 2023. Exposure and behavioral responses of tagged beluga whales (*Delphinapterus leucas*) to ships in the Pacific Arctic. *Marine Mammal Science*. 39(2):387–421.

- Martins MCI, Sette L, Josephson E, Bogomolni A, Rose K, Sharp SM, Neimeyer M, Moore M. 2019. Unoccupied aerial system assessment of entanglement in Northwest Atlantic grey seals (*Halichoerus grypus*). 18 p
- Matte A, Waldhauer R. 1984. Mid-Atlantic Bight nutrient variability. Highlands (NJ): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northeast Fisheries Center. 14 p. Report No.: SHL Report No. 84-15.
- Mazet JAK, Gardner IA, Jessup DA, Lowenstine LJ. 2001. Effects of petroleum on mink applied as a model for reproductive success in sea otters. *Journal of Wildlife Diseases*. 37(4):686-692.
<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj-n4C3wlj6AhW9nGoFHSaeAEIQFnoECAMQAAQ&url=https%3A%2F%2Fbioone.org%2Fjournals%2Fjournal-of-wildlife-diseases%2Fvolume-37%2Fissue-4%2F0090-3558-37.4.686%2FEFFECTS-OF-PETROLEUM-ON-MINK-APPLIED-AS-A-MODEL-FOR%2F10.7589%2F0090-3558-37.4.686.pdf&usg=AOvVaw3QV73ZwdELg5dMqzcDtZOF>.
- McCauley RD, Jenner MN, Jenner C, McCabe KA, Murdoch J. 1998. The response of humpback whales (*Megaptera novaeangliae*) to offshore seismic survey noise: Preliminary results of observations about a working seismic vessel and experimental exposures. *Australian Petroleum Production and Exploration Association Journal*. 38:692-707.
- Methratta ET, Dardick WR. 2019. Meta-analysis of finfish abundance at offshore wind farms. *Reviews in Fisheries Science & Aquaculture*. 27(2):242-260. doi:10.1080/23308249.2019.1584601.
- Meyer-Gutbrod EL, Greene CH, Davies KTA, Johns DG. 2021. Ocean regime shift is driving collapse of the North Atlantic right whale population. *Oceanography*. 34(3):22-31. [accessed 2023 Jan].
https://tos.org/oceanography/assets/docs/34-3_meyer-gutbrod.pdf.
- Meyer-Gutbrod EL, Greene CH, Sullivan PJ, Pershing AJ. 2015. Climate-associated changes in prey availability drive reproductive dynamics of the North Atlantic right whale population. *Marine Ecology Progress Series*. 535:243-258. doi:10.3354/meps11372.
- [MAOPD] Mid-Atlantic Ocean Data Portal. 2022. Mid-Atlantic Regional Council on the Ocean. [accessed 2022 Dec 19]. <https://portal.midatlanticocean.org>.
- Middleton P, Barnhart B. 2022. Supporting National Environmental Policy Act documentation for offshore wind energy development related to high voltage direct current cooling systems. Washington (DC): US Department of the Interior, Bureau of Ocean Energy Management. 13 p. Report No.: OCS Study BOEM 2022-023.
- Mikkelsen L, Johnson M, Wisniewska DM, van Neer A, Siebert U, Madsen PT, Teilmann J. 2019. Long-term sound and movement recording tags to study natural behavior and reaction to ship noise of seals. *Ecology and Evolution*. 9(5):2588-2601. <https://www.ncbi.nlm.nih.gov/pubmed/30891202>. doi:10.1002/ece3.4923.

- Miles T, Murphy S, Kohut J, Borsetti S, Munroe D. 2021. Offshore wind energy and the Mid-Atlantic cold pool: A review of potential interactions. *Marine Technology Society Journal*. 55(4):72-87. doi:10.4031/MTSJ.55.4.8.
- Miles J, Martin T, Goddard L. 2017. Current and wave effects around windfarm monopile foundations. *Coastal Engineering*. 2017 Mar 1;121:167-78.
- Mohr FC, Lasely B, Bursian S. 2008. Chronic oral exposure to Bunker C Fuel oil causes adrenal insufficiency in ranch mink. *Archives of Environmental Contamination and Toxicology*. 54:337-347. https://www.researchgate.net/publication/6076300_Chronic_Oral_Exposure_to_Bunker_C_Fuel_Oil_Causes_Adrenal_Insufficiency_in_Ranch_Mink_Mustela_vison. doi:10.1007/s00244-007-9021-5.
- Mooney TA, Yamato M, Branstetter BK. 2012. Hearing in cetaceans: From natural history to experimental biology. *Advances in Marine Biology*. 63:197-246.
- Moore MJ, van der Hoop JM. 2012. The painful side of trap and fixed net fisheries: Chronic entanglement of large whales. *Journal of Marine Biology*. 2012(230653). [accessed 2023 Jan]. <https://www.hindawi.com/journals/jmb/2012/230653/>. doi:10.1155/2012/230653.
- Moore MJ, de Quiros YB, Seewald JS, Sylva SP, Greer B, Niemeyer M, Bogomolni AL. 2013. Compositional discrimination of decompression and decomposition gas bubbles in bycaught seals and dolphins. *PLOS ONE*. 8(12):e83994.
- Moore SE, Clarke JT. 2002. Potential impact of offshore human activities on gray whales (*Eschrichtius robustus*). *Journal of Cetacean Resource Management*. 4(1):19-25.
- Moulton VD, Richardson JW, Williams MT, Blackwell SB. 2003. Ringed seal densities and noise near an icebound artificial island with construction and drilling. *Acoustics Research Letters Online*. 4(4):112-117. doi:10.1121/1.1605091.
- Muir DCG, Wagemann R, Grift NP, Norstrom RJ, Simon MA, Lien J. 1998. Organochlorine chemical and heavy metal contaminants in white-beaked dolphins (*Lagenorhynchus albirostris*) and pilot whales (*Globicephala melaena*) from the coast of Newfoundland, Canada. *Archives of Environmental Contamination and Toxicology*. 7(5):613-629.
- Muirhead CA, Warde AM, Biedron IS, Mihnovets NA, Clark CW, Rice AN. 2018. Seasonal acoustic occurrence of blue, fin, and North Atlantic right whales in the New York Bight. *Aquatic Conservation: Marine and Freshwater Ecosystems*. 28:744-753. doi:10.1002/aqc.2874.
- Murphy S, Law RJ, Deaville R, Barnett J, Perkins MW, Brownlow A, Penrose R, Davison NJ, Barber JL, Jepson PD. 2018. Organochlorine contaminants and reproductive implication in cetaceans: A case study of the common dolphin. p. 3-38.
- National Academy of Sciences. 1975. Assessing potential ocean pollutants (Chapter 8). A report of the Study Panel on Assessing Potential Ocean Pollutants to the Ocean Affairs Board, Commission on

- Natural Resources, National Research Council. Washington (DC): National Academy of Sciences. 405-438 p.
- [NASA] National Aeronautics and Space Administration. 2023. The effects of climate change. Pasadena (CA): National Aeronautics and Space Administration, Jet Propulsion Laboratory. [accessed 2023 Apr 05]. <https://climate.nasa.gov/effects/>.
- [NASEM] National Academies of Sciences, Engineering, and Medicine. 2023. *Potential Hydrodynamic Impacts of Offshore Wind Energy on Nantucket Shoals Regional Ecology: An Evaluation from Wind to Whales*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/27154>.
- National Park Service. 2014. Final General Management Plan / Environmental Impact Statement, Gateway National Recreation Area, New Jersey and New York. April 2014. <http://npshistory.com/publications/gate/gmp-eis-2014.pdf>.
- National Park Service. 2015. Fire Island National Seashore, Draft General Management Plan, Environmental Impact Statement. 2015. <https://parkplanning.nps.gov/document.cfm?documentID=66653>.
- [NRC] National Research Council. 1994. *Low-Frequency Sound and Marine Mammals: Current Knowledge and Research Needs*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/4557>.
- NRC. 2000. Marine mammals and low-frequency sound: Progress since 1994. Washington (DC): National Academy Press.
- NRC. 2003. Ocean noise and marine mammals. Washington (DC): National Academies Press. 192 p. <http://www.nap.edu/catalog/10564.html>.
- Nielsen JB, Nielson F, Jørgensen J, Grandjean P. 2000. Toxic metals and selenium in blood from pilot whales (*Globicephala melas*) and sperm whales (*Physeter catodon*). Marine Pollution Bulletin. 40(4):348-351. doi:10.1016/s0025-326x(99)00231-3.
- NMFS. 2016. Endangered Species Act Section 7 consultation on the continued prosecution of fisheries and ecosystem research conducted and funded by the Northeast Fisheries Science Center and the Issuance of the Letter of Authorization under the Marine Mammal Protection Act for the incidental take of marine mammals pursuant to those research activities. Washington (DC): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office, Protected Resources Division. Report No.: PCTS ID: NER-2015-12532.
- NMFS. 2018. 2018 revision to: Technical guidance for assessing the effects of anthropogenic sound on marine mammal hearing (version 2.0). Underwater thresholds for onset of permanent and temporary threshold shifts. Silver Spring (MD): US Department of Commerce, National Oceanic and

Atmospheric Administration, National Marine Fisheries Service, Office of Protected Resources. 178 p. Report No.: NOAA Technical Memorandum NMFS-OPR-59.

NMFS. 2020. North Atlantic right whale (*Eubalaena glacialis*) vessel speed rule assessment. US Department of Commerce, National Oceanic and Atmospheric Administration, Office of Protected Resources. 53 p. https://media.fisheries.noaa.gov/2021-01/FINAL_NARW_Vessel_Speed_Rule_Report_Jun_2020.pdf?null.

NMFS. 2021. Endangered Species Act Section 7 consultation biological opinion for the construction, operation, maintenance, and decommissioning of the South Fork Energy Project (lease OCS-A 0517). US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office. 523 p. Report No.: GARFO-2021-00353 – [CORRECTED]. https://media.fisheries.noaa.gov/2021-12/SFW_BiOp_OPR1.pdf.

NMFS. 2022a. Pinniped unusual mortality event along the northeast coast. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2023 Jan 09]. <https://www.fisheries.noaa.gov/new-england-mid-atlantic/marine-life-distress/2018-2020-pinniped-unusual-mortality-event-along>.

NMFS. 2022b. Summary of marine mammal protection act acoustic thresholds. Silver Spring (MD): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2022 May]. https://media.fisheries.noaa.gov/2022-05/MM%20Acoustic%20Thresholds%20%28508%29_secure%20%28May%202022%29.pdf.

NMFS. 2022c. Summary of marine mammal protection act acoustic thresholds. Silver Spring (MD): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 3 p. [accessed 2022 May]. https://media.fisheries.noaa.gov/2022-05/MM%20Acoustic%20Thresholds%20%28508%29_secure%20%28May%202022%29.pdf.

NMFS. 2024a. Draft 2023 Atlantic Marine Mammal Stock Assessment. Accessed May 1, 2024. Available: <https://www.fisheries.noaa.gov/s3/2024-01/Draft-2023-MMSARs-Public-Comment.pdf>.

NMFS. 2024b. 2017-2023 North Atlantic right whale unusual mortality event. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Protected Resources. [accessed 1 May 2024]. <https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2023-north-atlantic-right-whale-unusual-mortality-event>.

NMFS. 2024c. North Atlantic Right Whale calving season 2024. Available: <https://www.fisheries.noaa.gov/national/endangered-species-conservation/north-atlantic-right-whale-calving-season-2024>. Accessed April 2, 2024

NMFS. 2024d. 2016-2024 Humpback whale unusual mortality event along the Atlantic coast. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Protected Resources. [accessed 1 May 2024].

<https://www.fisheries.noaa.gov/national/marine-life-distress/2016-2024-humpback-whale-unusual-mortality-event-along-atlantic-coast>.

NMFS. 2024e. 2017–2024 Minke Whale Unusual Mortality Event along the Atlantic Coast. Accessed 1 May 2024. <https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2024-minke-whale-unusual-mortality-event-along-atlantic-coast>.

NMFS. 2024f. 2022 Pinniped Unusual Mortality Event in Maine (CLOSED). Accessed 1 May 2024. <https://www.fisheries.noaa.gov/marine-life-distress/2022-pinniped-unusual-mortality-event-maine-closed>.

NOAA. 2021. Final environmental impact statement, regulatory impact review, and final regulatory flexibility analysis for amending the Atlantic large whale take reduction plan: Risk reduction rule, volume 1. Washington (DC): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service and Industrial Economics. 433 p.

Normandeau Associates Inc and Exponent Inc. 2011. Effects of EMFs from undersea power cables on elasmobranchs and other marine species. Final report. Camarillo (CA): US Department of the Interior, Bureau of Ocean Energy Management, Regulation and Enforcement, Pacific OCS Region. 426 p. Report No.: OCS Study BOEM 2011-09. <https://espis.boem.gov/final%20reports/5115.pdf>.

Nowacek DP, Johnson MP, Tyack PL. 2004. North Atlantic right whales (*Eubalaena glacialis*) ignore ships but respond to alerting stimuli. *Proceedings of the Royal Society B: Biological Sciences*. 271:227-231.

Nowacek SM, Wells RS, Solow AR. 2006. Short-term effects of boat traffic on bottlenose dolphins, *Tursiops truncatus*, in Sarasota Bay, Florida. *Marine Mammal Science*. 17(4):673-688. doi:10.1111/j.1748-7692.2001.tb01292.x.

O'Brien O, Pendleton DE, Ganley LC, McKenna KR, Kenney RD, Quintana-Rizzo E, Mayo CA, Kraus SD, Redfern JV. 2022. Repatriation of a historical North Atlantic right whale habitat during an era of rapid climate change. *Scientific Reports*. 12(1):1-10. doi:10.1038/s41598-022-16200-8.

Ocean Wind LLC. 2022. Construction and operations plan, Ocean Wind Offshore Wind Farm. US Department of Interior, Bureau of Ocean Energy Management. 169 p. Report No.: Volumes I-III. <https://www.boem.gov/ocean-wind-construction-and-operations-plan/>.

Olsen E, Budgell WP, Head E, Kleivane L, Nottestad L, Prieto R, Silva MA, Skov H, Vikingsson GA, Waring G, et al. 2009. First satellite-tracked long-distance movement of sei whale (*Balaenoptera borealis*) in the northern Atlantic. *Aquatic Mammals*. 53(3):313-318. doi:10.1578/AM.35.3.2009.313.

Olson JK, Lambourn DM, Huggins JL, Raverty S, Scott AA, Gaydos JK. 2021. Trends in propeller strike-induced mortality in harbor seals (*Phoca vitulina*) of the Salish Sea. *Journal of Wildlife Diseases*. 57(3):689-693. doi:10.7589/JWD-D-20-00221.

- Orphanides CD. 2020. Estimates of cetacean and pinniped bycatch in the 2017 New England sink and Mid-Atlantic gillnet fisheries. Narragansett (RI): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northeast Fisheries Science Center. 21 p. Report No.: Northeast Fisheries Science Center Reference Document 20-03. <https://repository.library.noaa.gov/view/noaa/23650>.
- Orr T, Herz S, Oakley D. 2013. Evaluation of lighting schemes for offshore wind facilities and impacts to local environments. Herndon (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 429 p. Report No.: OCS Study BOEM 2013-0116.
- Osiecka AN, Jones O, Wahlberg M. 2020. The diel pattern in harbour porpoise clicking behaviour is not a response to prey activity. *Scientific Reports* 10(1): 14876. doi: 10.1038/s41598-020-71957-0
- OSPAR Commission. 2009. Overview of the impacts of anthropogenic underwater sound in the marine environment. London UK: OSPAR Commission. 133 p.
- Pace RM. 2021. Revisions and further evaluations of the right whale abundance model: Improvements for hypothesis testing. Woods Hole (MA): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northeast Fisheries Science Center. 54 p. Report No.: NOAA Technical Memorandum NMFS-NE-269. <https://apps-nefsc.fisheries.noaa.gov/rcb/publications/tm269.pdf>.
- Pace RM, Corkeron P, Kraus S. 2017. State-space mark-recapture estimates reveal a recent decline in abundance of North Atlantic right whales. *Ecology and Evolution*. 7(2017):8730-8741. doi:10.1002/ece3.3406.
- Pace RM, Silber GK. 2005. Simple analysis of ship and large whale collisions: Does speed kill? In: Sixteenth Biennial Conference on the Biology of Marine Mammals; 2005 Dec; San Diego (CA). p 1. https://www.researchgate.net/publication/341001162_Pace_Silber_Vessel_Speed_and_Ship_Strikes_Poster_San_Diego_2005MMS/link/5ea95be292851cb267630d51/download.
- Pace RM, Williams RI, Kraus SD, Knowlton AR, Pettis HM. 2021. Cryptic mortality of North Atlantic right whales. *Conservation Science and Practice*. 3:e346. doi:10.1111/csp2.346.
- Palka D, Aichinger DL, Broughton E, Chavez-Rosales S, Cholewiak D, Davis G, DeAngelis A, Garrison L, Haas H, Hatch J, et al. 2021. Atlantic marine assessment program for protected species: FY15-FY19. Washington (DC): Department of the Interior, Bureau of Ocean Energy Management. 330 p. Report No.: OCS Study BOEM 2021-051. https://espis.boem.gov/Final%20reports/BOEM_2021-051.pdf.
- Palka DL, Chavez-Rosales S, Josephson E, Cholewiak D, Haas HL, Garrison L, Jones M, Sigourney D, Waring G, Jech M, et al. 2017. Atlantic marine assessment program for protected species: 2010-2014. Washington (DC): US Department of the Interior, Bureau of Ocean Energy Management. 230 p. Report No.: OCS Study BOEM 2017-071. <https://espis.boem.gov/final%20reports/5638.pdf>.

- Parks SE, Clark CW, Tyack PL. 2007. Short- and long-term changes in right whale calling behavior: The potential effects of noise on acoustic communication. *Journal of the Acoustical Society of America*. 122(6):3725-3731. <https://www.ncbi.nlm.nih.gov/pubmed/18247780>. doi:10.1121/1.2799904.
- Paskyabi MB, Fer I. 2012. Upper ocean response to large wind farm effect in the presence of surface gravity waves. In: Deep Sea Offshore Wind R&D Conference, Vol 24; 2012 Jan; Trondheim (Norway). p 45-254.
- Patenaude NJ, Richardson JW, Smultea AM, Koski RW, Miller WG. 2002. Aircraft sound and disturbance to bowhead and beluga whales during spring migration in the Alaskan Beaufort Sea. *Marine Mammal Science*. 18(2):309-335. https://www.academia.edu/7642184/aircraft_sound_and_disturbance_to_bowhead_and_beluga_whales_during_spring_migration_in_the_alaskan_beaufort_sea.
- Pettis HM, Pace RMI, Hamilton PK. 2021. North Atlantic right whale consortium 2020 annual report card. North Atlantic Right Whale Consortium. 22 p. https://www.narwc.org/uploads/1/1/6/6/116623219/2020narwcreport_cardfinal.pdf.
- Pettis HM, Pace RMI, Hamilton PK. 2022. North Atlantic right whale consortium 2021 annual report card. North Atlantic Right Whale Consortium. 25 p. https://www.narwc.org/uploads/1/1/6/6/116623219/2021report_cardfinal.pdf.
- Pettis HM, Pace RM, Hamilton PK. 2023. North Atlantic right whale consortium 2022 annual report card. North Atlantic Right Whale Consortium. 15 p.
- Pfleger M, Mustain P, Valentine M, Gee E, Webber W, Fenty B. 2021. Vessel strikes threaten north Atlantic right whales. *Oceana*. 1-52. doi:10.5281/zenodo.5120727.
- Pierce GJ, Santos MB, Murphy S, Learmonth JA, Zuure AF, Rogan F, Bustamante P, Caurant F, Lahaye V, Ridous V, et al. 2008. Bioaccumulation of persistent organic pollutants in female common dolphins (*Delphinus delphis*) and harbour porpoises (*Phocoena phocoena*) from western European seas: Geographical trends, causal factors and effects on reproduction and mortality. *Environmental Pollution*. 153(2):401-415.
- Pike DG, Vikingsson GA, Gunnlaugsson T, Øien N. 2009. A note on the distribution and abundance of blue whales (*Balaenoptera musculus*) in the Central and Northeast North Atlantic. NAMMCO Scientific Publications. 7:19-29.
- Pirotta E, Laesser BE, Hardaker A, Riddoch N, Marcoux M, Lusseau D. 2013. Dredging displaces bottlenose dolphins from an urbanised foraging patch. *Marine Pollution Bulletin*. 74(1):396-402. <https://www.ncbi.nlm.nih.gov/pubmed/23816305>. doi:10.1016/j.marpolbul.2013.06.020.
- [PMEL] Pacific Marine Environmental Laboratory. 2020. Ocean acidification: The other carbon monoxide problem. Seattle (WA): US Department of Commerce, National Oceanic and Atmospheric

Administration, Pacific Marine Environmental Laboratory. [accessed 2022 Nov 20].
<https://www.pmel.noaa.gov/co2/story/Ocean+Acidification>.

