List of recommendations

Recommendation 1

- 8.19 The committee recommends that the New South Wales and Queensland Governments:
- immediately replace lethal drum lines with SMART drum lines; and
- phase out shark meshing programs and increase funding and support for the development and implementation of a wide range of non-lethal shark mitigation and deterrent measures.
- 8.20 The committee further recommends that the Australian Government pursue this recommendation at a future Meeting of Environment Ministers.

Recommendation 2

8.28 The committee recommends that, while state government lethal shark control programs remain in place, management arrangements for these programs should include more effective and transparent catch monitoring with the objective of improving understanding of the efficacy of lethal measures for public safety and the effects of the measures on the populations of marine species.

Recommendation 3

- 8.29 The committee recommends that the Australian Government:
- establish a publicly accessible national database of target and non-target species interactions with shark control measures; and
- require the Department of the Environment and Energy to use this information to prepare and publish an annual assessment of the impacts of lethal shark control measures on target and non-target marine species.

Recommendation 4

8.30 The committee recommends that state governments review and regularly audit the quality of the data collected on target and non-target species interactions with shark control measures.

Recommendation 5

8.37 The committee recommends that the Australian Government establish a review into the effectiveness of shark research and, following the review, commit to providing funding on a long-term basis for research areas that are considered likely to significantly contribute to improved knowledge about effective shark mitigation and deterrent measures.

Recommendation 6

- 8.38 The committee recommends that the Australian Government review the funding provided to CSIRO to enable CSIRO to:
- undertake ongoing data collection and monitoring to support the determination of white shark population trends;
- develop a predictive model of shark abundance and location; and
- undertake a social survey to determine how the behaviour of water users has changed in response to the recent human–shark interactions.
- 8.39 The committee further recommends that the Australian Government seek advice from CSIRO as to whether research can be undertaken to address anecdotal evidence presented to the committee on the potential risk that certain ocean-based activities, such as the use of teaser baits in cage diving, crayfish pots and trophy hunting, might increase the risk of human-shark interactions. The Australian Government should review the funding provided for marine science research to enable CSIRO (or another research institution) to conduct the research CSIRO advises could be undertaken.

Recommendation 7

8.42 The committee recommends that the Australian Government initiate discussions with state and Northern Territory governments regarding the clinical information collected about shark bite incidents to enable subsequent expert analysis of shark behaviour.

Recommendation 8

8.46 The committee recommends that the Australian Government match funding provided by state governments in support of the development of new and emerging shark mitigation and deterrent measures.

Recommendation 9

8.52 The committee recommends that the Australian Government develop a process to ensure products marketed as personal shark deterrent devices are independently verified as being fit-for-purpose.

Recommendation 10

8.53 The committee recommends that the Minister for the Environment and Energy and relevant state governments work with key stakeholder groups, such as national surfing organisations, to encourage water users to take all reasonable steps to reduce the probability of being involved in a shark bite incident, including by endorsing the use of independently verified personal deterrent devices.

Recommendation 11

- 8.55 The committee recommends that the Western Australian Government's trial rebate program for independently verified personal deterrent devices be made ongoing in Western Australia and adopted by other relevant state governments.
- 8.56 The committee further recommends that relevant state governments consider developing programs for subsidising independently verified personal deterrent devices for occasional surfers at beaches associated with the risk of dangerous shark encounters.

Recommendation 12

8.62 The committee recommends that the Australian Government hold a National Shark Summit of shark experts.

Recommendation 13

8.63 The committee recommends that the Australian Government establish a National Shark Stakeholder Working Group comprising key stakeholders in shark management policies. The principal function of the Working Group would be to further the objective of ending lethal shark control programs by developing strategies and facilitating information sharing about the effective use of non-lethal measures.

Recommendation 14

8.68 The committee recommends that the National Shark Stakeholder Working Group review the adequacy of information available to beachgoers regarding the risk presented by sharks, such as signage at beaches and how real-time information provided through shark alert apps can be made available at beaches.

Recommendation 15

8.69 The committee recommends that the Australian Government, working with relevant state governments, develop a program to provide grants for specialised trauma kits at venues near beaches associated with the risk of human-shark encounters.

Recommendation 16

- 8.70 The committee recommends that relevant state governments review the water safety education programs and education about sharks generally that is provided in schools (particularly schools in coastal areas), with a view to enhancing the education provided on reducing the risk of shark interactions and improving knowledge about shark behaviour and the ecological value of sharks.
- 8.71 As part of these reviews, the committee recommends that state governments consider the role that relevant community and scientific organisations with expertise in human–shark encounters could have in supporting the delivery of such programs.

Recommendation 17

8.72 The committee recommends that the National Shark Stakeholder Working Group review the various social media accounts and apps that distribute real-time information about shark sightings and warnings about the risk of shark activity to consider whether an integrated national database and app should be established.

Recommendation 18

8.74 The committee recommends that the New South Wales Department of Primary Industries improve its consultation and communication with animal rescue groups regarding marine wildlife caught in or injured by lethal shark control measures.

Recommendation 19

8.80 In light of the repeated use of section 158 exemptions for lethal shark control programs, the committee recommends that the next independent review of the *Environment Protection and Biodiversity Conservation Act 1999* carefully consider whether section 158 is operating as intended. In particular, the committee recommends that the independent review consider:

- whether the matters the Minister may consider in determining the national interest should be limited; and
- whether section 158 should be amended to prohibit the repeated granting of exemptions for the same controlled action or any other controlled action of a similar nature.

Recommendation 20

8.81 The committee recommends that the Minister for the Environment and Energy refrain from granting exemptions under section 158 of the *Environment Protection and Biodiversity Conservation Act 1999* for matters relating to shark control programs until after the operation of section 158 has been reviewed in accordance with Recommendation 19.