

SYDNEY COASTAL COUNCILS GROUP Inc.

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Reference: 008-21SJ

30 April 2021

Ms Kim Wolfenden

Senior Stakeholder Engagement Officer, NSW Shark Program

NSW Department of Primary Industries

<kim.wolfenden@dpi.nsw.gov.au>

Re: NSW Shark Management Strategy – Submission

Dear Ms Wolfenden,

We write to you regarding your Department's recent consultation process on the NSW Shark Program. We appreciate the opportunity to make a submission regarding the future of the program and would like to thank the NSW Department of Primary Industries (DPI) for engaging specifically with the Sydney Coastal Councils Group (SCCG) through targeted workshops.

About the SCCG

The SCCG is a regional organisation of Councils that advances sustainable management of Sydney's urban coastal and estuarine environment. We currently comprise nine-member Councils who represent approximately 1.3 million Sydneysiders. These Councils are Bayside, Inner West, Northern Beaches, North Sydney, Randwick, Sutherland Shire, Waverley, Willoughby, and Woollahra.

The coastal region that falls under the SCCG contains a rich diversity of natural assets, particularly those encompassed in marine and aquatic ecosystems. Ensuring these marine ecosystems are well managed and protected is a key objective of the SCCG, directly linked to its third goal in the [SCCG's Strategic Plan 2019-2029](#) – marine biodiversity is protected in the bioregion.

We would like to make the following comments on the future of the Shark Management Program in the Sydney region. It should be noted that many of our member Councils have also made their own submissions on the future of the program and therefore this submission should also be read in conjunction with our member Councils' submissions.

The Sydney region's reliance on shark mesh nets has resulted in impacts to non-target species

Currently in the NSW region, 51 beaches between Newcastle and Wollongong fall under the bather protection program, which sees these beaches netted using meshing nets. This has occurred since 1937¹. These nets do not create a barrier between swimmers and sharks; however, they are designed to reduce the chances of shark interactions with swimmers.²

Much research has been dedicated to the impact of shark meshing on marine biodiversity. This includes the Department's latest *Shark Meshing (Bather Protection) Program 2019/20 Annual Performance Report* which identified that 480 marine animals were caught in nets during this period, comprising 50 target sharks and 430 non-target animals. Release rates during this period identified that only 41% of these 480 marine animals were released alive.³ The SCCG believes that the loss of 283 non-target species during this period is a significant impact upon marine biodiversity.

Consequently, the majority of our coastal Council members, in response to the Department's 'Stakeholder consultation on preferred shark mitigation measures in NSW', identified that they do not support shark mesh nets and recommended that they be given a low preference for the Sydney region (Northern Beaches Council, Woollahra, Sutherland). However, Randwick Council considered that shark meshing within its local government area should be retained until there is data confirming the effectiveness of SMART drumlines, drones and VR4G shark listening stations in its region.

We commend the NSW Government for undertaking trials into alternatives and improving our understanding of sharks

We strongly support the NSW Government committing \$16 million in 2015 towards a 5-year Shark management Strategy, which trialled a suite of shark management technologies and helped to increase knowledge about the movement and ecology of target shark species, including White, Tiger and Bull Sharks. Investigating alternative technologies is applauded given the impact traditional shark mesh nets have on non-target species (see above). Furthering our understanding of sharks is also greatly supported given the critical role sharks play in the marine ecosystem.⁴

Recently, the NSW Government introduced a new Shark Management Program 2020/21 to increase beachgoer's protection from shark interactions while minimising harm to target and nontarget species. The 2020/21 strategy currently invests \$8 million over 2020/21 to Shark Programs, extending off the previous shark management strategy but incorporating current technologies including Smart Drumlines, drone surveillance, VR4G listening stations, and education and awareness programs.⁵

¹ Department of Primary Industries, "Shark Nets" Shark Smart <<https://www.sharksmart.nsw.gov.au/shark-nets>>

² CSIRO, What is the purpose of shark nets? (2020) <<https://www.csiro.au/en/research/animals/marine-life/sharks/what-is-the-purpose-of-shark-nets>>

³ Dalton S, Doak C, Peddemors V, "Shark Meshing (Bather Protection) Program 2019/20 Annual Performance Report" (NSW Department of Primary Industries, New South Wales, 2020) <https://www.sharksmart.nsw.gov.au/__data/assets/pdf_file/0009/1246275/smp-2019-2020-annual-performance-report.pdf>

⁴ Senate Committee Report (2017) "Shark mitigation and deterrent measures", para 149 <https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/harkmitigation/Report>

⁵ Department of Primary Industries, "NSW SHARK PROGRAM 2020/21" (2020) NSW SHARK PROGRAM 2020/21

SMART Drumlines have shown to significantly reduce impacts to non-target species whilst still preventing swimmer fatalities

Over the past 5 years, SMART drumlines successfully captured and released over 370 dangerous target sharks alive across NSW from 2016 to 2019, with only 5 fatalities. During this period in NSW, the smart drumline trials also successfully released 207 non-target species giving it a 97% successful release rate which is significantly higher than the release rates of shark mesh nets.⁶

Many of our coastal member Councils (Northern Beaches, Randwick and Sutherland) believe this technology should continue to be trialled in the Sydney region, although Waverley believes their main focus should be for research outcomes.

The use of drones needs to be carefully managed

Unmanned aerial vehicles (drones) have been used by the DPI since 2017, offering aerial surveillance and real-time vision of coastal waters and the surrounding area. Drone shark monitoring assists surf lifesavers in marine hazard and shark surveillance. It is understood that that from the NSW trials held in October 2018 to April 2019 370 sightings of potentially dangerous sharks were captured triggering 37 beach evacuations⁷.

Even though drones are a minimal impact shark surveillance system, however there should be careful consideration given to drone restrictions in public places and within proximity of marine animal and wildlife.⁸

We welcome further opportunity to engage

The SCCG encourages the NSW Government to consider its research findings from the 5-year Shark Management Strategy and 2020/21 Shark Management Program to ensure future shark management approaches adequately balance public safety whilst minimising harm to sharks and other marine animals. As a regional organisation of Sydney's coastal councils, the SCCG welcomes further opportunities to consult on shark management.

If you have any queries, please contact me on M.0407733075 or by email at executiveofficer@sydneycoastalcouncils.com.au

Yours sincerely,



Sarah Penny Joyce
Executive Officer

⁶ Department of Primary Industries, "SMS Factsheet-SMART Drumlines"(2020)
<https://www.sharksmart.nsw.gov.au/data/assets/pdf_file/0020/1237016/sms-factsheet-smart-drumlines.pdf>

⁷ Department of Primary Industries, "SMS Factsheet – Drones"(2020)
<https://www.sharksmart.nsw.gov.au/data/assets/pdf_file/0015/1237011/sms-factsheet-drones.pdf>

⁸ Civil Aviation Safety Authority, "Flying in Public Spaces" < <https://www.casa.gov.au/drones/rules/public-spaces?>>