- Putland RL, Merchant ND, Farcas A, Radford CA. 2017. Vessel noise cuts down communication space for vocalizing fish and marine mammals. *Global Change Biology*. 24(4):1708-1721.
<https://www.ncbi.nlm.nih.gov/pubmed/29194854>. doi:10.1111/gcb.13996.
- Quick N, Scott-Hayward L, Sadykova D, Nowacek D, Read A. 2017. Effects of a scientific echo sounder on the behavior of short-finned pilot whales (*Globicephala macrorhynchus*). *Canadian Journal of Fisheries and Aquatic Sciences*. 74(5):716-726. doi:10.1139/cjfas-2016-0293.
- Raghukumar K, Nelson T, Jacox M, Chartrand C, Fiechter J, Chang G, Cheung L, Roberts J. 2023. Projected cross-shore changes in upwelling induced by offshore wind farm development along the California coast. *Communications Earth & Environment*. 4(1).
- [Ramboll] Ramboll US Corporation. 2020. New Jersey offshore wind strategic plan: Navigating our future. Princeton (NJ): New Jersey board of Public Utilities and the Interagency Taskforce on Offshore Wind. 510 p.
- Raoux A, Tecchio S, Pezy J, Lassalle G, Degraer S, Wilhelmsson S, Cachera M, Ernande B, Le Guen C, Haraldsson M, et al. 2017. Benthic and fish aggregation inside an offshore wind farm: Which effects on the trophic web functioning? *Ecological Indicators*. 72:33-46. doi:10.1016/j.ecolind.2016.07.037.
- Read AJ. 2008. The looming crisis: Interactions between marine mammals and fisheries. *Journal of Mammalogy*. 89(3):541-548.
- Read AJ, Drinker P, Northridge S. 2006. Bycatch of marine mammals in U.S. and global fisheries. *Conservation Biology*. 20(1):163-169. <https://conbio.onlinelibrary.wiley.com/doi/abs/10.1111/j.1523-1739.2006.00338.x?sid=nlm%3Apubmed>. doi:10.1111/j.1523-1739.2006.00338.x.
- Reeves RR, McClellan K, Werner TB. 2013. Marine mammal bycatch in gillnet and other entangling net fisheries, 1990 to 2011. *Endangered Species Research*. 20:71-97. doi:10.3354/esr00481.
- Reygondeau G, Beaugrand G. 2011. Future climate-driven shifts in distribution of *Calanus finmarchicus*. *Global Change Biology*. 17:756-766. doi:10.1111/j.1365-2486.2010.02310.x.
- Richardson WJ, Wursig B, Greene Jr CR. 1986. Reactions of bowhead whales, *Balaena mysticetus*, to seismic exploration in the Canadian Beaufort Sea. *Journal of the Acoustical Society of America*. 79(4):1,117-111,128
- Richardson WJ, Greene CR, Malme C, Thompson DH. 1995. *Marine mammals and noise*. San Diego (CA): Academic Press.
- Richardson WJ, Miller GW, Greene CR. 1999. Displacement of migrating bowhead whales by sounds from seismic surveys in shallow waters of the Beaufort Sea. *Journal of the Acoustical Society of*

- America. 106(4):2281-2281.
<http://scitation.aip.org/content/asa/journal/jasa/106/4/10.1121/1.427801>. doi:10.1121/1.427801.
- Richardson WJ, Würsig B, Greene Jr C. 1990. Reactions of bowhead whales, *Balaena mysticetus*, to drilling and dredging noise in the Canadian Beaufort Sea. *Marine Environmental Research*. 29(2):26.
- Richter C, Dawson S, Slooten E. 2006. Impacts of commercial whale watching on male sperm whales at Kaikoura, New Zealand. *Marine Mammal Science*. 22(1):46-63. doi:10.1111/j.1748-7692.2006.00005.x.
- Risch D, Castellote M, Clark CW, Davis GE, Dugan PJ, Hodge LE, Kumar A, Lucke K, Mellinger DK, Nieukirk SL, et al. 2014. Seasonal migrations of North Atlantic minke whales: Novel insights from large-scale passive acoustic monitoring networks. *Movement Ecology*. 2(1):1-7.
- Robbins J, Mattila DK. 2001. Monitoring entanglements of humpback whales (*Megaptera novaeangliae*) in the Gulf of Maine on the basis of caudal peduncle scarring. In: 53rd Scientific Committee Meeting of the International Whaling Commission; 2001 Jul 23-27; Hammersmith (London). p 12.
- Roberts JJ. 2022. Habitat-based marine mammal density models for the U.S. Atlantic: Latest versions. Durham (NC): Duke University. [accessed 2022 Nov 18].
<https://seamap.env.duke.edu/models/Duke/EC/>.
- Roberts JJ, Best BD, Mannocci L, Fujioka E, Halpin PN, Palka DL, Garrison LP, Mullin KD, Cole TV, Khan CB, et al. 2016. Habitat-based cetacean density models for the U.S. Atlantic and Gulf of Mexico. *Scientific Reports*. 6:22615. <https://www.nature.com/articles/srep22615>. doi:10.1038/srep22615.
- Roberts JJ, Mannocci L, Halpin PN. 2017. Final project report: Marine species density data gap assessments and update for the AFTT study area, 2016-2017 (opt. year 1). Durham (NC): Naval Facilities Engineering Command, Atlantic and Duke University Marine Geospatial Ecology Lab. 76 p. Report No.: Version 1.4. https://seamap.env.duke.edu/seamap-models-files/Duke/Reports/AFTT_Update_2016_2017_Final_Report_v1.4_excerpt.pdf.
- Roberts JJ, Mannocci L, Schick RS, Halpin PN. 2018. Final project report: Marine species density data gap assessments and update for the AFTT study area, 2017-2018 (opt. year 2). Durham (NC): for Naval Facilities Engineering Command, Atlantic and the Duke University Marine Geospatial Ecology Lab. 113 p. https://seamap.env.duke.edu/seamap-models-files/Duke/Reports/AFTT_Update_2017_2018_Final_Report_v1.2_excerpt.pdf.
- Roberts JJ, Schick RS, Halpin PN. 2020. Final project report: Marine species density data gap assessments and update for the AFTT study area, 2018-2020 (option year 3). Durham (NC): Naval Facilities Engineering Command, Atlantic by the Duke University Marine Geospatial Ecology Lab. 142 p. Report No.: Version 1.4.
- Roberts JJ, Yack TM, Halpin PN. 2023. Marine mammal density models for the U.S. Navy Atlantic Fleet Training and Testing (AFTT) study area for the Phase IV Navy Marine Species Density Database

(NMSDD). Durham (NC): Naval Facilities Engineering Systems Command, Atlantic by the Duke University Marine Geospatial Ecology Lab. Report No.: Document version 1.3.

- Robinson SP, Wang L, Cheong SH, Lepper PA, Marubini F, Hartley JP. 2020. Underwater acoustic characterisation of unexploded ordnance disposal using deflagration. *Marine Pollution Bulletin*. 160:111646. <https://www.ncbi.nlm.nih.gov/pubmed/33181928>. doi:10.1016/j.marpolbul.2020.111646.
- Robinson Willmott J, Clerc J, Vukovich M, Pembroke A. 2021. Digital aerial baseline survey of marine wildlife in support of offshore wind energy. Overview and summary. Albany (NY): New York State Energy Research and Development. 60 p. Report No.: Contract no. 95764, Report no. 21-07.
- Rolland RM, Hunt KE, Kraus SD, Wasser SK. 2005. Assessing reproductive status of right whales (*Eubalaena glacialis*) using fecal hormone metabolites. *General and Comparative Endocrinology*. 142(3):308-317. <https://www.ncbi.nlm.nih.gov/pubmed/15935157>. doi:10.1016/j.ygcen.2005.02.002.
- Rolland RM, Parks SE, Hunt KE, Castellote M, Corkeron PJ, Nowacek DP, Wasser SK, Kraus SD. 2012. Evidence that ship noise increases stress in right whales. *Proceedings of the Royal Society B: Biological Sciences*. 279(1737):2363-2368. <https://www.ncbi.nlm.nih.gov/pubmed/22319129>. doi:10.1098/rspb.2011.2429.
- Ruppel CD, Weber TC, Staaterman ER, Labak SJ, Hart PE. 2022. Categorizing active marine acoustic sources based on their potential to affect marine animals. *Journal of Marine Science and Engineering*. 10(9). doi:10.3390/jmse10091278.
- Russell DJ, Hastie GD, Thompson D, Janik VM, Hammond PS, Scott-Hayward LA, Matthiopoulos J, Jones EL, McConnell BJ. 2016. Avoidance of wind farms by harbour seals is limited to pile driving activities. *Journal of Applied Ecology*. 53(6):1642-1652. <https://www.ncbi.nlm.nih.gov/pubmed/27867217>. doi:10.1111/1365-2664.12678.
- Russell DJF, Brasseur SMJM, Thompson D, Hastie GD, Janik VM, Aarts G, McClintock BT, Matthiopoulos J, Moss SEW, McConnell B. 2014. Marine mammals trace anthropogenic structures at sea. *Current Biology*. 24(14):R638-R639. doi:10.1016/j.cub.2014.06.033.
- Saunders JC, Dear SP, Schneider ME. 1985. The anatomical consequences of acoustic injury: A review and tutorial. *Journal of the Acoustical Society of America*. 78:833-860.
- Schakner ZA, Blumstein DT. 2013. Behavioral biology of marine mammal deterrents: A review and prospectus. *Biological Conservation*. 16:380-389. doi:10.1016/j.biocon.2013.08.024.
- Scheidat M, Tougaard J, Brasseur S, Carstensen J, van Polanen Petel T, Teilmann J, Reijnders P. 2011. Harbour porpoises (*Phocoena phocoena*) and wind farms: A case study in the Dutch North Sea. *Environmental Research Letters*. 6(2). doi:10.1088/1748-9326/6/2/025102.

- Scheifele PM, Andrew S, Cooper RA, Darre M, Musiek FE, Max L. 2004. Indication of a Lombard vocal response in the St. Lawrence River beluga. *Journal of the Acoustical Society of America*. 17:1486-1492. doi:10.1121/1.1835508.
- Schultze L, Merckelbach L, Horstmann J, Raasch S, Carpenter J. 2020. Increased mixing and turbulence in the wake of offshore wind farm foundations. *Journal of Geophysical Research: Oceans*. 125(2020):1-4. doi:10.1029/2019JC015858.
- Segtnan OH, Christakos K. 2015. Effect of offshore wind farm design on the vertical motion of the ocean. *Energy Procedia*. 80:213-222. doi:10.1016/j.egypro.2015.11.424.
- Siebert U, Sturznickel J, Schaffeld T, Oheim R, Rolvien T, Prenger-Berninghoff E, Wohlsein P, Lakemeyer J, Rohner S, Aroha Schick L, et al. 2022. Blast injury on harbour porpoises (*Phocoena phocoena*) from the Baltic Sea after explosions of deposits of World War II ammunition. *Environmental International*. 159:107014. <https://www.ncbi.nlm.nih.gov/pubmed/34883460>. doi:10.1016/j.envint.2021.107014.
- Smith CR, Rowles TK, Hart LB, Townsend IF, Wells RS, Zolman ES, Balmer BC, Quigley B, Ivnic M, McKercher W, et al. 2017. Slow recovery of Barataria Bay dolphin health following the Deepwater Horizon oil spill (2013-2014) with evidence of persistent lung disease and impaired stress response. *Endangered Species Research*. 33:127-142. <https://www.int-res.com/articles/esr2017/33/n033p127.pdf>. doi:10.3354/esr00778.
- Smultea MA, Mobley Jr JR, Fertl D, Fulling GL. 2008. An unusual reaction and other observations of sperm whales near fixed wing aircraft. *Gulf and Caribbean Research*. 20:75-80.
- Southall BL, Bowles AE, Ellison WT, Finneran JJ, Gentry RL, Greene Jr CR, Kastak D, Ketten DR, Miller JH, Natchigall PE, et al. 2007. Marine mammal noise exposure criteria: Initial scientific recommendations. *Aquatic Mammals*. 33(4):411-521. doi:10.1578/AM.33.4.2007.411.
- Southall BL, Finneran JJ, Reichmuth C, Nachtigall PE, Ketten DR, Bowles AE, Ellison WT, Nowacek DP, Tyack PL. 2019. Marine mammal noise exposure criteria: Updated scientific recommendations for residual hearing effects. *Aquatic Mammals*. 45(2):125-232. doi:10.1578/am.45.2.2019.125.
- Southall B, Ellison W, Clark C, Tollit D, Amaral J. 2021a. Marine mammal risk assessment for New England Offshore Windfarm construction and operational scenarios. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. 104 p. Report No.: OCS Study BOEM 2021-080.
- Southall BL, Nowacek DP, Bowles AE, Senigaglia V, Bejder L, Tyack PL. 2021b. Marine mammal noise exposure criteria: Assessing the severity of marine mammal behavioral responses to human noise. *Aquatic Mammals*. 47(5):421-464. doi:10.1578/am.47.5.2021.421.
- Sprogis KR, Videsen S, Madsen PT. 2020. Vessel noise levels drive behavioural responses of humpback whales with implications for whale-watching. *Elife*. 9. <https://www.ncbi.nlm.nih.gov/pubmed/32539930>. doi:10.7554/eLife.56760.

- Stelfox M, Hudgins J, Sweet M. 2016. A review of ghost gear entanglement amongst marine mammals, reptiles and elasmobranchs. *Marine Pollution Bulletin*. 111(1-2):6-17. doi:10.1016/j.marpolbul.2016.06.034.
- Stone GS, Kraus SD, Prescott JH, Hazard KW. 1988. Significant aggregations of endangered right whale, *Eubalaena glacialis*, on the continental shelf of Nova Scotia. *Canadian Field Naturalist*. 102:471-474.
- Stone KM, Leiter SM, Kenney RD, Wikgren BC, Thompson JL, Taylor JK, Kraus SD. 2017. Distribution and abundance of cetaceans in a wind energy development area offshore of Massachusetts and Rhode Island. *Journal of Coastal Conservation*. 21:527-543. doi:10.1007/s11852-017-0526-4.
- Sullivan L, Brosnan T, Rowles TK, Simeone C, Collier TK. 2019. Guidelines for assessing exposure and impacts of oil spills on marine mammals. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 82 p. Report No.: NOAA Tech. Memo. NMFS-OPR62. <https://repository.library.noaa.gov/view/noaa/22425>.
- Takeshita R, Sullivan L, Smith CR, Collier T, Hall A, Brosnan T, Rowles T, Schwacke L. 2017. The Deepwater Horizon oil spill marine mammal injury assessment. *Endangered Species Research*. 33:96-106. <https://opensky.ucar.edu/islandora/object/articles%3A19572>. doi:10.3354/esr00808.
- Taormina B, Bald J, Want A, Thouzeau G, Lejart M, Desroy N, Carlier A. 2018. A review of potential impacts of submarine power cables on the marine environment: Knowledge gaps, recommendations and future directions. *Renewable and Sustainable Energy Reviews*. 96:380-391. https://www.researchgate.net/publication/327079114_A_review_of_potential_impacts_of_submarine_power_cables_on_the_marine_environment_Knowledge_gaps_recommendations_and_future_directions. doi:10.1016/j.rser.2018.07.026. hal-02405630.
- Taruski AG, Olney CE, Winn HE. 1975. Chlorinated hydrocarbons in cetaceans. *Journal of the Fisheries Board of Canada*. 31(11):2205-2209.
- Teilmann J, Cartensen J. 2012. Negative long-term effects on harbour porpoises from a large scale offshore wind farm in the Baltic - evidence of slow recovery. *Environmental Research Letters*. 7(4):045101. doi:10.1088/1748-9326/7/4/045101.
- Tetra Tech Inc and LGL. 2020. Final comprehensive report years 1-3 for New York bight whale monitoring aerial surveys March 2017 - February 2020. East Setauket (NY): New York State Department of Environmental Conservation, Division of Marine Resources. 136 p. Report No.: Contract No. C009926.
- Thomsen F, Stober U. 2022. Operational underwater sound from future offshore wind turbines can affect the behavior of marine mammals. *Journal of the Acoustical Society of America*. 151(4):A239. doi:10.1121/10.0011186.
- Thorne LH, DN Wiley. 2024. Evaluating drivers of recent large whale strandings on the East Coast of the United States. *Conserv Biol*. 2024 May 29:e14302.

- Todd S, Stevick P, Lien J, Marques F, Ketten D. 1996. Behavioral effects of exposure to underwater explosions in humpback whales (*Megaptera novaeangliae*). *Canadian Journal of Zoology*. 74:1661-1672.
- Todd VL, Pearse WD, Tregenza N, Lepper PA, Tobb IB. 2009. Diel echolocation activity of harbour porpoises (*Phocoena phocoena*) around North Sea offshore gas installations. *ICES Journal of Marine Science*. 66:734-735.
- Todd VLG, Todd IB, Gardiner JC, Morrin ECN, MacPherson NA, DiMarzio NA, Thomsen F. 2015. A review of direct and indirect impacts of marine dredging activities on marine mammals. *ICES Journal of Marine Science*. 72(2):328-340. <https://academic.oup.com/icesjms/article/72/2/328/676320>. doi:10.1093/icesjms/fsu187.
- Todd VLG, Williamson LD, Jiang J, Cox SE, Todd IB, Ruffert M. 2020. Proximate underwater soundscape of a North Sea offshore petroleum exploration jack-up drilling rig in the Dogger Bank. *Journal of Acoustical Society of America*. 148(6):3971. doi:10.1121/10.0002958.
- Tougaard J, Cartstensen J, Teilmann J, Bech N. 2005. Effects of the Nysted Offshore Wind Farm on harbour porpoises. 51 p.
- Tougaard J, Hermannsen L, Madsen PT. 2020. How loud is the underwater noise from operating offshore wind turbines? *Journal of the Acoustical Society of America*. 148(5):2885. <https://www.ncbi.nlm.nih.gov/pubmed/33261376>. doi:10.1121/10.0002453.
- Trumble SJ, Norman SA, Crain DD, Mansouri F, Winfield ZC, Sabin R, Potter CW, Gabriele CM, Usenko S. 2018. Baleen whale cortisol levels reveal a physiological response to 20th century whaling. *Nature Communications*. 9(1):4587. <https://www.ncbi.nlm.nih.gov/pubmed/30389921>. doi:10.1038/s41467-018-07044-w.
- Tsuji K, Akamatsu T, Okamoto R, Mori K, Mitani Y, Umeda N. 2018. Change in singing behavior of humpback whales caused by shipping noise. *PLOS One*. 13(10):e0204112. <https://www.ncbi.nlm.nih.gov/pubmed/30356328>. doi:10.1371/journal.pone.0204112.
- [USACE] US Army Corps of Engineers. 2021. Newark Bay, New Jersey federal navigation project maintenance dredging. Newark Bay (NJ): US Army Corps of Engineers. Report No.: Public Notice No. Newark Bay, NJ FY21.
- USEPA. 2022. Climate change indicators: Oceans. US Environmental Protection Agency. [accessed 2023 Apr 05]. <https://www.epa.gov/climate-indicators/oceans>.
- USFWS. 2014. West Indian manatee *Trichechus manatus* Florida stock (Florida subspecies, *Trichechus manatus latirostris*) stock assessment report. Jacksonville (FL): US Department of the Interior, US Fish and Wildlife Service. 17 p. [accessed 2022 Feb 29]. <https://www.fws.gov/sites/default/files/documents/west-indian-manatee-florida-stock-assessment-report.pdf>.

