Dear Sir/Madam:

On behalf of the Animal Welfare Institute (AWI) and our supporters in the United Kingdom, we welcome the opportunity to respond to the Environmental Audit Committee's Sustainable Seas inquiry. AWI is committed to safeguarding marine species and their habitats. Our efforts focus on curbing humankind's harmful impact by urging governments and other decision makers to halt or prevent damaging actions, as well as educating the public and seafood industry about the deleterious effects their actions can have on the oceans' inhabitants, including fisheries bycatch of non-target marine mammals species and sharks.

AWI participates in international fora such as the Convention on International Trade in Endangered Species of Wild Fauna & Flora and the International Whaling Commission. The organisation also has participated in the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea and has funded research related to the mitigation of cetacean entanglement in fishing gear. AWI is a stakeholder in a number of Marine Stewardship Council fishery assessments.

Our submission is focused on the following points:

- The growing threat to marine life from varying forms of marine pollution, including plastics, micro-plastics, anthropogenic noise and lost fishing gear
- The need for urgent changes to the Marine Stewardship Council (MSC) standards

What forms of pollution are most prevalent in the ocean, and what impact are they having?

Plastics:

AWI is deeply concerned with the growing threat posed by a plastic pollution in the marine environment. A review (Baulch and Perry, 2014) found that ingestion of marine debris has been documented in 48 whale and dolphin species, the equivalent of 56 percent of all cetacean species. Plastics were the dominant type of debris ingested. The level of microplastics found in the ocean has also significantly increased (Goldstein et al., 2012; Rochman and Browne, 2013), and ingestion of these has been demonstrated in many marine species, including plankton, fish, sharks and whales (Bessling et al. 2015; Fossi and Depledge, 2014; Frias et al., 2014; Germanov et al., 2018, Lusher et al., 2015; Van Cauwenberghe and Janssen, 2014; Wright et al., 2013). Lusher (2013) found microplastics in 10 species of fish in the English Channel. The study looked at both pelagic and demersal fish, including commercially important species; plastics were found in the gastrointestinal tracts of 36.5 percent of the fish examined. There is increasing evidence that plastics are entering the food chain, with potentially grave consequences for marine life and humans.

Anthropogenic noise:

Anthropogenic noise pollution levels in the marine environment are increasing and there is mounting concern that noise proliferation poses a significant threat to marine ecosystems and the survival of marine mammals, fish and other ocean wildlife. Sources of anthropogenic ocean noise include the use of explosives, oceanographic experiments, geophysical research, underwater construction, ship traffic, military active sonar, air guns used for oil and gas exploration, as well as oil drilling and shipping

activities (Kunc et al., 2015). These activities are known to cause behavioural changes in marine mammals, and they also have been linked to stranding events in the UK and around the globe (Dolman et al., 2011; Simmonds et al., 2014; Morell et al., 2015). Baleen whales are sensitive to seismic testing at distances of a kilometer, and odontocetes at varying ranges. Seismic testing for oil and gas development has been associated with displacement and disruptions in infraspecific communications that can impact the whales' reproduction, feeding and navigation (Di lorio and Clark, 2009; Parsons et al 2009; Castellote et al. 2010; Hatch et al., 2010 and Prideaux and Prideaux, 2013).

Fishing gear:

Lost and abandoned fishing gear is also of concern. Derelict fishing gear is a major marine debris issue that can have a deleterious effect on marine life. Discarded and abandoned nets, ropes, and monofilament or multi-monofilament fishing gear continue to catch fish. This gear entangles marine animals, seriously injuring them and preventing them from hunting food. Lost or discarded gear can continue to impact animals for months and even years after being lost (IWC, 2013). It has been estimated that more than 640,000 tonnes of fishing gear is lost each year (GGGI, 2018), and this lost gear impacts critically endangered species such as the vaquita porpoise and the North Atlantic right whale.

How effective are the Marine Stewardship Council's ecolabel and fishery certification scheme at ensuring fisheries are sustainable?

It is our view that many fisheries assessed via the MSC certification process have not been subject to an adequate review of information available on bycatch of non-target species. Often the Conformity Assessment Body (CAB) involved in an assessment fails to provide a robust and consistent evidence base for bycaught and Endangered, Threatened and Protected (ETP) species. There appears to be a great deal of subjectivity in interpreting evidence and deciding on the severity of impacts of a given fishery, to the detriment of non-target species affected by that fishery.

For many species of marine mammals and pelagic sharks, there is a lack of available stock assessments, leading to a high level of uncertainty as to their status. The scoring guidelines under MSC Principle 2 aim to maintain bycaught secondary and ETP species above a "biological based limit" where the fishery does not hinder recovery. However, given that in-depth stock assessments are not available, it means that biologically based safe limits have not been established, often making current MSC guidelines under Principle 2 impossible to apply.

Even when CABs involved in the certification process acknowledge a lack of data, fisheries have still been recommended to receive the MSC stamp of approval. The Aker Biomarine and Rimfrost krill fisheries were certified despite the fact that the CABs acknowledged that there was no annual or updated stock assessment of krill available at that time, "just new assessments of old data sometimes with fresh assumptions or different interpretations of parameters" as well as an acknowledgment that rapid climate change in the Antarctic has a "direct causal relationship between variability in sea-ice cover, krill recruitment, prey availability and predator foraging ecology". The fact that populations of krill dependent Antarctic species such as whales remain depressed was noted by the CAB in the Rimfrost fishery, yet the fishery was certified (Ainley and Pauly, 2014; Hønneland et al., 2015a and Hønneland et al., 2015b).

