

Technical References for Background paper

The following papers are the sources of the scientific data provided in the background paper. In some instances there are limited notes following the citation (in italics). The National Geographic's web-site on marine plastics and the articles therein are the source of other data.

SC Gall and RC Thompson (2015). The impact of marine debris on marine life. *Marine Pollution Bulletin*, 92(1-2), 170-179. DOI:10.1016/j.marpolbul.2014.12.041.

TS Galloway et al. (2017). Interactions of microplastics throughout the marine ecosystem. *Nature Ecology and Evolution* and references therein.

MC Goldstein and DS Goodwin (2013). Gooseneck barnacles (*Lepas* spp.) ingest microplastic debris in the North Pacific Subtropical Gyre. *PeerJ* 1:e184. DOI:10.7717/peerj.184 and references therein.

JR Jambeck et al. (2015). Plastic waste inputs from land into the ocean. *Science*, 347(6223), 768-771. DOI:10.1126/science.1260352 and references therein. (*Estimates on marine plastics for 2010.*)

L Lebreton et al. (2018). Evidence that the Great Pacific Garbage Patch is rapidly accumulating plastic. *Scientific Reports*, 8:4666. DOI:10.1038/s41598-018-22939-w. (*Estimate for 2015-6 for marine plastics amounts. Microplastics are estimated to be 8% of the mass and 94% of the number of plastic debris.*)

CM Rochman et al. (2015). Anthropogenic debris in seafood: plastic debris and fibers from textiles in fish and bivalves sold for human consumption. *Scientific Reports* 5:14340. DOI: 10.1038/srep14340.

L Roman et al. (2019). Ecological drivers of marine debris ingestion in Procellariiform seabirds. *Scientific Reports* 9:916. DOI: 10.1038/s41598-018-37324-2 and references therein.

PG Ryan et al. (2009). Monitoring the abundance of plastic debris in the marine environment. *Phil. Trans. R. Soc B*. 365, 1999-2012. DOI:10.1098/rstb.2008.0207 and references therein. (*The type of plastic (whether it is more or less dense than water, susceptibility to weathering, etc.) is important to its persistence. Thick plastic items are likely to persist for decades and even long if shielded from ultraviolet radiation under water. Much remains unknown regarding plastic transformation processes and fate in the marine environment.*)

RC Thompson et al. (2009). Plastics, the environment and human health: current consensus and future trends. *Phil. Trans R. Soc B* 364, 2153-2166. DOI:10.1098/retb.2009.0053/ and references therein. (*Beyond the scope of this hearing is the potential for floating plastic debris, when colonized by marine organisms, to introduce new species into an ecosystem as noted in this reference.*)

C Wilcox et al. (2018). A quantitative analysis linking sea turtle mortality and plastic debris ingestion. *Scientific Reports* 8:12536. DOI:10.1038/s41598-018-30038-z and references therein.