- USFWS. 2019. Stock assessment report (SAR) West Indian manatee *Trichechus manatus*. US Fish and Wildlife Service. [accessed 2023 Mar 29]. <https://www.fws.gov/sites/default/files/documents/stock-assessment-report-west-indian-manatee-florida-stock-2023.pdf>.
- USFWS. 2023. Stock assessment report (SAR): West Indian manatee (*Trichechus manatus*) Florida stock (Florida subspecies, *Trichechus manatus latirostris*). Jaconsonville (FL): US Fish and Wildlife Service, Florida Ecological Services Office. 27 p.
- van Berkel J, Burchard H, Christenson A, Mortensen L, Svenstrup Petersen O, Thomsen F. 2020. The effects of offshore wind farms on hydrodynamics and implications for fishes. *Oceanography*. 33(4):108-117.
- Van Parijs SM, DeAngelis AI, Aldrich T, Gordon R, Holdman A, McCordic JA, Mouy X, Rowell TJ, Tennant S, Westell A, Davis GE, Gilles A. 2023. Establishing baselines for predicting change in ambient sound metrics, marine mammal, and vessel occurrence within a US offshore wind energy area. *ICES Journal of Marine Science*.
- van Waerebeek K, Baker A, Felix F, Gedamke J, Iniguez M, Sanino GP, Secchi ED, Sutaria D, van Helden AN, Wang Y. 2007. Vessel collisions with small cetaceans worldwide and with large whales in the southern hemisphere, an initial assessment. *Latin American Journal of Aquatic Mammals*. 6(1):43-49. doi:10.5597/lajam00109.
- Vanderlaan ASM, Taggart CT. 2007. Vessel collisions with whales: The probability of the lethal injury based on vessel speed. *Marine Mammal Science*. 23(1):144-156. https://www.phys.ocean.dal.ca/~taggart/Publications/Vanderlaan_Taggart_MarMamSci23_2007.pdf. doi:10.1111/j.1748-7692.2006.00098.x.
- Vanhellemont Q, Ruddick K. 2014. Turbid wakes associated with offshore wind turbines observed with Landsat 8. *Remote Sensing of Environment*. 145:105-115. doi:10.1016/j.rse.2014.01.009.
- Vires G. 2011. Echosounder Effects on Beaked Whales in the Tongue of the Ocean, Bahamas. Duke University.
- von Benda-Beckmann AM, Aarts G, Sertlek HÖ, Lucke K, Verboom WC, Kastelein RA, Ketten DR, van Bemmelen R, Lam F-PA, Kirkwood RJ, et al. 2015. Assessing the impact of underwater clearance of unexploded ordnance on harbour porpoises (*Phocoena phocoena*) in the southern North Sea. *Aquatic Mammals*. 41(4):503-523. doi:10.1578/am.41.4.2015.503.
- Waring GT, Josephson E, Maze-Foley K, Rosel PE. 2015. U.S. Atlantic and Gulf of Mexico marine mammal stock assessments - 2014. Woods Hole (MA): US Department of Commerce, National Oceanic and Atmospheric Administration, National Fisheries Science Center. 370 p. Report No.: NOAA Technical Memorandum NMFS-NE-258. <https://repository.library.noaa.gov/view/noaa/5043>.
- Water Proof. 2020. Coastal Virginia offshore wind noise monitoring during monopile installation A01 and A02. Jan De Nul n.v.: 140 p. Report No.: WP2019_1197_R4r8.

- Watt CA, Simonee J, L’Herault V, Zhou R, Ferguson SH, Marcoux M, Black S. 2021. Cortisol levels in narwhal (*Monodon monoceros*) blubber from 2000 to 2019. *Arctic Science*. 7(3):690–698.
- Weisbrod AV, Shea D, Moore MJ, Stegeman JJ. 2000. Bioaccumulation patterns of polychlorinated biphenyls and chlorinated pesticides in northwest Atlantic pilot whales. *Environmental Toxicology and Chemistry: An International Journal*. 19(3):667-677.
- Wells RS, Scott MD. 1997. Seasonal incidence of boat strikes on bottlenose dolphins near Sarasota, Florida. *Marine Mammal Science*. 13(3):475-480.
- Werner S, Budziak A, van Franeker J, Galgani F, Hanke G, Maes T, Matiddi M, Nilsson P, Oosterbaan L, Priestland E, et al. 2016. Harm caused by marine litter. Ispra (Italy): European Commission, JRC Technical Reports. 92 p. Report No.: EUR 28317 EN.
<https://mcc.jrc.ec.europa.eu/documents/201709180716.pdf>.
- Westell A, Rowell TJ, Posdaljian N, Solsona-Berga A, Van Parijs SM, DeAngelis AI, Gilles A. 2024. Acoustic presence and demographics of sperm whales (*Physeter macrocephalus*) off southern New England and near a US offshore wind energy area. *ICES Journal of Marine Science*.
- Whitt AD, Dudzinski K, Laliberte JR. 2013. North Atlantic right whale distribution and seasonal occurrence in nearshore waters off New Jersey, USA and implications for management. *Endangered Species Research*. 20:50-69. doi:10.3354/esr00486.
- Whitt A, Powell JA, Richardson AG, Bosyk JR. 2015. Abundance and distribution of marine mammals in nearshore waters off New Jersey, USA. *Journal of Cetacean Resource Management*. 15:45-59.
- Wilber DH, Clarke DG. 2001. Biological effects of suspended sediments: A review of suspended sediment impacts on fish and shellfish with relation to dredging activities in estuaries. *Northern American Journal of Fisheries Management*. 21:855-875. doi:10.1577/1548-8675(2001)0212.0.CO;2.
- Williams TM, Kendall TL, Richter BP, Ribeiro-French CR, John JS, Odell KL, Losch BA, Feuerbach DA, Stamper MA. 2017a. Swimming and diving energetics in dolphins: A stroke-by-stroke analysis for predicting the cost of flight responses in wild odontocetes. *Journal of Experimental Biology*. 220(Pt 6):1135-1145. <https://www.ncbi.nlm.nih.gov/pubmed/28298467>. doi:10.1242/jeb.154245.
- Williams TM, Blackwell SB, Richter B, Sinding MHS, Heide-Jørgensen MP. 2017b. Paradoxical escape responses by narwhals (*Monodon monoceros*). *Science*. 358(6368):1328–1331.
- Williams TM, Blackwell SB, Tervo O, Garde E, Sinding MHS, Richter B, Heide-Jørgensen MP. 2022. Physiological responses of narwhals to anthropogenic noise: A case study with seismic airguns and vessel traffic in the Arctic. *Functional Ecology*. doi:10.1111/1365-2435.14119.
- Wingfield JC. 2013. Ecological processes and the ecology of stress: The impacts of abiotic environmental factors. *Functional Ecology*. 27:37-44. doi:10.1111/1365-2435.12039.

- Wisniewska DM, Johnson M, Teilmann J, Siebert U, Galatius A, Dietz R, Madsen PT. 2018. High rates of vessel noise disrupt foraging in wild harbour porpoises (*Phocoena phocoena*). *Proceedings of the Royal Society B: Biological Sciences*. 285(1872). <https://www.ncbi.nlm.nih.gov/pubmed/29445018>. doi:10.1098/rspb.2017.2314.
- Wood J, Southall BL, Tollit DJ. 2012. PG&E offshore 3-D Seismic Survey Project EIR – Marine Mammal Technical Draft Report.
- Woodley TH, Gaskin DE. 1996. Environmental characteristics of North Atlantic right and fin whale habitat in the lower Bay of Fundy, Canada. *Canadian Journal of Zoology*. 74:75-84.
- Wright AJ, Aguilar de Soto N, Baldwin AL, Bateson M, Beale CM, Clark C, Deak T, Edwards EF, Fernandez A, Godinho A, et al. 2007. Do marine mammals experience stress related to anthropogenic noise? *International Journal of Comparative Psychology*. 20(2):274-316.
- Würsig B, Lynn SK, Jefferson TA, Mullin KD. 1998. Behavior of cetaceans in the northern Gulf of Mexico relative to survey ships and aircraft. *Aquatic Mammals*. 24.1:41-50.
- Würsig B, Greene Jr CR, Jefferson TA. 2000. Development of an air bubble curtain to reduce underwater noise of percussive piling. *Marine Environmental Research*. 49:79-93.
- Wynne K, Schwartz M. 1999. Guide to marine mammals & turtles of the U.S. Atlantic & Gulf of Mexico. Fairbanks (AK): University of Alaska Press.
- Yost WA. 2000. Fundamentals of hearing: an introduction. San Diego (CA): Academic Press. 349-349 p. <http://catdir.loc.gov/catdir/description/els031/00103469.html>.
- Zobell VM, Fraiser KE, Morten JA, Hastings SP, Peavey Reeves LE, Wiggins SM, Hildebrand JA. 2021. Underwater noise mitigation in the Santa Barbara Channel through incentive-based vessel speed reduction. *Scientific Reports*. 11(1):18391. doi:10.1038/s41598-021-96506-1.
- Zoidis AM, Lomac-MacNair KS, Ireland DS, Rickard ME, McKown KA, Schlesinger MD. 2021. Distribution and density of six large whale species in the New York Bight from monthly aerial surveys 2017 to 2020. *Continental Shelf Research*. 239:104572.

K.4.10 Section 3.5.7, Sea Turtles

- Aguirre AA, Balazs G, Spraker T, Gross T. 1995. Adrenal and hematological responses to stress in juvenile green turtles (*Chelonia mydas*) with and without Fibropapillomas. *Physiological Zoology*. 68:831-854. doi:10.2307/30163934.
- Austin ME, Hannay DE, Broker KC. 2018. Acoustic characterization of exploration drilling in the Chukchi and Beaufort seas. *Journal of the Acoustical Society of America*. 144(1):1-115. doi:10.1121/1.5044417.

- Bailey H, Benson SR, Shillinger GL, Bograd SJ, Dutton PH, Eckert SA, Morreale SJ, Paladino FV, Eguchi T, Foley DG, Block BA, Piedra R, Hitipeuw C, Tapilatu RF and Spotila JR. 2012. Identification of distinct movement patterns in Pacific leatherback turtle populations influenced by ocean conditions. *Ecological Applications*. 22: 735-747. <https://doi.org/10.1890/11-0633>.
- Bailey H, Brookes KL, Thompson PM. 2014. Assessing environmental impacts of offshore wind farms: Lessons learned and recommendations for the future. *Aquatic Biosystems*. 10(8):1-13.
- Baker K, Howson U. 2021. Data collection and site survey activities for renewable energy on the Atlantic Outer Continental Shelf. Biological Assessment. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 152 p.
- Balazs GH. 1985. Impact of ocean debris on marine turtles: Entanglement and ingestion. In: Shomura RS, Yoshida HO, editors. *Proceedings of the 1984 Workshop on the Fate and Impact of Marine Debris*; 1984 Nov 27-29; Honolulu, HI. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Fisheries Center Honolulu Laboratory 43 p.
- Barco S, Law M, Drummond B, Koopman C, Trapani C, Reinheimer S, Rose S, Swingle WM, Williard A. 2016. Loggerhead turtles killed by vessel and fishery interaction in Virginia, USA, are healthy prior to death. *Marine Ecology Progress Series*. 555:221-234. doi:10.3354/meps11823.
- Barnette MC. 2017. Potential impacts of artificial reef development on sea turtle conservation in Florida. St. Petersburg (FL): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries service, Southeast Regional Office. 36 p. Report No.: Technical Memorandum NMFS-SER-5.
- Bartol SM, Bartol IK. 2012. Hearing capabilities of loggerhead sea turtles (*Caretta caretta*) throughout ontogeny: An integrative approach involving behavioral and electrophysiological techniques: Final report E&P & marine life programme. Norfolk (VA): Virginia Wesleyan College and Old Dominion University. 37 p. Report No.: JIP Grant No. 22 07-14.
- Bartol SM, Ketten DR. 2006. Turtle and tuna hearing. In: Swimmer Y, Brill R, editors. *Sea turtle and pelagic fish sensory biology: Developing techniques to reduce sea turtle bycatch in longline fisheries*. US Department of Commerce, National Oceanic and Atmospheric Administration. p. 117.
- Bartol SM, Music JA, Lenhardt M. 1999. Auditory evoked potentials of the loggerhead sea turtle (*Caretta caretta*). *Copeia*. 3:636-840.
- Bejarano AC, Michel J, Rowe Z, Li D, French Mcay L, Ekin D. 2013. Environmental risks, fate and effects of chemicals associated with wind turbines on the Atlantic outer continental shelf. Herndon (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 355 p. Report No.: OCS Study BOEM 2013-213.

- Bellmann MA, Brinkmann J, May J, Wendt T, Gerlach S, Remmers P. 2020. Underwater noise during the impulse pile-driving procedure: Influencing factors on pile-driving noise and technical possibilities to comply with noise mitigation values. The Federal Maritime and Hydrographic Agency (Bundesamt für Seeschifffahrt und Hydrographie). 137 p. Report No.: FKZ UM16 881500.
- Bembenek-Baile SA, Niemuth JN, McClellan-Green PD, Godfrey HM, Harms CA, Gracz H, Stoskopf MK. 2019. Metabolomics analysis of skeletal muscle, heart, and liver of hatchling loggerheads sea turtles (*Caretta caretta*) experimentally exposed to crude oil and/or corexit. *Metabolites*. 9(2019):21. [accessed 2023 Jan]. doi:10.3390/metabo9020021.
- Berreiros JP, Raykov VS. 2014. Lethal lesions and amputation caused by plastic debris and fishing gear on the loggerhead turtle *Caretta caretta* (Linnaeus, 1758). Three case reports from Terceira Island, Azores (NE Atlantic). *Marine Pollution Bulletin*. 86:518-522. https://www.researchgate.net/publication/263928443_Lethal_lesions_and_amputation_caused_by_plastic_debris_and_fishing_gear_on_the_loggerhead_turtle_Caretta_caretta_Linnaeus_1758_Three_case_reports_from_Terceira_Island_Azores_NE_Atlantic. doi:10.1016/j.marpolbul.2014.07.020.
- Bevan E, Whiting S, Tucker T, Guinea M, Raith A, Douglas R. 2018. Measuring behavioral responses of sea turtles, saltwater crocodiles, and crested terns to drone disturbance to define ethical operating thresholds. *PLOS One*. 13(3):e0194460. doi:10.1371/journal.pone.0194460.
- Bilinski J. 2021. Review of the impacts to marine fauna from electromagnetic frequencies (EMF) generated by energy transmitted through undersea electric transmission cables. NJDEP Division of Science and Research. [accessed 2022 Nov 29]. <https://www.nj.gov/dep/offshorewind/docs/njdep-marine-fauna-review-impacts-from-emf.pdf>.
- BOEM. 2007. Programmatic environmental impact statement for alternative energy development and production and alternate use of facilities on the outer continental shelf. US Department of the Interior, Bureau of Ocean Energy Management. 4 p. Report No.: OCS EIS/EA MMS 2007-046. <https://www.boem.gov/renewable-energy/guide-ocs-alternative-energy-final-programmatic-environmental-impact-statement-eis>.
- BOEM. 2012. Commercial wind lease issuance and site assessment activities on the Atlantic Outer Continental Shelf offshore New Jersey, Delaware, Maryland, and Virginia, Final Environmental Assessment. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 336 p. Report No.: OCS EIS/EA BOEM 2012-003. http://www.boem.gov/sites/default/files/uploadedFiles/BOEM/Renewable_Energy_Program/Smart_from_the_Start/Mid-Atlantic_Final_EA_012012.pdf.
- BOEM. 2017. Gulf of Mexico OCS oil and gas lease sales 2012 2017. Gulf of Mexico lease sales 249, 250, 251, 252, 253, 254, 256, 257, 259, and 261. Final multiscale environmental impact statement. Vol II: chapters 4-8. US Department of the Interior, Bureau of Ocean and Energy Management. 700 p. Report No.: OCS EIS/EA BOEM 2017-009. <https://www.boem.gov/oil-gas-energy/2017-2022-gulf-mexico-multisale-environmental-impact-statement#Final-Programmatic-EIS>.

- BOEM. 2019. National Environmental Policy Act documentation for impact-producing factors in the offshore wind cumulative impacts scenario on the north Atlantic Outer Continental Shelf. Sterling (VA): 213 p. Report No.: OCS Study BOEM 2019-036. [accessed 2023 Feb 08].
<https://www.boem.gov/sites/default/files/environmental-stewardship/Environmental-Studies/Renewable-Energy/IPFs-in-the-Offshore-Wind-Cumulative-Impacts-Scenario-on-the-N-OCS.pdf>.
- BOEM. 2021. Project design criteria and best management practices for protected species associated with offshore wind data collection. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs, Atlantic OCS Region. 18 p.
<https://www.boem.gov/sites/default/files/documents//PDCs%20and%20BMPs%20for%20Atlantic%20Data%20Collection%2011222021.pdf>.
- Bolten AB, Crowder LB, Dodd MG, Lauritsen AM, Musick JA, Schroeder BA, Witherington BE. 2019. Recover plan for the northwest Atlantic population of the loggerhead sea turtle (*Caretta caretta*) second revision (2008). Assessment of Progress Toward Recovery. 21 p.
- Borcuk. 2017. Dive distribution and group size parameters for marine species occurring in the U.S. Navy's Atlantic and Hawaii-Southern California training and testing study areas. Newport (RI): US Department of the Navy, Naval Undersea Warfare Center. 114 p.
- Brandner RL. 1983. A sea turtle nesting at Island Beach State Park, Ocean County, New Jersey. Herpetological Review. 14:110.
- Bugoni L, Krause L, Petry MV. 2001. Marine debris and human impacts on sea turtles in southern Brazil. Marine Pollution Bulletin. 42(12):1330-1334. [accessed 2023 Jan].
https://www.academia.edu/15335402/Marine_Debris_and_Human_Impacts_on_Sea_Turtles_in_Southern_Brazil.
- Camacho M, Luzardo OP, Boada LD, Jurado LFL, Medina M, Zumbado M, Orós J. 2013. Potential adverse health effects of persistent organic pollutants on sea turtles: evidence from a cross-sectional study on Cape Verde loggerhead sea turtles. Science of the Total Environment. 458:283-289.
<https://www.semanticscholar.org/paper/Potential-adverse-health-effects-of-persistent-on-a-Camacho-Luzardo/842a0ed990cad4034b890e2f082edcc146446c86>.
doi:10.1016/j.scitotenv.2013.04.043.
- Carpenter J, Merckelbach L, Callies U, Clark S, Gaslikova L, Baschek B. 2016. Potential impacts of offshore wind farms on North Sea stratification. PLOS ONE. 11(8):1-28. doi:10.1371/journal.pone.0160830.
- Causon P, Gill AB. 2018. Linking ecosystem services with epibenthic biodiversity change following installation of offshore wind farms. Environmental Science & Policy. 89(2018):340-347.
<https://www.sciencedirect.com/science/article/pii/S1462901118304556/pdf?md5=b728b2b7a9e61e28e5901a5806772e71&pid=1-s2.0-S1462901118304556-main.pdf>.