In 2017, the MSC certified St. Lawrence snow crab fishery in Canada was responsible for the deaths of critically endangered North Atlantic right whales, estimated to number roughly 450 animals (Seafood Source 2017 and NOAA 2018). The mortalities in 2017 exceeded a biologically safe removal level (NOAA 2017). Whilst this fishery is currently suspended from using the MSC ecolabel, a number of other MSC certified lobster and snow crab fisheries that overlap with the right whales' range remain certified, despite the potential for cumulative impacts of these fisheries on this endangered species.

The CAB for one of these MSC certified fisheries, for Gulf of Maine lobster, acknowledged in its certification report that, "[t]he assessment team has no doubt that lobster fisheries in the United States, including the Gulf of Maine lobster fishery, pose a significant risk to endangered large whales"(SAI Global, 2016). The assessment body recently acknowledged the mortality events stating "new information has indicated that changes to scoring is necessary under the ETP component, in regards to impacts on North Atlantic Right Whales (NARWs) in particular…" (SCS Global, 2018).

AWI is a member of the Make Stewardship Count coalition which submitted a letter to the Marine Stewardship Council raising concerns about its Standard (Make Stewardship Count, 2018a). We urge the Committee to ensure that the MSC Standard is urgently reviewed in order to guarantee that it addresses all cumulative impacts —both fishery and environmental— on target, bycatch, endangered, threatened and protected species and vulnerable marine ecosystems such as sea grass and corals.

The coalition is calling on the MSC to ensure that its claims of sustainability for its fisheries is evidence based and transparent, and that all data used by the CABs in their decision making process is available to stakeholders and that the certification and surveillance audit processes are impartial. Regarding the latter, we note our concerns that CABs are paid for by the very fisheries that they are assessing.

MSC should be required to agree on a definition for 'sustainability' based on input provided by a panel of independent experts as part of its wider Standard review. This definition should undergo regular review to ensure that the Standard continues to address best practice conservation measures, and to adjust to the rapidly changing state of the world's oceans due to climate change, increased marine pollution, fisheries impacts, increases in anthropogenic noise, etc.. The coalition is also concerned at the expense involved and lack of objectivity in the MSC Objections process.

Another concern is the failure of CABs to ensure that fisheries fulfill conditions placed upon them at the time of certification. A report by the SeaChoice coalition, analysed Canadian MSC certified fisheries and found that once the blue tick label has been awarded:

> " there is little change to fishery practices that directly improves their environmental impacts on habitat, non-target species and ecosystem function. There are also increasing concerns with timeline extensions and flexible interpretations of the application of Standard requirements that may be reducing MSC's credibility…" (SeaChoice, 2018).

It is rare that a fishery is suspended due to a failure to fulfill conditions, especially for Principle 2 issues.

The MSC should forbid the entry of fisheries catching top-predators and fisheries involving the deliberate encirclement of cetaceans and whale sharks, as it does with fisheries that involve the use of dynamite and poison. In 2017, the MSC certified a Mexican tuna fishery that deliberately sets on dolphins, killing and seriously injuring hundreds, if not thousands of dolphins each year (Make Stewardship Count, 2018c).

Rewarding such behaviour is antithetical to the public perception of the MSC ecolabel, as recently shown in a 2018 YouGov poll of the public in the UK, Germany, France and Switzerland (Make Stewardship Count, 2018b). With regard to shark finning, despite the fact that this is not meant to take place under the current MSC Standard, this practice is known to occur (Make Stewardship Count, 2018c).

Further, regarding ethical considerations, we are concerned that MSC has certified fisheries in Norway in which vessels and/or processing companies listed as MSC certificate shareholders are also engaged in commercial whaling.

What more could the Government do to promote a sustainable blue economy?

There continues to be a lack of data on the impacts of plastic and micro-plastic ingestion on a number of marine species, and information on related mortality rates is only available for a few species and regions. There is also a need for further information on plastic-related pathology in stranded or entangled animals. To address these gaps, it is suggested that the UK government increase its support for such studies, particularly in economically challenged Commonwealth countries and Overseas Territories.

AWI urges the government to support efforts to build robust evidence of fishing gear losses and entanglement data, as well as research into the development of well-informed best fishing practices. We refer the Environmental Audit Committee to the work of the Cambridge-based International Whaling Commission's working group on Human Induced Impacts and its recently founded Bycatch Mitigation Initiative (https://iwc.int/bycatch).

Notably, the government's failure to include ghost fishing gear in its January 2018 plan to address the plastics crisis is disconcerting. As the Department of Environment, Food, and Rural Affairs is a member of the Global Ghost Gear Initiative, this oversight is difficult to understand. We strongly urge the Government to rectify this situation by acknowledging the extent of the problem and to support initiatives that seek solutions to the challenges posed to the marine environment by ghost gear and bycatch.

While these concerns and deficiencies need to be addressed, we commend Parliament for the decision taken to ban all single-use plastic items from Westminster as of 2019, and urge the Government to follow the example set by Westminster by continuing to introduce measures that will do away with such items.

Thank you for your consideration of the points raised above, and we would be happy to answer any further questions members of the Environmental Audit Committee might have.

Sincerely,

Kate O'Connell
Marine Wildlife Consultant
Animal Welfare Institute
kate.oconnell@balaena.org

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