- Charrier I, Jeantet L, Maucourt L, Régis S, Lecerf N, Benhalilou A, Chevallier D. 2022. First evidence of underwater vocalizations in green sea turtles *Chelonia mydas*. *Endangered Species Research*. 48:31-41. doi:10.3354/esr.
- Conserve Wildlife Foundation of New Jersey. 2022. New Jersey endangered and threatened species field guide: Atlantic hawksbill turtle. Conserve Wildlife Foundation of New Jersey. [accessed 2022 Nov 28]. <http://www.conservewildlifenj.org/species/fieldguide/>.
- Cooks SL, Forrest TG. 2005. Sounds produced by nesting leatherback sea turtles (*Dermochelys coriacea*). *Herpetological Review*. 36(4):387-390.
- Crocker SE, Fratantonio FD. 2016. Characteristics of sounds emitted during high-resolution marine geophysical surveys. Sterling (VA): US Department of Interior. 266 p. Report No.: BOEM 2016-044, NUWC-NPT Technical Report 12,203.
- Crocker SE, Fratantonio FD, Hart PE, Foster DS, O'Brien TS, Labak S. 2019. Measurement of sounds emitted by certain high-resolution geophysical survey systems. *IEEE Journal of Oceanic Engineering*. 00(00):1-53. doi:10.1109/JOE.2018.2829958.
- DeRuiter SL, Doukara KL. 2012. Loggerhead turtles dive in response to airgun sound exposure. *Endangered Species Research*. 16(1):55-63. doi:10.3354/esr00396.
- Dickerson D, Wolters MS, Theriot C, Slay C. 2004. Dredging impacts on sea turtles in the Southeastern USA: a historical review of protection. *Proceedings of world dredging congress XVII, dredging in a sensitive environment*. 13 p.
- Eckert KL, Wallance BP, Frazier JG, Eckert SA. 2012. Synopsis of the biological data on the leatherback sea turtle (*Dermochelys coriacea*). US Department of the Interior, US Fish and Wildlife Service. 172 p. Report No.: Biological Technical Publication BTP-R4015-2012.
- Ecology and Environment Engineering. 2017. New York state offshore wind master plan marine mammals and sea turtle study final report. New York (NY): New York State Energy Research and Development Authority. 164 p. Report No.: Report 17-25.
- Emeana CJ, Hughes TJ, Dix JK, Gernon TM, Henstock TJ, Thompson CEL, Pilgrim JA. 2016. The thermal regime around buried submarine high-voltage cables. *Geophysical Journal International*. 206(2):1051-1064. doi:10.1093/gji/ggw195.
- Empire Offshore Wind LLC. 2022. Empire wind project (EW1 and EW2), construction and operations plan. US Department of the Interior, Bureau of Ocean Energy Management. 200 p. <https://www.boem.gov/renewable-energy/empire-wind-construction-and-operations-plan>.
- English PA, Mason T, Backstrom JT, Tibbles JB, Mackay AA, Smith MJ, Mitchell T. 2017. Improving efficiencies of National Environmental Policy Act documentation for offshore wind facilities case studies report. US Department of the Interior, Bureau of Ocean Energy Management, Office of

Renewable Energy Programs. 296 p. Report No.: OCS Study BOEM 2017-026.
<https://tethys.pnnl.gov/sites/default/files/publications/English-et-al-2017-BOEM.pdf>.

- Ferrara CR, Vogt RC, Harfush MR, Sousa-Lime RS, Albavera E, Tavera A. 2014a. First evidence of leatherback turtle (*Dermochelys coriacea*) embryos and hatchlings emitting sounds. *Chelonian Conservation and Biology*. 13(1):110-114.
- Ferrara CR, Vogt RC, Giles JC, Kuchling G. 2014b. Chelonian vocal communication. *Biocommunication of Animals*. 261-274. doi:10.1007/978-94-007-7414-8_15.
- Ferrara CR, Vogt RC, Sousa-Lime RS, Lenz A, Morales-Mávil JE. 2019. Sound communication in embryos and hatchlings of *Lepidochelys kempii*. *Chelonian Conservation and Biology: Celebrating 25 years as the World's Turtle and Tortoise Journal*. 18(2):279-283. doi:10.2744/CCB-1386.1.
- Finkbeiner EM, Wallance BP, Moore JE, Lewison RL, Crowder LB, Read AJ. 2011. Cumulative estimates of sea turtle bycatch and mortality in USA fisheries between 1990 and 2007. *Biological Conservation*. 144(11):2719-2727. doi:10.1016/j.biocon.2011.07.033.
- Finneran JJ, Henderson EE, Houser DS, Jenkins K, Kotecki S, Muslow J. 2017. Criteria and thresholds for U.S. Navy acoustic and explosive effects analysis (Phase III). Space and Naval Warfare Systems Center Pacific: 183 p.
https://www.hstteis.com/portals/hstteis/files/reports/Criteria_and_Thresholds_for_U.S._Navy_Acoustic_and_Explosive_Effects_Analysis_June2017.pdf.
- Foley AM, Singel K, Hardy R, Bailey R, Sonderman K, Schaf S. 2008. Distributions, relative abundances, and mortality factors for sea turtles in Florida from 1980 through 2007 as determined References Cited J-65 USDOJ | BOEM from strandings. Jacksonville (FL): Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute, Jacksonville Field Laboratory. 145 p.
<https://georgehbalazs.com/wp-content/uploads/2020/03/Stranding-Report-2007.pdf>.
- Foley AM, Stacy BA, Hardy RF, Shea CP, Minch KE, Schroeder BA. 2019. Characterizing watercraft-related mortality of sea turtles in Florida. *The Journal of Wildlife Management*. 83(5):1057-1072. doi:10.1002/jwmg.21665.
- Gall SC, Thompson CR. 2015. The impact of marine debris on marine life. *Marine Pollution Bulletin*. 92:170-179. [accessed 2022 Jun 10]. <https://doi.org/10.1016/j.marpolbul.2014.12.041>. doi:10.1016/j.marpolbul.2014.12.041.
- Gallaway BJ, Caillouet Jr CW, Plotkin PT, Gazey WJ, Cale JG, Raborn SW. 2013. Kemp's ridley stock assessment project final report. Ocean Springs (MS): Gulf States Marine Fisheries Commission. 291 p.
- Gardline. 2018. Lease area OCS-A 0512 geophysical survey, RV shearwater protected species observer report, Mar-11-2018 to Apr-02-2018. Norwood (NJ): Alpine Ocean Seismic Survey Inc. on behalf of Equinor US Wind, LLC. 117 p.

- Gardline. 2021. Ørsted north-east cluster IHA, 2020-2021 BOEM lease OCS-A 0486, 0487, 0500 and 0517, protected species observer technical report, Sep-25-2020 to Sep-24-2021. Westminster (London): Ørsted US Wind Power LLC. 104 p. Report No.: Report Ref 11456.E01.
- Gardline. 2022. Ocean wind II (OCW02) 2021 IHA geophysical surveys, BOEM leases OCS-A 0498 and OCS-A 0532, protected species observer technical report, May-10-2021 to May-09-2022. Boston (MA): Ørsted US Wind Power LLC. 79 p. Report No.: Report Ref 11721.E02.
- GARFO. 2020. GARFO acoustic tool: Analyzing the effects of pile-driving on ESA-listed species in the greater Atlantic region. Greater Atlantic Regional Fisheries Office.
<https://s3.amazonaws.com/media.fisheries.noaa.gov/2020-09/GARFO-Sect7-PileDriving-AcousticsTool-09142020.xlsx?.Egxagq5Dh4dplwJQsmN1gV0nggnk5qX>.
- Geo-Marine Inc. 2010. Ocean/wind power ecological baseline studies: January 2008-December 2009. Final report. Volume III: Marine mammal and sea turtle studies. Plano (TX): New Jersey Department of Environmental Protections, Office of Science. 218 p.
<https://tethys.pnnl.gov/sites/default/files/publications/Ocean-Wind-Power-Baseline-Volume3.pdf>.
- Gless JM, Salmon M, Wyneken J. 2008. Behavioral responses of juvenile leatherbacks *Dermochelys coriacea* to lights used in the longline fishery. *Endangered Species Research*. 5:239-247.
doi:10.3354/esr00082.
- Greene KJ, Anderson GM, Odell J, Steinberg N. 2010. The northwest Atlantic marine ecoregional assessment: species, habitats and ecosystems. Phase one. Boston (MA): The Nature Conservancy, Eastern US Division. 460 p. [accessed 2022 Nov 28].
<http://www.conservationgateway.org/conservationbygeography/northamerica/unitedstates/edc/documents/namera-phase1-fullreport.pdf>.
- Gregory MR. 2009. Environmental implications of plastic debris in marine settings--entanglement, ingestion, smothering, hangers-on, hitch-hiking and alien invasions. *Philosophical Transactions of the Royal B Society*. 364(1526):2013-2025.
<https://royalsocietypublishing.org/doi/epdf/10.1098/rstb.2008.0265>. doi:10.1098/rstb.2008.0265.
- Halvorsen MB, Zeddies DG, Ellison WT, Chicoine DR, Popper AN. 2012. Effects of mid-frequency active sonar on hearing in fish. *Journal of the Acoustical Society of America*. 131:559-607.
doi:10.1121/1.3664082.
- Halvorsen MB, Zeddies DG, Chicoine DR, Popper A. 2013. Effects of exposure to high intensity sonar on three species of fish. *Journal of the Acoustical Society of America*. 134(2):EL205-2010.
- Hannay D, Zykov M. 2022. Underwater acoustic modeling of detonations of unexploded ordnance (UXO) for Ørsted farm construction, US East coast. Silver Spring (MD): JASCO Applied Sciences Inc. 43 p.

- Hays GC, Christensen A, Fossette S, Schofield G, Talbot J, Mariani P. 2014. Route optimization and solving Zermelo's navigation problem during long distance migration in cross flows. *Ecology Letters*. 17:137-143. doi:10.1111/ele.12219.
- Hazel J, Lawler IR, March H, Robson S. 2007. Vessel speed increases collision risk for the green turtle *Chelonia mydas*. *Endangered Species Research*. 3(2):105-113. [accessed 2022 Sep]. <https://www.int-res.com/articles/esr2007/3/n003p105.pdf>.
- HDR. 2019. Field observations during wind turbine operations at the Block Island wind farm, Rhode Island. Englewood (CO): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 281 p. Report No.: OCS Study BOEM 2019-028.
- Heinis F, de Jong C, Ainslie M, Borst W, Vellinga T. 2013. Monitoring programme for the Maasvlakte 2, Part III- the effects of underwater sound. *Terra et Aqua*. 132:21-32.
- Hoarau L, Ainley L, Jean C, Ciccione S. 2014. Ingestion and defecation of marine debris by loggerhead sea turtles, *Caretta caretta*, from by-catches in the South-West Indian Ocean. *Marine Pollution Bulletin*. 84(1-2):90-96. http://seaturtle.org/library/HoarauL_2014_MarPollBull.pdf. doi:10.1016/j.marpolbul.2014.05.031.
- Holst M, Richardson WJ, Koski WR, Smultea MA, Haley B, Fitzgerald MW, Rawson M. 2006. Effects of large and small-source seismic surveys on marine mammals and sea turtles. In: EOS, Transactions of the American Geophysical Union 87, Joint Assembly Supplement; 2006 May 23-26; Baltimore (MD).
- Hunt K, Innis C, Kennedy A, McNally K, Davis D, Burgess E, Merigo C. 2016. Assessment of ground transportation stress in juvenile Kemp's ridley sea turtles (*Lepidochelys kempii*). *Conservation Physiology*. 4. doi:10.1093/conphys/cov071.
- Hutchison ZL, Bartley ML, Degraer S, English P, Khan A, Livemore J, Rumes B, King J. 2020. Offshore wind energy and benthic habitat changes: Lessons from Block Island Wind Farm. *Oceanography*. 33(44):58-69.
- Hutchison LZ, Gill A, Sigra P, He H, King J. 2020. Anthropogenic electromagnetic fields (EMF) influence the behaviour of bottom-dwelling marine species. *Scientific Reports* 10(1):4219. [IMO] International Maritime Organization. 2019. Pollution prevention. London: International Maritime Organization. [accessed 2022 Dec 21]. <https://www.imo.org/en/OurWork/Environment/Pages/Pollution-Prevention.aspx>.
- Jansen E, de Jong C. 2016. Underwater noise measurements in the North Sea in and near the Princess Amalia Wind Farm in operation.
- Janßen H, Augustin CB, Hinrichsen HH, Kube S. 2013. Impact of secondary hard substrate on the distribution and abundance of *Aurelia aurita* in the western Baltic Sea. *Marine Pollution Bulletin*. 75:224-234.

- Johnson A. 2018. White paper on the effects of increased turbidity and suspended sediment on ESA listed species from projects occurring in the greater Atlantic region. Greater Atlantic Region Policy Series. 18(2). www.greateratlantic.fisheries.noaa.gov/policyseries/. 106p.
- Ketten DR. 2004. Marine mammal auditory systems: A summary of audiometric and anatomical data and implications for underwater acoustic impacts. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Fisheries Science Center. 97 p. Report No.: NOAA-TN-NMFS-SWFSC-256.
- Ketten DR, Merigo C, Chiddick H, Krum H, Melvin EF. 1999. Acoustic fatheads: Parallel evolution of underwater sound reception mechanisms in dolphins, turtles, and sea birds. *Journal of Acoustical Society of America*. 105(2):1110-1110. doi:10.1121/1.425191.
- Kraus SD, Leiter S, Stone K, Wikgren B, Mayo C, Hughes P, Kenney DR, Clark CW, Rice AN, Estabrooke B, Tielens J. 2016. Northeast large pelagic survey collaborative aerial and acoustic surveys for large whales and sea turtles. Final report. US Department of the Interior, Bureau of Ocean Energy Management. Sterling (VA). 118p. Report No.: OCS Study BOEM 2016-054
- Küsel ET, Weirathmueller MJ, Zammit KE, Welch SJ, Limpert KE, Zeddies DG. 2022a. Underwater acoustic and exposure modeling. JASCO Applied Sciences for Ocean Wind LLC. 79 p. Report No.: Document 02109, Version 1.0 DRAFT.
- Küsel ET, Weirathmueller MJ, Zammit KE, Ozanich ECR, Kanu CO, Dufault SG, Reeve ML, Limpert KE, Clapsaddle ME, Zeddies DG. 2022b. Empire wind acoustic and exposure modeling. JASCO Applied Sciences for Equinor US. 616 p. Report No.: Document 02585, Version 4.2.
- Lavender AL, Bartol SM, Bartol IK. 2012. Hearing capabilities of loggerhead sea turtles (*Caretta caretta*) throughout ontogeny. In: *The effects of noise on aquatic life*. New York (NY): Springer. p. 89-92.
- Lavender AL, Bartol SM, Bartol IK. 2014. Ontogenetic Investigation of underwater hearing capabilities in loggerhead sea turtles (*Caretta caretta*) using a dual testing approach. *The Journal of Experimental Biology*. 27(14):2580-2589. doi:10.1242/jeb.096651.
- Lenhardt M. 1994. Seismic and very low frequency sound induced behaviors in captive loggerhead marine turtles (*Caretta caretta*). In: *Fourteenth Annual Symposium on Sea Turtle Biology and Conservation* NOAA Technical Memorandum NMFS-SEFSC-351. p 238-241.
- Lenhardt M. 2002. Sea turtle auditory behavior. *Journal of Acoustical Society of America*. 112(5):2314-2314. doi:10.1121/1.1526585.
- Limpus CJ. 2006. Marine turtle conservation and Gorgon Gas Development, Barrow Island, Western Australia. Brisbane (Australia): Environmental Protection Authority, Western Australia & Department of Conservation and Land Management, Western Australia. 22 p.

- Lindeboom HJ, Kouwenhoven HJ, Bergman MJN, Bouma S, Brasseur S, Daan R, Fijn RC, de Haan D, Dirksen S, van Hal R, et al. 2011. Short-term ecological effects of an offshore wind farm in the Dutch coastal zone; a compilation. *Environmental Research Letters*. 6(3):035101. doi:10.1088/1748-9326/6/3/035101.
- Lucke K, Lepper PA, Hoeve B, Everaarts E, van Elk N, Siebert U. 2007. Perception of low-frequency acoustic signals by a harbour porpoise (*Phocoena phocoena*) in the presence of simulated offshore wind turbine noise. *Aquatic Mammals*. 33(1):55-68. doi:10.1578/am.33.1.2007.55.
- Luschi P, Benhamou S, Girard C, Ciccione S, Roos D, Sudre J, Benvenuti S. 2007. Marine turtles use geomagnetic cues during open sea homing. *Current Biology*. 17:126-133. [accessed 2022 Apr 01]. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.572.8884&rep=rep1&type=pdf>. doi:10.1016/j.cub.2006.11.062.
- Lutcavage M, Plotkin P, Witherington B, Lutz P. 1997. Human impact on sea turtle survival. In: Lutz P, Musick J, editors. *The Biology of Sea Turtles*. CRC Press. p. 1-24.
- Mannes, L. M., Wahlberg, M., & Christensen-Dalsgaard, J. 2023. Temporary threshold shift in turtles. In A. N. Popper, J. Sisneros, A. D. Hawkins, & F. Thomsen (Eds.), *The Effects of Noise on Aquatic Life: Principles and Practical Considerations* (pp. 1-8). Springer. https://doi.org/10.1007/978-3-031-10417-6_101-1.
- Marine Ventures International Inc. 2022. Protected species observer technical report. MMT Sweden AB submitted to Avangrid. 78 p. Report No.: Kitty Hawk North BOEM lease OCS-A 0508 (M/V Deep Helder).
- Marn N, Jusup M, Legović T, Kooijman SALM, Klanjšček T. 2017. Environmental effects on growth, reproduction, and life history traits of loggerhead sea turtles. *Ecological Modelling*. 360:164-178.
- Martin KJ, Alessi SC, Gaspard JC, Tucker AD, Bauer GB, Mann DA. 2012. Underwater hearing in the loggerhead turtle (*Caretta caretta*): A comparison of behavioral and auditory evoked potential audiograms. *Journal of Experimental Biology*. 215(17):3001-3009.
- Martin RE, Earnest RG. 2000. Physical and ecological factors influencing sea turtle entrainment at the St. Lucie Nuclear Plant: 1976-1998. Florida Power & Light Company by Ecological Associates Inc. 357 p.
- McCauley RD, Fewtrell J, Duncan AJ, Jenner C, Jenner MN, Penrose JD, Prince RIT, Adhitya A, Murdoch J, McCabe K. 2000. Marine seismic surveys: A study of environmental implications. *The APPEA Journal*. 40:692-708.
- McKenna LN, Paladino FV, Santidrián Tomillo P, Robinson NJ. 2019. Do sea turtles vocalize to synchronize hatching or nest emergence? *Copeia*. 107(1):120-123. doi:10.1643/CE-18-069.
- Michel JA, Bejarano C, Peterson CH, Voss C. 2013. Review of biological and biophysical impacts from dredging and handling of offshore sand. Herndon (VA): US Department of the Interior, Bureau of Ocean Energy Management. 258 p. Report No.: OCS Study BOEM 2013-0119.

- Middleton P, Barnhart B. 2022. Supporting National Environmental Policy Act documentation for offshore wind energy development related to high voltage direct current cooling systems. Washington (DC): US Department of the Interior, Bureau of Ocean Energy Management. 13 p. Report No.: OCS Study BOEM 2022-023.
- Miller JH, Potty GR. 2017. Measurements of underwater sound radiated from an offshore wind turbine. *Journal of Acoustical Society of America*. 142(4):2699. doi:10.1121/1.5014843.
- Milton SL, Lutz PL. 2003. Physiological and genetic responses to environmental stress. In: *The Biology of Sea Turtles*, Vol II. CRC Press LLC. p. 163-198.
- Mitchelmore CL, Bishop CA, Collier TK. 2017. Toxicological estimation of mortality of oceanic sea turtles oiled during the Deepwater Horizon oil spill. *Endangered Species Research*. 33:39-50. [accessed 2023 Jan]. <https://www.int-res.com/articles/esr2017/33/n033p039.pdf>. doi:10.3354/esr00758.
- Moein SE, Musick JA, Keinath JA, Barnard DE, Lenhardt M, George R. 1994. Evaluation of seismic sources for repelling sea turtles from hopper dredges. Gloucester Point (VA): US Army Corps of Engineers Waterways Experimental Station by the Virginia Institute of Marine Science, College of William and Mary. 43 p.
- Monteiro CC, Carmo HM, Santos AJ, Corso G, Sousa-Lime RS. 2019. First record of bioacoustic emission in embryos and hatchlings of hawksbill sea turtles (*Eretmochelys imbricata*). *Chelonian Conservation and Biology: Celebrating 25 years as the World's Turtle and Tortoise Journal*. 18(2):273-278. doi:10.2744/CCB-1382.1.
- [NEFSC] Northeast Fisheries Science Center and [SEFSC] Southeast Fisheries Science Center. 2011. Preliminary summer 2010 regional abundance estimate of loggerhead turtles (*Caretta caretta*) in northwestern Atlantic Ocean continental shelf waters. US Department of Commerce, National Oceanic and Atmospheric Administration, Northeast Fisheries Science Center. Report No.: Reference Document 11-03.
- Nelms SE, Piniak WED, Weir CR, Godley BJ. 2016. Seismic surveys and marine turtles: An underestimated global threat? *Biological Conservation*. 193:49-65. doi:10.1016/j.biocon.2015.10.020.
- NFS and USGS. 2011. Final programmatic environmental impact statement/overseas environmental impact statement of marine seismic research funded by the National Science Foundation or conducted by the US Geological Survey. National Science Foundation and US Geological Survey. 514 p. https://www.nsf.gov/geo/oce/envcomp/usgs-nsf-marine-seismic-research/nsf-usgs-final-eis-oeis_3june2011.pdf.
- NMFS. 2015. National Marine Fisheries Service, Endangered Species Act Section 7 consultation, biological opinion for Virginia offshore wind technology advancement project. US. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office. 250 p. Report No.: NER-2015-12128.

- NMFS. 2016. Biological opinion for the Virginia offshore wind technology advancement project. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office. 256 p. Report No.: NER-2015-12128, GARFO-2015-00030.
- NMFS. 2020. 2020 South Atlantic regional biological opinion for dredging and material placement activities in the southeast United States. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southeast Regional Office. 652 p. Report No.: SERO-2019-03111. [accessed 2022 Nov 16]. https://media.fisheries.noaa.gov/dam-migration/sarbo_acoustic_revision_6-2020-opinion_final.pdf.
- NMFS. 2021a. Section 7 species presence table: Sea turtles in the greater Atlantic region. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office. [accessed 2022 Nov 28]. <https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-species-presence-table-sea-turtles-greater>.
- NMFS. 2021b. Cold-stunning and sea turtles. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Protected Resources. [accessed 2022 Nov 28]. <https://www.fisheries.noaa.gov/national/marine-life-distress/cold-stunning-and-sea-turtles-frequently-asked-questions>.
- NMFS. 2022a. Sea turtle stranding and salvage network. US Department of Commerce, National Oceanic and Atmospheric Administration. [accessed 2022 Nov 28]. <https://connect.fisheries.noaa.gov/content/cb3f4647-9e4f-4f3d-9edf-e7a87a1feef6/>.
- NMFS. 2022b. Green turtle (*Chelonia mydas*) species overview. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2022 Nov 27]. <https://www.fisheries.noaa.gov/species/green-turtle>.
- NMFS. 2022c. Kemp's ridley turtle (*Lepidochelys kempii*) species overview. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2022 Nov 27]. <https://www.fisheries.noaa.gov/species/kemps-ridley-turtle>.
- NMFS. 2022d. Leatherback turtle (*Dermochelys coriacea*) Species Overview. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2022 Nov 27]. <https://www.fisheries.noaa.gov/species/leatherback-turtle>.
- NMFS. 2022e. Loggerhead turtle. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. <https://www.fisheries.noaa.gov/species/loggerhead-turtle#overview>.
- NMFS. 2023. National Marine Fisheries Service: Summary of Endangered Species Act acoustic thresholds (marine mammals, fishes, and sea turtles). US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2023 Mar 03].

https://www.fisheries.noaa.gov/s3/2023-02/ESA%20all%20species%20threshold%20summary_508_OPR1.pdf.

NMFS and USFWS. 1991. Recovery plan for the U.S. population of the Atlantic green turtle. Washington (DC): US Department of Commerce, National Oceanographic and Atmospheric Administration, National Marine Fisheries Service, and US Department of the Interior, US Fish and Wildlife Service. 59 p. [accessed 2022 Nov 27]. <https://repository.library.noaa.gov/view/noaa/15995>.

NMFS and USFWS. 1992. Recovery plan for leatherback turtles in the U.S. Caribbean, Atlantic, and Gulf of Mexico. Washington (DC): US Department of Commerce, National Oceanographic and Atmospheric Administration, National Marine Fisheries Service, and US Department of the Interior, US Fish and Wildlife Service. 69 p.

NMFS and USFWS. 2007. Green sea turtle (*Chelonia mydas*) 5-year review: Summary and evaluation. Washington (DC): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service and US Department of the Interior, Fish and Wildlife Service. 105 p. <https://repository.library.noaa.gov/view/noaa/17039>.

NMFS and USFWS. 2008. Recovery plan for the northwest Atlantic population of the loggerhead sea turtle (*Caretta caretta*). Washington (DC): US Department of Commerce, National Oceanographic and Atmospheric Administration, National Marine Fisheries Service, US Department of the Interior, US Fish and Wildlife Service. 325 p.

NMFS and USFWS. 2015. Kemp's ridley sea turtle (*Lepidochelys kempii*) 5-Year review: Summary and evaluation. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service Office of Protected Resources and US Department of the Interior, US Fish and Wildlife Service, Southwest Region. 63 p.

NMFS and USFWS. 2019. Recovery plan for the northwest Atlantic population of the loggerhead sea turtles (*Caretta caretta*). Second revision (2008). Assessment of progress toward recovery. Washington (DC): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service and US Department of the Interior, US Fish and Wildlife Service. 21 p. https://media.fisheries.noaa.gov/dam-migration/final_nw_atl_cc_recovery_team_progress_review_report_508.pdf.

NMFS and USFWS. 2020. Endangered Species Act status review of the leatherback turtle (*Dermochelys coriacea*) 2020. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service and US Department of the Interior, US Fish and Wildlife Service. 396 p.

NOAA. 2020. National Marine Fisheries Service Endangered Species Act Section 7 consultation biological opinion. Construction, operation, maintenance, and decommissioning of the vineyard wind offshore energy project (lease OCS-A 0501). US Department of Commerce, National Oceanic and Atmospheric

Administration, National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office. 326 p. Report No.: GARFO-2019-00343.

Normandeau Associates Inc. 2021a. Digital aerial baseline survey of marine wildlife in support of offshore wind energy. Spatial and temporal marine wildlife distributions in the New York offshore planning area, summer 2016 - Spring 2019. Final report volume 1: Methods, general results, limitations, and discussion. New York State Energy Research and Development Authority. 61 p. Report No.: NYSERDA Contract 95764. NYSERDA Report 21-07a.

Normandeau Associates Inc. 2021b. Digital aerial baseline survey of marine wildlife in support of offshore wind energy. Spatial and temporal marine wildlife distributions in the New York offshore planning area, summer 2016 - Spring 2019. Final report volume 3: Results (turtles). New York State Energy Research and Development Authority. 40 p. Report No.: NYSERDA Contract 95764. NYSERDA Report 21-07c.

Normandeau Associates Inc and Exponent Inc. 2011. Effects of EMFs from undersea power cables on elasmobranchs and other marine species. Final report. Camarillo (CA): US Department of the Interior, Bureau of Ocean Energy Management, Regulation and Enforcement, Pacific OCS Region. 426 p. Report No.: OCS Study BOEM 2011-09. <https://espis.boem.gov/final%20reports/5115.pdf>.

[OBIS] Ocean Biodiversity Information System. 2022. Ocean Biodiversity Information System. Ocean Biodiversity Information System. [accessed 2022 Nov 28]. <https://obis.org/>.

Orr T, Herz S, Oakley D. 2013. Evaluation of lighting schemes for offshore wind facilities and impacts to local environments. Herndon (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 429 p. Report No.: OCS Study BOEM 2013-0116.

Palka DL, Chavez-Rosales S, Josephson E, Cholewiak D, Haas HL, Garrison L, Jones M, Sigourney D, Waring G, Jech M, et al. 2017. Atlantic marine assessment program for protected species: 2010-2014. Washington (DC): US Department of the Interior, Bureau of Ocean Energy Management. 230 p. Report No.: OCS Study BOEM 2017-071. <https://espis.boem.gov/final%20reports/5638.pdf>.

Palka D, Aichinger DL, Broughton E, Chavez-Rosales S, Cholewiak D, Davis G, DeAngelis A, Garrison L, Haas H, Hatch J, et al. 2021. Atlantic marine assessment program for protected species: FY15-FY19. Washington (DC): US Department of the Interior, Bureau of Ocean Energy Management. 330 p. Report No.: OCS Study BOEM 2021-051. https://espis.boem.gov/Final%20reports/BOEM_2021-051.pdf.

Papale E, Prakash S, Singh S, Batibasaga A, Buscaino G, Piovano S. 2020. Soundscape of green turtle foraging habitats in Fiji, South Pacific. PLOS One. 15(8):e0236628.

Passow U, Overton EB. 2021. The complexity of spills: The fate of the Deepwater Horizon oil. Annual Review of Marine Science. 13:15.11-15.28.

- Patrício AR, Varela MR, Barbosa C, Broderick AC, Cartry P, Hawkes LA, Pegalla A, Godley BJ. 2019. Climate change resilience of a globally important sea turtle nesting population. *Global Change Biology*. 25(2):522-535.
- Pezy JP, Raoux A, Dauvin JC. 2018. An ecosystem approach for studying the impact of offshore wind farms: A French case study. *ICES Journal of Marine Science*. 77(3):1238-1246.
- Piniak WED. 2012. Acoustic ecology of sea turtles: Implications for conservation [doctoral dissertation]. Durham (NC): Duke University.
- Piniak WED, Eckert SA, Harms CA, Stringer EM. 2012. Underwater hearing sensitivity of the leatherback sea turtle (*Dermochelys coriacea*): Assessing the potential effect of anthropogenic noise. Herndon (VA): US Department of the Interior, Bureau of Ocean Energy Management. 35 p. Report No.: OCS Study BOEM 2012-01156.
- Piniak WED, Mann DA, Harms CA, Jones TT, Eckert SA. 2016. Hearing in the juvenile green sea turtle (*Chelonia mydas*): A comparison of underwater and aerial hearing using auditory evoked potentials. *PLOS One*. 11(10):e0159711.
- Popper AN, Hawkins AD, Fay RR, Mann DA, Bartol S, Carlson TJ, Coombs S, Ellison WT, Gentry RL, Halvorsen MB, et al. 2014. Sound exposure guidelines for fishes and sea turtles: A technical report prepared by ANSI-accredited standards committee S3/SC1 and registered with ANSI. Melville (NY): Acoustical Society of America. 87 p. Report No.: ASA S3/SC1.4 TR-2014. https://www.researchgate.net/publication/279347068_Sound_Exposure_Guidelines/link/5596735d08ae99aa62c777b9/download.
- Ramirez A, Kot CY, Piatkowski D. 2017. Review of sea turtle entrainment risk by trailing suction hopper dredges in the US Atlantic and Gulf of Mexico and the development of the ASTER decision support tool. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. 275 p. Report No.: OCS Study BOEM 2017-084.
- Raoux A, Tecchio S, Pezy J, Lassalle G, Degraer S, Wilhelmsson S, Cachera M, Ernande B, Le Guen C, Haraldsson M, et al. 2017. Benthic and fish aggregation inside an offshore wind farm: Which effects on the trophic web functioning? *Ecological Indicators*. 72:33-46. doi:10.1016/j.ecolind.2016.07.037.
- Reese A, Stolen M, Findlay CR, Smith J, Varghese H, Levenson J. 2022. Potential lifecycle impacts of renewable energy construction and operations on endangered sea turtles with a focus on the northwest Atlantic. Sterling (VA): U.S. Department of the Interior, Bureau of Ocean Energy Management. 129 p. Report No.: OCS Study BOEM 2023-073. Contract No.: 140M0121F0014. URL: https://espis.boem.gov/final%20reports/BOEM_2023-073.pdf.
- Ridgway SH, Wever EG, McCormick JG, Palin J, Anderson JH. 1969. Hearing in the giant sea turtle, *Chelonia mydas*. *Proceedings of the National Academy of Sciences US*. 64(2):884-890.

- RPS. 2019. Protected species observer report, Equinor wind, US, LLC, BOEM lease no.: OCS-A 0415, New York, U.S.A., 19 April 2019 to 22 July 2019. Houston (TX): Alpine Ocean Seismic Survey Inc. on behalf of Equinor Wind, US, LLC. 73 p.
- RPS. 2020. Atlantic shores offshore wind geophysical survey protected species observer report, BOEM Lease No.: OCS-A-0499, New Jersey, U.S.A. Boston (MA): Fugro on behalf of Atlantic Shores Offshore Wind. 75 p.
- RPS. 2021. Dominion energy geophysical survey 2020-2021 IHA protected species observer report. Dominion Energy by RPS. 802 p. [accessed 2021 Nov 18].
- Ruppel CD, Weber TC, Staaterman ER, Labak SJ, Hart PE. 2022. Categorizing active marine acoustic sources based on their potential to affect marine animals. *Journal of Marine Science and Engineering*. 10(9). doi:10.3390/jmse10091278.
- Salas, A.K., Capuano, A.M., Harms, C.A., Piniak, W.E. and Mooney, T.A. 2023. Temporary noise-induced underwater hearing loss in an aquatic turtle (*Trachemys scripta elegans*). *The Journal of the Acoustical Society of America*, 154(2), pp.1003-1017. <https://doi.org/10.1121/10.0020588>.
- Samuel Y, Morreale SJ, Clark CW, Greene CH, Richmond ME. 2005. Underwater, low-frequency noise in a coastal sea turtle habitat. *Journal of the Acoustical Society of America*. 117(3):1465-1472. https://www.researchgate.net/publication/7929208_Underwater_low-frequency_noise_in_a_coastal_sea_turtle_habitat.
- Schultze L, Merckelbach L, Horstmann J, Raasch S, Carpenter J. 2020. Increased mixing and turbulence in the wake of offshore wind farm foundations. *Journal of Geophysical Research: Oceans*. 125(2020):1-4. doi:10.1029/2019JC015858.
- Schuyler QA, Wilcox C, Townsend K, Hardesty BD, Marshall NJ. 2014. Mistaken identify? Visual similarities of marine debris to natural prey items of sea turtles. *BMC Ecology*. 14(14). <https://bmcecol.biomedcentral.com/articles/10.1186/1472-6785-14-14>. doi:10.1186/1472-6785-14-14.
- Seminoff JA, Allen CD, Balaz GH, Dutton PH, Eguchi T, Haas HL, Hargrove SA, Jensen MP, Klemm DL, Lauritsen AM, et al. 2015. Status review of the green turtle (*Chelonia mydas*) under the U.S. endangered species act. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 517 p. Report No.: NOAA Technical Memorandum, NOAA-NMFS-SWFSC-539.
- Shigenaka G, Stacy B, Wallace B. 2021. Oil and sea turtles: Biology, planning, and response. US Department of Commerce, National Oceanic and Atmospheric Administration, Office of Restoration and Response Publication. 27 p. <https://repository.library.noaa.gov/view/noaa/23022>.

- Slavik K, Lemmen C, Zhang W, Kerimoglu O, Klingbeil K, Wirtz WK. 2019. The large-scale impact of offshore wind farm structures on pelagic primary productivity in the southern North Sea. *Hydrobiologia*. 845(1):35-53.
- Smultea Environmental Sciences. 2020. Protected species observer technical report for Ørsted New England IHA, BOEM Lease Areas OCS-A 0486; OCS-A 0487, and OCS-A 0500; 2019 - 2020. Ørsted. 124 p.
- Snoek R, de Swart R, Didderen K, Lengkeek W, Teunis M. 2016. Potential effects of electromagnetic fields in the Dutch North Sea. Final report. Rijkswaterstaat Water, Verkeer en Leefomgeving. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiVnMPp4of6AhVbFmIAHYTiDpUQFnoECAMQAw&url=https%3A%2F%2Fwww.noordzeeloket.nl%2Fpublish%2Fpages%2F122296%2Fpotential_effects_of_electromagnetic_fields_in_the_dutch_north_sea_-_phase_1_desk_study_rws_wvl.pdf&usg=AOvVaw1_5LQ7sbKGZXAsivHdBB4z.
- Snoek R, Böhm C, Didderen K, Lengkeek W, Driessen FMF, Maathuis MAM. 2020. Potential effects of electromagnetic fields in the Dutch North Sea Phase 2 – Pilot field Study. Waterproof Marine Consultancy & Services BV and Bureau Waardenburg. Report No.: BV.WP2018_1130_R3r3. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiDoleT9If6AhU1j2oFHa-dAZAQFnoECAUQAQ&url=https%3A%2F%2Fwww.noordzeeloket.nl%2Fpublish%2Fpages%2F173407%2Fpotential_effects_of_electromagnetic_fields_in_the_dutch_north_sea_-_phase_12pilot_study_rws_wvl.pdf&usg=AOvVaw3ITx4IkLsEK62eGdy20Sfx.
- Southall BL, Bowles AE, Ellison WT, Finneran JJ, Gentry RL, Greene Jr CR, Kastak D, Ketten DR, Miller JH, Natchigall PE, et al. 2007. Marine mammal noise exposure criteria: Initial scientific recommendations. *Aquatic Mammals*. 33(4):411-521. doi:10.1578/AM.33.4.2007.411.
- Southall B, Ellison W, Clark C, Tollit D, Amaral J. 2021. Marine mammal risk assessment for New England Offshore Windfarm construction and operational scenarios. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. 104 p. Report No.: OCS Study BOEM 2021-080.
- Stöber U, Thomsen F. 2021. How could operational underwater sound from future offshore wind turbines impact marine life? *Journal of the Acoustical Society of America*. 149(3):1791. <https://www.ncbi.nlm.nih.gov/pubmed/33765823>. doi:10.1121/10.0003760.
- Taormina B, Bald J, Want A, Thouzeau G, Lejart M, Desroy N, Carlier A. 2018. A review of potential impacts of submarine power cables on the marine environment: Knowledge gaps, recommendations and future directions. *Renewable and Sustainable Energy Reviews*. 96:380-391. https://www.researchgate.net/publication/327079114_A_review_of_potential_impacts_of_submarine_power_cables_on_the_marine_environment_Knowledge_gaps_recommendations_and_future_directions. doi:10.1016/j.rser.2018.07.026. hal-02405630.

- Tetra Tech Inc. 2022. Appendix Z: underwater acoustic assessment coastal Virginia offshore wind commercial project. Dominion Energy Services Inc. [accessed 2022 Jul 05].
- Tetra Tech Inc. and LGL. 2020. Final comprehensive report years 1-3 for New York bight whale monitoring aerial surveys March 2017 - February 2020. East Setauket (NY): New York State Department of Environmental Conservation, Division of Marine Resources. 136 p. Report No.: Contract No. C009926.
- Thomás J, Guitart R, Mateo R, Raga JA. 2020. Marine debris ingestion in loggerhead turtles, *Caretta caretta*, from the Western Mediterranean. *Marine Pollution Bulletin*. 44:211-216.
- Thomsen F, Stober U. 2022. Operational underwater sound from future offshore wind turbines can affect the behavior of marine mammals. *Journal of the Acoustical Society of America*. 151(4):A239. doi:10.1121/10.0011186.
- Thomsen F, Gill AB, Kosecka M, Andersson M, Andre M, Degraer S, Folegot J, Gabriel J, Judd A, Neumann T, et al. 2015. *MarVEN — Environmental impacts of noise, vibrations and electromagnetic emissions from marine renewable energy*. Luxembourg: Publications Office of the European Union. 82 p. <https://tethys.pnnl.gov/publications/marven-environmental-impacts-noise-vibrations-electromagnetic-emissions-marine>.
- Tougaard J, Henriksen OD, Miller LA. 2009. Underwater noise from three types of offshore wind turbines: Estimation of impact zones for harbor porpoises and harbor seals. *Journal of Acoustical Society of America*. 125(6):8.
- Tougaard J, Hermannsen L, Madsen PT. 2020. How loud is the underwater noise from operating offshore wind turbines? *Journal of the Acoustical Society of America*. 148(5):2885. <https://www.ncbi.nlm.nih.gov/pubmed/33261376>. doi:10.1121/10.0002453.
- US Department of the Navy. 2018. Final environmental statement/overseas environmental impact statement Atlantic fleet training and testing, volume 1. US Department of Commerce, Nation Oceanic and Atmospheric Administration, National Marine Fisheries Service by US Department of the Navy, Naval Facilities Engineering Command Atlantic. 1020 p.
- USACE. 2020. South Atlantic regional biological opinion for dredging and material placement activities in the southeast United States. US Army Corps of Engineers. 646 p. https://media.fisheries.noaa.gov/dam-migration/sarbo_acoustic_revision_6-2020-opinion_final.pdf.
- USFWS. 2020. Loggerhead sea turtle fact sheet (*Caretta caretta*). US Department of the Interior, US Fish and Wildlife Service. [accessed 2022 Nov 27]. <https://www.fws.gov/southeast/pdf/fact-sheet/loggerhead-sea-turtle-english.pdf>.
- Varela MR, Patrício AR, Anderson K, Broderick AC, DeBell L, Hawkes LA, Tilley D, Snape RT, Westoby MJ, Godley BJ. 2019. Assessing climate change associated sea-level rise impacts on sea turtle nesting

beaches using drones, photogrammetry and a novel GPS system. *Global Change Biology*. 25(2):753-762.

Vargo S, Lutz P, Odell D, Van Vleet E, Bossart G. 1986. Effects on oil on marine turtles. Final report prepared for MMS. [accessed 2023 Jan].
http://www.seaturtle.org/PDF/VargoS_1986a_MMSTechReport.pdf.

Vegter AC, Barletta M, Beck C, Borrero J, Burton H, Campbell ML, Costa MF, Eriksen M, Eriksson C, Estrades A, et al. 2014. Global research priorities to mitigate plastic pollution impacts on marine wildlife. *Endangered Species Research*. 25(3):225-247. https://www.int-res.com/articles/esr_oa/n025p225.pdf.

Villalba-Guerra MR. 2017. Stress response of loggerhead sea turtles (*Caretta caretta*) entrained in the St. Lucie power plant, Hutchinson, Florida [thesis]. Hammond (LA): Southeastern Louisiana University.

Wang J, Zou X, Yu W, Zhang D, Wang T. 2019. Effects of established offshore wind farms on energy flow of coastal ecosystems: A case study of the Rudong Offshore Wind Farms in China. *Ocean & Coastal Management*. 171:111-118.

Warchol ME. 2011. Sensory regeneration in the vertebrate inner ear: Differences at the levels of cells and species. *Hearing Research*. 273(1-2):72-79. doi:10.1016/j.heares.2010.05.004.

Watwood S, Buonantony D. 2012. Dive distribution and group size parameters for marine species occurring in Navy training and testing areas in the North Atlantic and North Pacific Oceans. Newport (RI): Naval Undersea Warfare Center Division. 234 p.

Weir CR. 2007. Observations of marine turtles in relation to seismic airgun sound off Angola. *Marine Turtle Newsletter*. 116:17-20.

Wilcox JR. 1985. Sea turtle intake entrapment studies. Special report to section 4.2.2 of the St. Lucie unit 2 environmental protection plan, April 9, 1985. Florida Power & Light. 359 p.
<https://www.nrc.gov/docs/ML1721/ML17215A861.pdf>.

Yun D. 2018. Rarest Sea Turtle Nests on Queens Beach. National Parks Service. [accessed 2022 Nov 27].
<https://www.nps.gov/gate/learn/news/rarest-sea-turtle-nests-on-queens-beach.htm>.

K.4.11 Section 3.5.8, Wetlands

Atlantic Shores. 2022. Atlantic Shores offshore wind construction and operations plan, lease area OCS-A 0499. US Department of the Interior, Bureau of Ocean Energy Management. 277 p. Report No.: OCS-A- 0499. [accessed 2023 Jan 01]. <https://www.boem.gov/renewable-energy/state-activities/atlantic-shores-offshore-wind-construction-and-operations-plan>.

Atlantic Shores Offshore Wind. 2024. Atlantic Shores Offshore Wind OCS-A 0549 Construction and Operations Plan. Volume II: Affected Environment. 871 p. [accessed 2024 May 05].

https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/new-jersey/Atlantic%20Shores%20North_OCS-A%200549_COP%20Volume%20II_03-01-2024.pdf.

BOEM. 2021. South Fork wind farm and south Fork export cable project final environmental impact statement. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 1317 p. Report No.: OCS EIS/EA, BOEM 2020-057. [accessed 2022 Dec]. <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/SFWF%20FEIS.pdf>.

BOEM. 2022. Ocean Wind 1 offshore wind farm draft environmental impact statement. [accessed 2022 Dec]. <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/OceanWind1-DEIS-Vol1and2.pdf>.

Cornell University Geospatial Information Repository. 2013. Index of New York State regulatory freshwater wetlands. [accessed 2022 Dec 09]. <https://cugir.library.cornell.edu/catalog/cugir-008187>.

NJDEP. 2021. Wetlands of New Jersey GIS. [accessed 2022 Dec]. <https://gisdata-njdep.opendata.arcgis.com/datasets/wetlands-of-new-jersey-from-land-use-land-cover-2012-update/explore?location=40.143284%2C-74.755600%2C8.71>.

NJDEP. 2023. Landscape 3.3 Data for Vernal Habitats of New Jersey. [accessed 2024 June]. https://gisdata-njdep.opendata.arcgis.com/datasets/e31e69d4088b4f23b8da5ea21d2f85c5_84/explore

NYSDEC. 2005. Tidal wetlands – NYC and Long Island. [accessed 2022 Dec 09]. <http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1139>.

USEPA. 2016a. What climate change means for New Jersey. US Environmental Protection Agency. 2 p. Report No.: EPA 430-F-16-032. [accessed 2023 Mar 03]. <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-nj.pdf>.

USEPA. 2016b. What climate change means for New York. US Environmental Protection Agency. 2 p. Report No.: EPA 430-F-16-034. [accessed 2023 Mar 03]. <https://19january2021snapshot.epa.gov/sites/static/files/2016-09/documents/climate-change-ny.pdf>.

K.4.12 Section 3.6.1, Commercial Fisheries for For-Hire Recreational Fishing

[ASMFC] Atlantic States Marine Fisheries Commission. 2022. Program overview. Arlington (VA): Atlantic States Marine Fisheries Commission. <http://www.asmfc.org/fisheries-management/program-overview>.

- Carpenter J, Merckelbach L, Callies U, Clark S, Gaslikova L, Baschek B. 2016. Potential impacts of offshore wind farms on North Sea stratification. *PLOS ONE*. 11(8):1-28. doi:10.1371/journal.pone.0160830.
- Chen C. 2021. Assessing Potential Impacts of Offshore Wind Facilities on Regional Sea Scallop Laval and Early Juvenile Transports. Report No. NOAA Grant Number: NA19NMF450023. 11 p.
- Claissé JT, Pondella II DJ, Milton L, Zahn AL, Williams CM, Williams PJ, Bull AS. 2014. Oil platforms off California are amongst the most productive marine fish habitats globally. *Proceedings of the National Academy of Sciences of the United States of America*. 111(43):14542-15467. [accessed 2023 Jan]. <https://doi.org/10.1073/pnas.1411477111>. doi:10.1073/pnas.1411477111.
- Debusschere E, Hostens K, Adriaens D, Ampe B, Botteldooren D, De Boeck G, De Muynck A, Sinha AK, Vandendriessche S, L. Van Hoorebeke L. 2016. Acoustic stress responses in juvenile sea bass *Dicentrarchus labrax* induced by offshore pile driving. *Environmental Pollution*. 208:747-757. doi:10.1016/j.envpol.2015.10.055.
- Eigaard OR, Bastardie M, Breen M, Dinesen GE, Hintzen NT, Laffargue P, Mortensen JR, Nielsen JR, Nilsson HC, O'Neill FG, et al. 2016. Estimating seabed pressure from demersal trawls, seines, and dredges based on gear design and dimensions. *ICES Journal of Marine Science*. 73(suppl_1):i27-i43. doi:10.1093/icesjms/fsv099.
- Empire Offshore Wind LLC. 2022. Empire wind project (EW1 and EW2), construction and operations plan. US Department of the Interior, Bureau of Ocean Energy Management. 200 p. <https://www.boem.gov/renewable-energy/empire-wind-construction-and-operations-plan>.
- English PA, Mason T, Backstrom JT, Tibbles JB, Mackay AA, Smith MJ, Mitchell T. 2017. Improving efficiencies of National Environmental Policy Act documentation for offshore wind facilities case studies report. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 296 p. Report No.: OCS Study BOEM 2017-026. <https://tethys.pnnl.gov/sites/default/files/publications/English-et-al-2017-BOEM.pdf>.
- Fayram AH, De Risi A. 2007. The potential compatibility of offshore wind power and fisheries: An example using bluefin tuna in the Adriatic Sea. *Ocean & Coastal Management*. 50(8):597-605. doi:10.1016/j.ocecoaman.2007.05.004.
- Guida V, Drohan A, Welch H, McHenry J, Johnson D, Kentner V, Brink J, Timmons D, Pessutti J, Fromm S, et al. 2017. Habitat mapping and assessment of northeast wind energy areas. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 312 p. Report No.: OCS Study BOEM 2017-088. <https://espis.boem.gov/final%20reports/5647.pdf>.
- HDR. 2018. Field Observations during Wind Turbine Foundation Installation at the Block Island Wind Farm, Rhode Island. Final Report to the U.S. Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. OCS Study BOEM 2018-029. 175 pp.

- Higashi GR. 1994. Ten years of fish aggregating device (FAD) design development in Hawaii. *Bulletin of Marine Science*. 55(2-3):651-666.
- Holland KN. 1990. Horizontal and vertical movements of yellowfin and bigeye tuna associated with fish aggregating devices. *Fishery Bulletin*. 88(3):493-507.
- Holt, D.E, and Johnston, C.E. 2014. Evidence of the Lombard Effect in Fishes. *Behavioral Ecology* (2014), 25(4): 819–826. doi:10.1093/beheco/aru028.
- King DM. 2017. Economics of Mid-Atlantic fisheries in the year 2030 (discussion paper). In: Mid-Atlantic Blue Ocean Economy 2030, The Marine Science & Policy Series; 2017 Oct 12-13; West Long Branch (NJ). p 1-13. [accessed 2022 Nov 01].
<https://www.monmouth.edu/uci/documents/2019/11/economics-of-mid-atlantic-fisheries-in-the-year-2030.pdf/>.
- Jézéquel Y, Cones S, Jensen FH, Brewer H, Collins J, Mooney TA. 2022. Pile driving repeatedly impacts the giant scallop (*Placopecten magellanicus*). *Scientific reports*. 12(1):15380.
- Jézéquel Y, Cones S, Mooney TA. 2023. Sound sensitivity of the giant scallop (*Placopecten magellanicus*) is life stage, intensity, and frequency dependent. *The Journal of the Acoustical Society of America*. 153(2):1130-7.
- Johnson TL, Jon van Berkel J, Mortensen LO, Bell MA, Tiong I, Hernandez B, Snyder DB, Thomsen F, Petersen OS. 2021. Hydrodynamic modeling, particle tracking and agent-based modeling of larvae in the U.S. Mid-Atlantic Bight. Lakewood (CO): US Department of the Interior, Bureau of Ocean Energy Management. 232 p. Report No.: OCS Study BOEM 2021-049.
- Krebs J, Jacobs F, Popper AN. 2016. Avoidance of pile-driving noise by Hudson River sturgeon during construction of the new NY Bridge at Tappan Zee. In: Krebs J, Popper AN, editors. *The Effects of Noise on Aquatic Life II*. Dublin, Ireland: Springer Science + Business Media New York. p. 555-563.
- Langhamer O. 2012. Artificial reef effect in relation to offshore renewable energy conversion: State of the art. *The Scientific World Journal*. 2012(Article ID 386713):1-9. doi:10.1100/2012/386713.
- Li X, Chi L, Chen X, Ren Y, Lehner S. 2014. SAR observation and numerical modeling of tidal current wakes at the East China Sea offshore wind farm. *Journal of Geophysical Research: Oceans*. 119(8):4958-4971. doi:10.1002/2014JC009822.
- Linley EAS, Wilding AT, Black K, Hawkins AJS, Mangi S. 2007. Review of the reef effects of offshore wind farm structures and their potential for enhancement and mitigation. PML Applications Ltd. and Scottish Association for Marine Sciences to the Department for Business Enterprise & Regulatory Reform. 132 p.
https://tethys.pnnl.gov/sites/default/files/publications/Potential_for_Enhancement_and_Mitigation.pdf.

- [MAFMC] Mid-Atlantic Fishery Management Council. 2022. Fishery management plans and amendments. Mid-Atlantic Fishery Management Council. [accessed 2023 Apr 14]. <https://www.mafmc.org/fishery-management-plans>.
- Miles J, Martin T, Goddard L. 2017. Current and wave effects around windfarm monopile foundations. *Coastal Engineering*. 2017 Mar 1;121:167-78.
- [NEFMC] New England Fishery Management Council. 2022. Fishery management plans and amendments. Newburyport (MA): New England Fishery Management Council. [accessed 2023 Apr 14]. <https://www.nefmc.org/management-plans>.
- NJDEP. 2021. Location of New Jersey artificial reefs. Trenton (NJ): New Jersey Department of Environmental Protection, Division of Fish and Wildlife. [accessed 2022 Nov 28]. <https://www.nj.gov/dep/fgw/artreef.htm>.
- NMFS. 2006. Final consolidated Atlantic highly migratory species fishery management plan. Silver Spring (MD): National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Sustainable Fisheries, Highly Migratory Species Management Division. 1629 p.
- NMFS. 2014. Lobster management areas. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2023 Sep 11]. <https://www.fisheries.noaa.gov/resource/map/lobster-restricted-gear-areas>.
- NMFS. 2016a. Lobster management areas. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2023 Sep 11]. <https://www.fisheries.noaa.gov/resource/map/lobster-management-areas>.
- NMFS. 2016b. Layer: Total party charter activity 2011-2015. 2016a. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2022 Nov 29]. https://oceandata.rad.rutgers.edu/arcgis/rest/services/CAS_VTR_PartyCharter/2011_2015/MapServer/72.
- NMFS. 2017. Final Amendment 10 to the 2006 consolidated Atlantic highly migratory species fishery management plan: Essential fish habitat and environmental assessment. Silver Spring (MD): National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Sustainable Fisheries, Highly Migratory Species Management Division. 442 p. NMFS. 2021a. Commercial fisheries landings statistics. Query for 2021 landings by species in New York and New Jersey US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2022 Nov 21]. <https://www.fisheries.noaa.gov/national/sustainable-fisheries/commercial-fisheries-landings>.
- NMFS. 2021b. Top US ports. Query for 2021 landings by port. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2022 Nov 15]. <https://www.fisheries.noaa.gov/foss/f?p=215:11:12731197432119>.

- NMFS. 2021c. Commercial fisheries landings statistics. Query for 2022 landings by year from states in the geographic analysis area. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2024 Apr 24]. <https://www.fisheries.noaa.gov/national/sustainable-fisheries/commercial-fisheries-landings>.
- NMFS. 2021d. Vessel activity by vessel speed and VMS activity by course, OCS-A 0537, 0538, 0539, 0541, 0542, and 0544, January 2014 to December 2021. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service.
- NMFS. 2022a. Recreational fisheries statistics queries, for-hire recreational fishing-trips. Personal Communication from the US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Fisheries Statistics Division. [accessed 2022 Nov 21]. <https://www.fisheries.noaa.gov/data-tools/recreational-fisheries-statistics-queries>.
- NMFS. 2022b. Recreational fisheries statistics queries, for-hire recreational fishing-catches. Personal Communication from the US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Fisheries Statistics Division. [accessed 2022 Nov 21]. <https://www.fisheries.noaa.gov/data-tools/recreational-fisheries-statistics-queries>.
- NMFS. 2023a. Consolidated Atlantic Highly Migratory Species Management Plan. [accessed 2023 Sep 12]. <https://www.fisheries.noaa.gov/management-plan/consolidated-atlantic-highly-migratory-species-management-plan>.
- NMFS. 2023b. Descriptions of selected fishery landings of recreational and charter vessel revenues from areas: A planning level assessment. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 10 p. Report No.: Mid-Atlantic Offshore Wind. OCS-A 0544. [accessed 2023 Mar 13]. https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/rec/OCS_A_0544_Mid_Atlantic_Offshore_Wind_rec.html.
- NMFS. 2023c. Descriptions of selected fishery landings of recreational and charter vessel revenues from areas: a planning level assessment. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 10 p. Report No.: Ocean Winds East. OCS-A 0537. [accessed 2023 Mar 13]. https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/rec/OCS_A_0537_Mid_Atlantic_Offshore_Wind_rec.html.
- NMFS. 2023d. Descriptions of selected fishery landings of recreational and charter vessel revenues from areas: a planning level assessment. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 11 p. Report No.: Attentive Energy. OCS-A 0538. [accessed 2023 Mar 13]. https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/rec/OCS_A_0538_Mid_Atlantic_Offshore_Wind_rec.html

- NMFS. 2023e. Descriptions of selected fishery landings of recreational and charter vessel revenues from areas: a planning level assessment. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 10 p. Report No.: Community Offshore. OCS-A 0539. [accessed 2023 Mar 13].
https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/rec/OCS_A_0539_Community_Offshore_Wind_rec.html.
- NMFS. 2023f. Descriptions of selected fishery landings of recreational and charter vessel revenues from areas: a planning level assessment. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 10 p. Report No.: Atlantic Shores Offshore Wind Bight. OCS-A 0541. [accessed 2023 Mar 13].
https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/rec/OCS_A_0541_Atlantic_Shores_Offshore_Wind_Bight_rec.html.
- NMFS. 2023g. Descriptions of selected fishery landings of recreational and charter vessel revenues from areas: a planning level assessment. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 10 p. Report No.: Invenergy Wind Offshore. OCS-A 0542. [accessed 2023 Mar 13].
https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/rec/OCS_A_0542_Invenergy_Wind_Offshore_rec.html.
- NMFS. 2023h. Descriptions of selected fishery landings and estimates of recreational party and charter vessel revenue from areas: A planning-level assessment. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 10 p. Report No.: Mid-Atlantic Offshore Wind. OCS-A 0544. [accessed 2023 Sep 25].
https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/rec/OCS_A_0544_Mid_Atlantic_Offshore_Wind_rec.html#Most_Impacted_Species_By_Management_Category.
- NMFS. 2023i. Descriptions of selected fishery landings and estimates of recreational party and charter vessel revenue from areas: A planning-level assessment. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 10 p. Report No.: Ocean Winds East. OCS-A 0537. [accessed 2023 Sep 25]
https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/rec/OCS_A_0537_Ocean_Winds_East_rec.html#Most_Impacted_Species_By_Management_Category
- NMFS. 2023j. Descriptions of selected fishery landings and estimates of recreational party and charter vessel revenue from areas: A planning-level assessment. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 11 p. Report No.: Attentive Energy. OCS-A 0538. [accessed 2023 Sep 25]
https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/rec/OCS_A_0538_Attentive_Energy_rec.html#Most_Impacted_Species_By_Management_Category

- NMFS. 2023k. Descriptions of selected fishery landings and estimates of recreational party and charter vessel revenue from areas: A planning-level assessment. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 10 p. Report No.: Community Offshore. OCS-A 0539. [accessed 2023 Sep 25]
https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/rec/OCS_A_0539_Community_Offshore_Wind_rec.html#Most_Impacted_Species.
- NMFS. 2023l. Descriptions of selected fishery landings and estimates of recreational party and charter vessel revenue from areas: A planning-level assessment. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 10 p. Report No.: Atlantic Shores Offshore Wind Bight. OCS-A 0541. [accessed 2023 Sep 25]
https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/rec/OCS_A_0541_Atlantic_Shores_Offshore_Wind_Bight_rec.html#Most_Impacted_Species.
- NMFS. 2023m. Descriptions of selected fishery landings and estimates of recreational party and charter vessel revenue from areas: A planning-level assessment. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. 10 p. Report No.: Invenergy Wind Offshore. OCS-A 0542. [accessed 2023 Sep 25]
https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/rec/OCS_A_0542_Invenergy_Wind_Offshore_rec.html#Most_Impacted_Species.
- NYSDEC. 2022. Artificial reef locations. Albany (NY): New York State Department of Conservation. [accessed 2022 Nov 28]. <https://www.dec.ny.gov/outdoor/71702.html#Map>.
- Paschen, M., Richter, U. & Kořnick, W. 2000. Trawl Penetration in the Seabed (TRAPESE). Final report Contract No. 96–006.
- Popper AN, Hastings MC. 2009. The effects of human-generated sound on fish. *Integrative Zoology*. 41(1):43-52. doi:10.1111/j.1749-4877.2008.00134.x.
- Popper AN, Hawkins AD, Fay RR, Mann DA, Bartol S, Carlson TJ, Coombs S, Ellison WT, Gentry RL, Halvorsen MB, et al. 2014. Sound exposure guidelines for fishes and sea turtles: A technical report prepared by ANSI-accredited standards committee S3/SC1 and registered with ANSI. Melville (NY): Acoustical Society of America. 87 p. Report No.: ASA S3/SC1.4 TR-2014.
https://www.researchgate.net/publication/279347068_Sound_Exposure_Guidelines/link/5596735d08ae99aa62c777b9/download.
- Relini M, Orsi LR, Relini G. 1994. An offshore buoy as a FAD in the Mediterranean. *Bulletin of Marine Science*. 55(2-3):1099-1105.
- [ROSA] Responsible Offshore Science Alliance. 2021. Offshore wind project monitoring framework and guidelines. Responsible Offshore Science Alliance. [accessed 2023 Sep 13]. <http://ROSA-Offshore-Wind-Project-Monitoring-Framework-and-Guidelines.pdf>.

- Schultze L, Merckelbach L, Horstmann J, Raasch S, Carpenter J. 2020. Increased mixing and turbulence in the wake of offshore wind farm foundations. *Journal of Geophysical Research: Oceans*. 125(2020):1-4. doi:10.1029/2019JC015858.
- Shelley K, Phelan B, Stanley J, Soulen H. 2018. Could offshore wind energy construction affect black sea bass behavior?
- Smith J., M. Lowry, C. Champion, and I. Suthers. 2016. A designed artificial reef is among the most productive marine fish habitats: New metrics to address ‘production versus attraction.’ *Marine Biology*. 163(18).
- Stevens BG, Schweitzer C, Price A. 2019. Hab in the MAB: Characterizing black sea bass habitat in the mid-Atlantic bight. *Atlantic Coastal Fish Habitat Partnership*. 60 p.
<https://www.atlanticfishhabitat.org/wp-content/uploads/2019/12/ACFHP-Final-Report.pdf>.
- Sueur, J., Farina, A. 2015. Ecoacoustics: The Ecological Investigation and Interpretation of Environmental Sound. *Biosemiotics* 8, 493–502. <https://doi.org/10.1007/s12304-015-9248-x>. doi: 10.1007/s12304-015-9248-x
- Tetra Tech. 2022. Empire Offshore Wind: Empire Wind Project (EW 1 and EW 2). Construction and operations plan. Volume 2e: Social resources. [accessed 2022 Oct 31].
<https://www.boem.gov/renewable-energy/cop-v2-volume-2e-social>.
- Van Berkel J, Burchard H, Christenson A, Mortensen L, Svenstrup Petersen O, Thomsen F. 2020. The effects of offshore wind farms on hydrodynamics and implications for fishes. *Oceanography*. 33(4):108-117.

K.4.13 Section 3.6.2 Cultural Resources

- BOEM. 2012. Inventory and analysis of archaeological site occurrence on the Atlantic Outer Continental Shelf. New Orleans (LA): Prepared by TRC Environmental Corporation for the US Department of the Interior, Bureau of Ocean Energy, Gulf of Mexico OCS Region. 324 p. Report No.: OCS Study BOEM 2012-008.
- BOEM. 2013. Finding of no historic properties affected for Atlantic Outer Continental Shelf proposed geological and geophysical activities to identify sand resources and borrow areas for coastal restoration projects. US Department of the Interior, Bureau of Ocean Energy Management. 16 p.
- BOEM. 2020. Guidelines for providing archaeological and historic property information pursuant to 30 CFR Part 585. May 27. Department of the Interior, Bureau of Ocean Energy Management. 23 p.
<https://www.boem.gov/sites/default/files/documents/about-boem/Archaeology%20and%20Historic%20Property%20Guidelines.pdf>.
- BOEM. 2021. Commercial and research wind lease and grant issuance and site assessment activities on the Atlantic Ocean Continental Shelf of the New York Bight, final environmental assessment. Sterling

(VA): US Department of the Interior, Bureau of Ocean Energy Management. 167 p. Report No.: OCS EIS/EA BOEM 2021-073. [accessed 2022 Nov 28].

https://www.boem.gov/sites/default/files/documents//NYBightFinalEA_BOEM_2021-073.pdf.

BOEM. n.d. New York Bight final sale notice lease area descriptive statistics. US Department of the Interior, Bureau of Ocean Energy Management. 2 p. <https://www.boem.gov/renewable-energy/state-activities/new-york-bight>.

[NPS] National Park Service. 2006. Management policies 2006. US Department of the Interior, National Parks Service. 180 p. <https://www.nps.gov/orgs/1548/upload/ManagementPolicies2006.pdf>.

K.4.14 Section 3.6.3, Demographics, Employment, and Economics

Atkinson Palombo, C and Hoen, B. 2014. Relationships between Wind Turbines and Residential Property Values in Massachusetts, A joint Report of University of Connecticut and Lawrence Berkeley National Laboratory. January 9, 2014.

[AWEA] American Wind Energy Association. 2020. U.S. offshore wind power economic impact assessment. American Wind Energy Association. 19 p. [accessed 2020 Mar]. https://supportoffshorewind.org/wp-content/uploads/sites/6/2020/03/AWEA_Offshore-Wind-Economic-ImpactsV3.pdf.

Brunner EJ, Hoen B, Rand J, D Schwegman. 2024. Commercial wind turbines and residential home values: New evidence from the universe of land-based wind projects in the United States. *Energy Policy*. 185: 113837. [accessed 2024 April 19]. <https://www.sciencedirect.com/science/article/pii/S0301421523004226>.

BVG Associates Limited. 2017. U.S. job creation in offshore wind: A report for the roadmap project for multi-state cooperation on offshore wind. New York State Energy Research and Development Authority. 64 p. Report No.: 17-22. <https://tethys.pnnl.gov/sites/default/files/publications/NYSERDA-Report-2017-OSW-Jobs.pdf>.

Cape May County Planning Board. 2022. Cape May County comprehensive plan. T&M Associates. 296 p. [accessed 2022 Dec 02]. <https://capemaycountynj.gov/DocumentCenter/View/9239/Cape-May-County-Comprehensive-Plan>.

Dong L and Lang C. 2022. Do views of offshore wind energy detract? A hedonic price analysis of the Block Island wind farm in Rhode Island. *Energy Policy*. 167: 113060. [accessed 2024 April 19]. <https://www.sciencedirect.com/science/article/abs/pii/S0301421522002853?via%3Dihub>.

Georgetown Economic Services LLC. 2020. Potential employment impact from offshore wind in the United States: The Mid-Atlantic and New England Region.

- Hoen, B., Brown, J. P., Jackson, T., Wiser, R., Thayer, M., and Cappers, P. 2013. A Spatial Hedonic Analysis of the Effects of Wind Energy Facilities on Surrounding Property Values in the United States, Ernest Orlando Lawrence Berkeley National Laboratory, LBNL-6362E.
- Jensen, C. U., Panduro, T. E., Lundhede, T. H., Nielsen, A. S. E., Dalsgaard, M., & Thorsen, B. J. 2018. The impact of on-shore and off-shore wind turbine farms on property prices. *Energy Policy*, 116, 50-59.
- Lutzeyer, S., D. J. Phaneuf, and L. O. Taylor. 2017. The Amenity Costs of Offshore Windfarms: Evidence from a Choice Experiment. (CEnREP Working Paper No. 17-017). Raleigh, NC: Center for Environmental and Resource Economic Policy. August 2017.
- NOAA. 2022. NOAA: Quick report tool for socioeconomic data. US Department of Commerce, National Oceanic and Atmospheric Administration. [accessed 2022 Nov 23]. <https://coast.noaa.gov/quickreport/#/index.html>.
- [NOEP] National Ocean Economics Program. 2022. Market data. National Ocean Economics Program. [accessed 2022 Nov 26]. <https://www.oceaneconomics.org/Market/ocean/oceanEcon.asp>.
- NREL. 2023. A supply chain road map for offshore wind energy in the United States. National Renewable Energy Laboratory. 209 p. Report No.: NREL/TP-5000-84710.
- NYSERDA. 2021. Offshore wind, workforce development. New York State Energy Research and Development Authority. 2 p. <https://www.nyserda.ny.gov/All-Programs/Programs/Offshore-Wind/Focus-Areas/Supply-Chain-Economic-Development/Workforce-Development>.
- Parsons GR, Firestone J. 2018. Atlantic offshore wind energy development: Values and implications for recreation and tourism. US Department of the Interior, Bureau of Ocean Energy Management. 59 p. Report No.: 2018-013. <https://www.semanticscholar.org/paper/Atlantic-Offshore-Wind-Energy-Development%3A-Values-Parsons-Firestone/91b0ede146b8701cb44d72c58f09b29533df3cdf>.
- US Bureau of Economic Analysis. 2021. Current-dollar gross domestic product (GDP) by state and region, 2020. US Bureau of Economic Analysis. [accessed 2021 Sep 30]. <https://apps.bea.gov/itable/itable.cfm?ReqID=70&step=1&acrdn=1>.
- US Census Bureau. 2000. 2000 Decennial census. US Census Bureau. [accessed 2022 Dec 01]. <https://data.census.gov/>.
- US Census Bureau. 2010. 2010 Decennial census. US Census Bureau. [accessed 2022 Dec 01]. <https://data.census.gov/>.
- US Census Bureau. 2019. American Community Survey 2015–2019 5-Year Estimates. US Census Bureau. [accessed 2022 Nov 29]. <https://data.census.gov/>.
- US Census Bureau. 2020. 2020 Decennial census. US Census Bureau. [accessed 2022 Dec 01]. <https://data.census.gov/>.

Zhang Z, Capinha C, Karger ND, Turon X, MacIsaac JH, Zhan A. 2020. Impacts of climate change on geographical distributions of invasive ascidians. *Marine Environmental Research*. 159.

K.4.15 Section 3.6.4, Environmental Justice

BOEM. 2020. Guidelines for providing archaeological and historic property information pursuant to 30 CFR Part 585. May 27. US Department of the Interior, Bureau of Ocean Energy Management. 23 p. <https://www.boem.gov/sites/default/files/documents/about-boem/Archaeology%20and%20Historic%20Property%20Guidelines.pdf>.

CEQ. 1997. Environmental justice: Guidance under the National Environmental Policy Act. Council on Environmental Quality. 40 p. https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf.

[EJ IWG] Environmental Justice Interagency Working Group. 2016. Promising practices for EJ methodologies in NEPA reviews. Report of the Federal Interagency Working Group on Environmental Justice & NEPA Committee. Environmental Justice Interagency Working Group. 56 p.

Johnson NM, Hoffmann AR, J.C. Behlen JC, Lau C, Pendleton D, Harvey N, Shore R, Li Y, Chen J, Tian Y, et al. 2021. Air pollution and children's health—A review of adverse effects associated with prenatal exposure from fine to ultrafine particulate matter. *Environmental Health and Preventive Medicine*. 26(72):1-29. doi:10.1186/s12199-021-00995-5.

Jorgensen BS, Stedman RC. 2001. Sense Of place as an attitude: Lakeshore owners attitudes toward their properties. *Journal of Environmental Psychology*. 21(3):233-248. doi:10.1006/jevp.2001.0226.

Kodros JK, Bell ML, Dominici F, L'Orange C, Godri Pollitt KJ, Weichenthal S, Wu X, Volckens J. 2022. Unequal airborne exposure to toxic metals associated with race, ethnicity, and segregation in the USA. *Nature Communications*. 13(6329). <https://doi.org/10.1038/s41467-022-33372-z>. doi:10.1038/s41467-022-33372-z.

NJDEP. 2021. Environmental justice overburdened communities. New Jersey Department of Environmental Protection. [accessed 2023 Jan 03]. <https://www.nj.gov/dep/ej/communities.html>.

NJDEP. 2023. Environmental justice law, rules and policy. New Jersey Department of Environmental Protection. [accessed 2023 Mar 12]. <https://dep.nj.gov/ej/policy/>.

NOAA. 2019. Social indicators for coastal communities. [accessed 2022 Dec 01]. <https://www.fisheries.noaa.gov/national/socioeconomics/social-indicators-coastal-communities>.

Thind MPS, Tessum CW, Azevedo IL, Marshall JD. 2019. Fine particulate air pollution from electricity generation in the US: Health impacts by race, income, and geography affiliations. *Environmental Science Technology*. Dec 3:53(23):14010-14019. doi:10.1021/acs.est.9b02527.

US Census Bureau. 2010. 2010 Decennial census. US Census Bureau. [accessed 2022 Dec 01]. <https://data.census.gov/>.

US Census Bureau. 2020. 2020 Decennial census. US Census Bureau. [accessed 2022 Dec 01]. <https://data.census.gov/>.

USEPA. 2016. Promising practices for EJ methodologies in NEPA reviews: Report for the Federal Interagency Working Group on Environmental Justice & NEPA Committee. US Environmental Protection Agency. https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf.

USEPA. 2021. Climate change and social vulnerability in the United States. US Environmental Protection Agency. 101 p.

Wang Y, Kloog I, Coull BA, Kosheleva A, Zanobetti A, Schwartz JD. 2016. Estimating causal effects of long-term PM2.5 exposure on mortality in New Jersey. *Environmental Health Perspective*. 124(8):11852-11880. <http://dx.doi.org/10.1289/ehp.1409671>. doi:10.1289/ehp.1409671.

[WHO] World Health Organization. 2011. Burden of disease from environmental noise: Quantification of healthy life years lost in Europe. World Health Organization, Regional Office for Europe. 126 p.

K.4.16 Section 3.6.5, Land Use and Coastal Infrastructure

Borough of Paulsboro. 2010. Zoning Map, Borough of Paulsboro. https://taxmaps.info/docs/zoning/0814_Zoning_Map.pdf.

CSA Ocean Sciences, Inc. and Exponent. 2019. *Evaluation of Potential EMF Effects on Fish Species of Commercial or Recreational Fishing Importance in Southern New England*. U.S. Department of the Interior, Bureau of Ocean Energy Management, Headquarters, Sterling, VA. OCS Study BOEM 2019-049.

Empire State Development. 2022. Arthur Kill terminal. [accessed 2023 April 05]. <https://esd.ny.gov/esd-media-center/press-releases/esd-announces-48-million-federal-grant-awarded-arthur-kill-terminal-offshore-wind-staging-assembly-port-staten-island>.

[ICNIRP] International Commission on Non-ionizing Radiation Protection. 2010. ICNIRP Guidelines for Limiting Exposure to Time-Varying Electric and Magnetic Fields (1 Hz to 100 kHz). <https://www.icnirp.org/cms/upload/publications/ICNIRPLFgdl.pdf>.

Landfire. 2020. Landfire GIS data. [accessed 2022 Dec 12]. <https://landfire.gov/>.

Long Island Index Map. 2020. [accessed 2022 Nov 21]. <http://www.longislandindexmaps.org/>.

NJDEP. 2015. Land use/land cover 2012 update (generalized), edition 20150217 (Land_lu_2012_gen). [accessed 2022 Nov 21]. <https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d>.

- NJDEP. 2022. Enforceable policies. [accessed 2022 Dec 01].
[https://www.nj.gov/dep/cmp/czm_enforcepolicies.html#:~:text=The%20Coastal%20Area%20Facility%20Review%20Act%20\(CAFRA\)%20authorizes%20the%20Department,grading%2C%20site%20preparation%20and%20the.](https://www.nj.gov/dep/cmp/czm_enforcepolicies.html#:~:text=The%20Coastal%20Area%20Facility%20Review%20Act%20(CAFRA)%20authorizes%20the%20Department,grading%2C%20site%20preparation%20and%20the.)
- [NJEDA] New Jersey Economic Development Authority. 2020. The New Jersey wind port – Technical information for offshore wind developers and component manufacturers. New Jersey Economic Development Authority. 24 p.
- NYC Planning. 2021. ZoLa, New York City’s Zoning & Land Use Map. [accessed 2022 Nov 21].
<https://zola.planning.nyc.gov/about/#10.06/40.6388/-73.75/0/13.>
- NYSDOS. 2022. New York State coastal management program renewable energy geographic location description. New York Department of State. 67 p.
https://dos.ny.gov/system/files/documents/2023/05/nysrenewableenergygld.final_.2022-12-02_branded.pdf.
- NYSERDA. 2019a. 2018 ports assessment: Port of Albany-Rensselaer, pre-front end engineering design report. New York State Energy Research and Development Authority. 95 p. [accessed 2022 Nov 21].
<https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/Focus-Areas/Supply-Chain-Economic-Development/Port-Infrastructure>.
- NYSERDA. 2019b. 2018 ports assessment: Port of Coeymans, pre-front end engineering design report. New York State Energy Research and Development Authority. 168 p. [accessed 2022 Nov 21].
<https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/Focus-Areas/Supply-Chain-Economic-Development/Port-Infrastructure>.
- NYSERDA. 2019c. 2018 ports assessment: South Brooklyn Marine Terminal, pre-front end engineering design report. [accessed 2022 Nov 21]. <https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/Focus-Areas/Supply-Chain-Economic-Development/Port-Infrastructure>.
- NYSERDA. 2019d. 2018 ports assessment: Port Ivory, pre-front end engineering design report. New York State Energy Research and Development Authority. 160 p. [accessed 2022 Nov 21].
<https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/Focus-Areas/Supply-Chain-Economic-Development/Port-Infrastructure>.
- NYSERDA. 2022. Offshore wind ports: Cumulative impacts study. New York State Energy Research and Development Authority. 386 p. [accessed 2022 Dec 01]. <https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/Focus-Areas/Impacts-and-Benefits>.
- Ocean Wind LLC (Ocean Wind). 2023. Construction and Operations Plan, Ocean Wind Offshore Wind Farm. Volumes I–III. May. <https://www.boem.gov/ocean-wind-construction-and-operations-plan/>.
- Port of Albany. 2021. Offshore wind tower manufacturing port project, Port of Albany New York, FY 2021 port infrastructure development program grant application. 6 p.

USEPA. 2023. Climate change impacts on coasts. US Environmental Protection Agency.
<https://www.epa.gov/climateimpacts/climate-change-impacts-coasts#:~:text=Some%20coastal%20ecosystems%20are%20already,rise%2C%20and%20extreme%20weather%20events.&text=In%20addition%2C%20in%20a%20number,oxygen%20levels%20in%20the%20water.>

K.4.17 Section 3.6.6, Navigation and Vessel Traffic

Atlantic Shores. 2022. Atlantic Shores offshore wind construction and operations plan, lease area OCS-A 0499. US Department of the Interior, Bureau of Ocean Energy Management. 277 p. Report No.: OCS-A- 0499. [accessed 2023 Jan 01]. <https://www.boem.gov/renewable-energy/state-activities/atlantic-shores-offshore-wind-construction-and-operations-plan>.

Board of Commissioners of Pilots of the State of New York. 2020a. Annual report. 24 p. [accessed 2022 Dec 13]. <https://nypilotcommission.org/>.

Board of Commissioners of Pilots of the State of New York. 2020b. State pilotage system operations and statistics; state pilot operational bases and floating equipment. Board of Commissioners of Pilots of the State of New York. 3 p. [accessed 2022 Dec 13]. <https://nypilotcommission.org/>.

BOEM. 2021. Guidelines for lighting and marking of structures supporting renewable energy development. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 9 p.

BTMI Engineering. 2022. Offshore wind ports: Cumulative vessel traffic assessment. New York (NY): New York State Energy Research and Development Authority. 189 p. [accessed 2022 Dec 14]. <https://www.nyserda.ny.gov/About/Publications/Offshore-Wind-Plans-for-New-York-State>.

Empire Offshore Wind LLC. 2022. Empire wind project (EW1 and EW2), construction and operations plan. US Department of the Interior, Bureau of Ocean Energy Management. 200 p. <https://www.boem.gov/renewable-energy/empire-wind-construction-and-operations-plan>.

National Academies of Science, Engineering, and Medicine. 2022. Wind turbine impacts to marine vessel radar. Washington (DC): The National Academies Press. [accessed 2023 Jan 10]. <https://doi.org/10.17226/26430>. doi:10.17226/26430

NOAA. 2018. Approaches to New York, chart 12326. US Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, Coast Survey. 1 p. [accessed 2023 Apr 05]. <https://www.charts.noaa.gov/PDFs/12326.pdf>.

NOAA. 2023. United States coast pilot, volume 2, Atlantic coast: Cape Cod, Massachusetts to Sandy Hook, New Jersey. US Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service. 449 p.

- Ocean Wind LLC. 2022. Construction and operations plan, Ocean Wind Offshore Wind Farm. US Department of Interior, Bureau of Ocean Energy Management. 169 p. Report No.: Volumes I-III. <https://www.boem.gov/ocean-wind-construction-and-operations-plan/>.
- Port Authority of New York and New Jersey. 2019. Port master plan 2050. Port Authority of New York and New Jersey. [accessed 2022 Nov 27]. <https://www.panynj.gov/port/en/index.htm>.
- Sharples M. 2011. Offshore electrical cable burial for wind farms: State of the art, standards and guidance & acceptable burial depths, separation distances and sand wave effect. US Department of the Interior, Bureau of Ocean Energy Management, Regulation & Enforcement. 220 p. Report No.: Project No. 671, Contract M10PC00102. [accessed 2023 Jan 10]. <https://www.bsee.gov/sites/bsee.gov/files/tap-technical-assessment-program//final-report-offshore-electrical-cable-burial-for-wind-farms.pdf>.
- USCG. 2016a. Commandant instruction (CONDINST). Washington (DC): US Coast Guard. Report No.: 16003.2A.
- USCG. 2016b. Atlantic coast port access route study (ACPARS) final report. Washington (DC): US Coast Guard.
- USCG. 2020. The areas offshore of Massachusetts and Rhode Island port access route study. 199 p. Report No.: Final Report. Docket Number USCG-2019-0131. [accessed 2022 May 04]. <https://downloads.regulations.gov/USCG-2019-0131-0101/content.pdf>.
- USCG. 2021a. Seacoast of New Jersey including offshore approaches to the Delaware Bay, Delaware port access route study: Draft report. US Coast Guard. 69 p. Report No.: USCG-2020-0172. [accessed 2021 Oct 21]. <https://downloads.regulations.gov/USCG-2020-0172-0044/content.pdf>.
- USCG. 2021b. Northern New York bight port access route study (NNYBPARS) final report. Washington (DC): US Coast Guard.
- USCG. 2023a. Consolidated port approaches port access route studies. US Coast Guard, Office of Navigation Systems. 22 p. [accessed 2023 Mar 27]. https://www.navcen.uscg.gov/sites/default/files/pdf/PARS/Consolidated_Port_Approaches_PARS_Updated_Mar2023.pdf.
- USCG. 2023b. Pollution, search and rescue, and vessel incident data for New York bight programmatic environmental impact statement geographic analysis area. US Coast Guard.
- USCG. 2023c. Navigation and vessel inspection circular 02-23. Washington (DC): US Coast Guard. 69 p. [accessed 2023 Nov 22]. https://www.dco.uscg.mil/Portals/9/DCO%20Documents/5p/5ps/NVIC/2020/2023/OREI%20NVIC%202023_FINAL_05OCT2023.pdf?ver=2FtgA6VSQw3TzFDIObhmgQ%3D%3D.

K.4.18 Section 3.6.7, Other Uses (Marine Minerals, Military Use, Aviation, Scientific Research and Surveys)

- [ASBPA] American Shore & Beach Preservation Association. 2023. National beach nourishment database. American Shore & Beach Preservation Association. [accessed 2023 Mar 06]. <https://gim2.aptim.com/ASBPANationwideRenourishment>.
- Atlantic Shores. 2022. Atlantic Shores offshore wind construction and operations plan, lease area OCS-A 0499. US Department of the Interior, Bureau of Ocean Energy Management. 277 p. Report No.: OCS-A- 0499. [accessed 2023 Jan 01]. <https://www.boem.gov/renewable-energy/state-activities/atlantic-shores-offshore-wind-construction-and-operations-plan>.
- Battista T, Sautter W, Poti M, Ebert E, Kracker L, Kraus LJ, Mabrouk A, Williams B, Dorfman D, Husted R, et al. 2019. Comprehensive seafloor substrate mapping and model validation in the New York Bight. Silver Spring (MD): 187 p. Report No.: ICS Study BOEM 2019-069 and NOAA Technical Memorandum NOS NCCOS 255. <https://doi.org/10.2923/yys0-a098>. doi: 10.2923/yys0-a098
- BOEM. 2021. Vineyard wind 1 offshore wind energy project final environmental impact statement. Volume I-4. 25 p. Report No.: OCS EIS/EA BOEM 2021-0012. <https://www.boem.gov/vineyard-wind>.
- BOEM. 2022. Marine minerals information system (MMIS). US Department of the Interior, Bureau of Ocean Energy Management. [accessed 2022 Dec 19]. <https://mmis.doi.gov/BOEMMMIS/>.
- Colburn RJ, Randaolph CA, Drummond C, Miles MW, Brody FC, McGillen CD, Krieger AS, Jankowski RE. 2020. Radar interference analysis for renewable energy facilities on the Atlantic Outer Continental Shelf. McLean (VA): 197 p. Report No.: OCS Study BOEM 2020-039.
- Elko N, Briggs TR, Benedet L, Robertson Q, Thomsom G, Webb B, Garvey K. 2021. A century of U.S. beach nourishment. Ocean and Coastal Management. 199(2021 Jun):11. <https://doi.org/10.1016/j.ocecoaman.2020.105406>. doi:10.1016/j.ocecoaman.2020.105406
- Empire Offshore Wind LLC. 2022. Citing National Oceanic and Atmospheric Administration (NOAA) 2016. Danger zones and restricted areas. 17 p. [accessed 2023 Jan]. <https://www.fisheries.noaa.gov/inport/item/48876>.
- Guida V, Drohan A, Welch H, McHenry J, Johnson D, Kentner V, Brink J, Timmons D, Pessutti J, Fromm S, et al. 2017. Habitat mapping and assessment of northeast wind energy areas. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 312 p. Report No.: OCS Study BOEM 2017-088. <https://espiis.boem.gov/final%20reports/5647.pdf>.
- Hare J, Blythe B, Ford K, Godfrey-McKee S, Hooker B, Jensen B, Lipsky A, Nachman C, Pfeiffer L, Rasser M, et al. 2022. NOAA Fisheries and BOEM Federal Survey Mitigation Strategy – Northeast U.S. Region. Woods Hole (MA): US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northeast Fisheries Science Center. 37 p. Report

No.: NOAA Technical Memorandum NMFS-NE-292.

<https://www.fisheries.noaa.gov/resource/document/federal-survey-mitigation-strategy-northeast-us-region>.

[MAOPD] Mid-Atlantic Ocean Data Portal. 2022. Mid-Atlantic Regional Council on the Ocean. [accessed 2022 Dec 19]. <https://portal.midatlanticocean.org>.

[NASCA] North American Submarine Cable Association. 2020. Northeast region maps. North American Submarine Cable Association. [accessed 2022 Dec 02]. <https://www.n-a-s-c-a.org/cable-maps-all-regions/cable-map-regions-northeast/>.

[NAVSEA] Naval Sea Systems Command. 2022. U.S. Navy. Washington Navy Yard (DC): US Department of the Navy, Naval Sea Systems Command. [accessed 2022 Dec 16]. <https://www.navsea.navy.mil/Home/Warfare-Centers/Who-We-Are/>.

[NFSC] Northeast Fisheries Science Center. 2020. 2019 Annual report of a comprehensive assessment of marine mammal, marine turtle, and seabird abundance and spatial distribution in US waters of the Western North Atlantic Ocean - AMAPPS II. Woods Hole (MA): Northeast Fisheries Science Center. 112 p.

NJDEP. 2023. [official communication; letter from Office of Climate and Energy on 2023 Aug 21].

[NOD] Northeast Ocean Data. 2022. [accessed 2022 Dec 16]. <https://www.northeastoceandata.org/data-explorer/>.

NYSERDA. 2017a. Cable landfall permitting study. New York (NY): New York State Energy Research and Development Authority. 248 p. Report No.: NYSERDA Report 17-25e. <https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/About-Offshore-Wind/Master-Plan#:~:text=NYSERDA%20led%20the>.

NYSERDA. 2017b. Cables, pipelines, and other infrastructure study. New York (NY): New York State Energy Research and Development Authority. 54 p. <https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/About-Offshore-Wind/Master-Plan#:~:text=NYSERDA%20led%20the%20development%20of%20the%20New%20York,addressing%20market%20barriers%20and%20aiming%20to%20lower%20costs>.

NYSERDA. 2020. New York State offshore wind master plan. New York State Energy Research and Development Authority. 60 p. Report No.: NYSERDA Report 17-25. <https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/About-Offshore-Wind/Master-Plan#:~:text=NYSERDA%20led%20the%20development%20of%20the%20New%20York,addressing%20market%20barriers%20and%20aiming%20to%20lower%20costs>.

NYSERDA. 2022. Ongoing environmental research. New York State Energy Research and Development Authority. [accessed 2022 Nov 25]. <https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/Focus-Areas/Ocean-Environment/Ongoing-Environmental-Research>.

NYSDERDA. 2023. Offshore Wind Cable Corridor Constraints Assessment. 366 p. NYSDERDA Report 23-06. www.nysderda.ny.gov%2F-%2Fmedia%2FProject%2FNysderda%2FFiles%2FPrograms%2FOffshore-Wind%2F2306-Offshore-Wind-Cable-Corridor-Constraints-Assessment--completeacc.pdf&usg=AOvVaw2z06EltkR3qVvv_vwvFkwi&opi=89978449

K.4.19 Section 3.6.8, Recreation and Tourism

Atlantic Shores. 2021. Atlantic Shores offshore wind construction and operations plan, lease area OCS-A 0499. US Department of the Interior, Bureau of Ocean Energy Management. 277 p. Report No.: OCS-A- 0499. [accessed 2023 Jan 01]. <https://www.boem.gov/renewable-energy/state-activities/atlantic-shores-offshore-wind-construction-and-operations-plan>.

BOEM. 2012. Atlantic region wind energy development: Recreation and tourism economic baseline development, impacts of offshore wind on tourism and recreation economies. Herndon (VA): US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. 533 p. Report No.: OCS Study BOEM 2012-085. <https://coast.noaa.gov/data/digitalcoast/pdf/atlantic-region-wind-energy.pdf>.

BOEM. 2018. Recreation and commercial fishing in the New York Bight. Presentation for NY Bight call for information and nominations - Fisheries meeting. Long Branch (NJ): US Department of the Interior, Bureau of Ocean Energy Management. 10 p. [accessed 2018 May 08]. <https://www.boem.gov/sites/default/files/renewable-energy-program/NY-Bight-Brian-Hooker.pdf>.

BOEM. 2021. Vineyard Wind 1 offshore wind energy project final environmental impact statement. Volume I. 25 p. Report No.: OCS EIS/EA BOEM 2021-0012. <https://www.boem.gov/vineyard-wind>.

Carr-Harris A, Lang C. 2019. Offshore wind energy as net positive for the tourism industry of New Jersey. 49 p. [accessed 2022 Dec]. <https://jscholarship.library.jhu.edu/bitstream/handle/1774.2/64294/Offshore%20Wind%20Impact%20on%20Tourism%20in%20Southern%20New%20Jersey%5B2334%5D.pdf?sequence=2>.

Center for Blue Economy. 2016. Navigating the global economy: A comprehensive analysis of the Massachusetts maritime economy. University of Massachusetts Dartmouth. Report No.: 79. https://www.middlebury.edu/institute/sites/www.middlebury.edu.institute/files/2019-03/April2017.ComprehensiveAnalysisMassachusettsMaritimeEconomy-cbe-contributor_0.pdf.

Empire State Development. n.d. Tourism, exploring New York State is an amazing business. New York State. <https://esd.ny.gov/industries/tourism>.

Kirkpatrick AJ, Benjamin S, Depiper G, Murphy T, Steinback S, Demarest C. 2017. Socioeconomic impact of Outer Continental Shelf wind energy development on fisheries in the U.S. Atlantic. Washington (DC): US Department of the Interior, Bureau of Ocean Energy Management. 150 p. Report No.: OCS Study BOEM 2017-012. <https://espis.boem.gov/final%20reports/5580.pdf>.

- NJDEP. 2018a. Tuckahoe WMA impoundment management. New Jersey Department of Environmental Protection, Division of Fish and Wildlife. [accessed 2023 Jan]. https://www.state.nj.us/dep/fgw/news/2018/tuckahoe_improvements18-2.htm.
- NJDEP. 2018b. Blue claws: Crabbing in New Jersey. New Jersey Department of Environmental Protection. <https://dep.nj.gov/njfw/fishing/marine/blue-claws-crabbing-in-new-jersey/>.
- NJDEP. 2021. Wildlife management areas. New Jersey Department of Environmental Protection. <https://www.state.nj.us/dep/fgw/wmland.htm>.
- NJDEP. 2023. New Jersey beaches. Cooperative coastal monitoring. New Jersey Department of Environmental Protection. [accessed 2023 Mar]. <https://njbeaches.org/#reports>.
- New Jersey Department of State. 2021a. Surfing New Jersey. New Jersey Department of State, Division of Travel and Tourism. 2 p. <https://www.visitnj.org/article/surfing-new-jersey>.
- New Jersey Department of State. 2021b. New Jersey sailing center. New Jersey Department of State, Division of Travel and Tourism. [accessed 2023 Jan]. <https://www.visitnj.org/nj-charter-boats/new-jersey-sailing-center>.
- NMFS. 2023. Office of Science and Technology. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. [accessed 2023 Mar 27]. <https://www.st.nmfs.noaa.gov>.
- NOAA. 2022a. Fisheries economics of the United States 2019. 248 p. Report No.: NMFS-F/SPO-229A. [accessed 2022 Dec 03]. https://media.fisheries.noaa.gov/2022-07/FEUS-2019-final-v3_0.pdf.
- NOAA. 2022b. Social indicators for coastal communities. 5 p. <https://www.fisheries.noaa.gov/national/socioeconomics/social-indicators-coastal-communities>.
- NOAA. 2022c. NOAA: Quick report tool for socioeconomic data. US Department of Commerce, National Oceanic and Atmospheric Administration. [accessed 2022 Nov 23]. <https://coast.noaa.gov/quickreport/#/index.html>.
- NOAA. n.d.-a. Fast facts, tourism and recreation. [accessed 2022 Dec 03]. <https://coast.noaa.gov/states/fast-facts/tourism-and-recreation.html>.
- NOAA. n.d.-b Fisheries one stop shop, NOAA Fisheries, landings database. US Department of Commerce, National Oceanic and Atmospheric Administration. [accessed 2023 Sep]. <https://www.fisheries.noaa.gov/foss/f?p=215:7:6689364716355>.
- NPS. 2007. Atlantic and Gulf Coasts recreation area survey. 9 p. [accessed 2022 Dec 03]. https://www.nps.gov/parkhistory/online_books/rec_area_survey/atlantic-gulf/nj.htm.
- NJDEP. 2023. New Jersey Beaches, cooperative coastal monitoring. State of New Jersey. [accessed 2023 Mar]. <https://njbeaches.org/#reports>.

- NYSDEC. 2022. Coastal storm risk management projects. New York State Department of Environmental Conservation. [accessed 2023 Jan]. <https://www.dec.ny.gov/lands/110710.html#HATS>.
- NYSDEC. n.d. New York Bight whale monitoring program. New York State Department of Environmental Conservation. [accessed 2022 Dec 21]. <https://www.dec.ny.gov/lands/113647.html>.
- NYSDOS. 2022. New York State coastal management program renewable energy geographic location description. New York Department of State. 67 p.
https://dos.ny.gov/system/files/documents/2023/05/nysrenewableenergygld.final_.2022-12-02_branded.pdf.
- NYSERDA. 2017. Marine recreational uses study. New York State Energy Research and Development Authority. 58 p. Report No.: NYSERDA Report 17-25m. <https://www.nyserdera.ny.gov/-/media/Project/Nyserda/Files/Publications/Research/Biomass-Solar-Wind/Master-Plan/17-25m-Marine-Recreational-Uses-Study.pdf>.
- NYSERDA. 2021. New York State offshore wind. The view of Empire Wind. New York State Energy Research and Development Authority. 2 p.
- New York State Parks, Recreation and Historic Preservation. 2021. Recreational boating report. New York State Parks, Recreation and Historic Preservation: 46 p. [accessed 2022 Dec].
<https://www.parks.ny.gov/documents/recreation/boating/RecreationalBoatingReport2021.pdf>
- Ocean Wind LLC. 2022. Construction and operations plan, Ocean Wind Offshore Wind Farm. US Department of Interior, Bureau of Ocean Energy Management. 169 p. Report No.: Volumes I-III.
<https://www.boem.gov/ocean-wind-construction-and-operations-plan/>.
- Parsons GR, Firestone J. 2018. Atlantic offshore wind energy development: Values and implications for recreation and tourism. US Department of the Interior, Bureau of Ocean Energy Management. 59 p. Report No.: 2018-013. <https://www.semanticscholar.org/paper/Atlantic-Offshore-Wind-Energy-Development%3A-Values-Parsons-Firestone/91b0ede146b8701cb44d72c58f09b29533df3cdf>.
- Parsons G, Firestone J, Yan L, Toussaint J. 2020. The effect of offshore wind power projects on recreational beach use on the East Coast of the United States: Evidence from contingent-behavior data. *Energy Policy*. 144:7.
<https://www.sciencedirect.com/science/article/abs/pii/S030142152030389X>.
- Peregrine Energy Group Inc. 2008. Rhode Island offshore wind stakeholders final report. Boston (MA): Rhode Island Office of Energy Resources. 21 p.
- Tougaard J, Madsen PT, Wahlberg M. 2008. Underwater noise from construction and operation of offshore wind farms. *Bioacoustics*. 143-146. doi:10.1080/09524622.2008.9753795.
- Tourism Economics. 2019. Economic impact of tourism in New Jersey. 51 p.
https://visitsomersetnj.org/wp-content/uploads/2021/04/2019-nj-economic-impact_6-1-20.pdf.

K.4.20 Section 3.6.9, Scenic and Visual Resources

- [Argonne] Argonne National Laboratory. 2024. Ocean, seascape, landscape, and visual impact assessment of the New York Bight Offshore Wind lease areas. Argonne National Laboratory.
- Atlantic Shores. 2022. Atlantic Shores offshore wind construction and operations plan, lease area OCS-A 0499. US Department of the Interior, Bureau of Ocean Energy Management. 277 p. Report No.: OCS-A- 0499. [accessed 2023 Jan 01]. <https://www.boem.gov/renewable-energy/state-activities/atlantic-shores-offshore-wind-construction-and-operations-plan>.
- Bislins, Walter. 2022. Advanced earth curvature calculator. [accessed 2023 Nov 21]. <http://walter.bislins.ch/bloge/index.asp?page=Advanced+Earth+Curvature+Calculator>.
- BOEM. 2021. Assessment of seascape, landscape, and visual impacts of offshore wind energy developments on the outer continental shelf of the United States. OCS Study BOEM 2021-032. April.
- Equinor. 2022. Empire Offshore Wind: Empire Wind Project (EW 1 and EW 2) construction and operations plan, Appendix BB, aircraft detection lighting system (ADLS) analysis. Tetra Tech Inc. [accessed 2023 Jan 01]. https://www.boem.gov/sites/default/files/documents/renewable-energy/Public_EOW%20COP%20Appendix%20BB_ADLS%20Analysis.pdf.
- Landscape Institute and Institute of Environmental Management and Assessment. 2016. Guidelines for Landscape and Visual Assessment 3rd Edition. Spon Press.
- lightpollutionmap.info. 2024. U.S. Light pollution map. [accessed 2024 May 23]. www.lightpollutionmap.info.
- National Park Service. 2023. Night sky data collection sites. [accessed 2024 May 23]. <https://www.nps.gov/subjects/nightskies/datacollectionsites.htm>.
- Statista. 2024. Ship traffic handled at the Port of New York & New Jersey in 2020, by ship type. [accessed 2024 June 7]. <https://www.statista.com/statistics/1342780/port-calls-by-ship-type-port-of-new-york-new-jersey/>.
- Sullivan RG, Kirchler LB, Cothren J, Winters S. 2013. Offshore wind turbine visibility and visual impact threshold distances. National Association of Environmental Professionals. 15(1): 33-49. doi: 10.1017/S1466046612000464.

K.5 Chapter 4, Other Required Impact Analysis

None.