

# Sydney Coastal Councils Group Shark Mitigation Advocacy Statement

## **Background**

The NSW Government has developed a NSW Shark Management Program 2022/23 and beyond. It aims to continue with its shark mitigation program, using a range of technologies along the NSW coastline. The key aspects of the program include:

- SMART (Shark-Management-Alert-in-Real-Time) drumlines
- Tagged shark listening stations
- Drone surveillance
- Shark meshing
- Community education and engagement programs
- Research
- Partnerships with Surfing NSW and Surf Life Saving NSW

The current program is shown at the following link: <a href="https://www.sharksmart.nsw.gov.au/current-program">https://www.sharksmart.nsw.gov.au/current-program</a>

The program follows on from the NSW Shark Management Strategy. The key objective of the strategy is to increase protection for bathers from shark interactions whilst minimising harm to sharks or other animals. A link to information on the strategy is below:

https://www.dpi.nsw.gov.au/ data/assets/pdf\_file/0006/581694/nsw-shark-management-strategy-factsheet.pdf

Differing council and community views have emerged on preferences among the shark mitigation methods. It is noted among the SCCG councils that there are different perspectives which makes developing common advocacy positions problematic.

There is a strong evidence base that shark meshing captures non-target species. However, this is countered by perceptions, expectations and realities regarding bather safety at beaches. To guide SCCG advocacy, the GM Forum determined that a set of common shark mitigation principles be developed which are based on fact.

#### Facts about shark mitigation methods

SMART (Shark-Management-Alert-in-Real-Time) drumlines

This technology is designed to intercept sharks that come close to shore. The drumlines have proven to be the most effective tool for catching target sharks, minimising the catch of non-target animals and maximising the survival of all animals caught, using this method.

SMART drum lines are deployed at locations along the length of the NSW coast.

#### Tagged shark listening stations

Tagged shark listening stations record the presence of tagged animals swimming within 500m. When a tagged target shark (being a White, Tiger or Bull Shark) swims within 500m of a tagged shark listening station, an alert is sent to the public via Twitter and the SharkSmart App. Currently tagged shark listening stations are deployed across NSW with at least one in each LGA.

#### Drone surveillance

Shark surveillance drones have been flown at many beaches in NSW since December 2021. The program stretches from the far north coast to far south coast. The program operates in both the

warmer months and out of season months, in order to offer increased protection at a time when many juvenile White Sharks are migrating north along the NSW coastline.

Every LGA now has at least one Unmanned Aerial Vehicle (UAV) ie. drone patrol location since the 2022-23 Surf Life Saving season. Further trials are being done looking at long-range flights and extended line of sight to improve surveillance.

# Shark meshing

Currently in the NSW region, beaches between Newcastle and Wollongong fall under the Shark Meshing (Bather Protection) Program. This has occurred since 1937. The nets do not create a barrier between swimmers and sharks; however, they are designed to reduce the chances of shark interactions with swimmers. Much research has been dedicated to the impact of shark meshing on marine biodiversity. For example, the 2019/20 Program Annual Performance Report identified that 480 marine animals were caught in nets during this period, comprising 50 target sharks and 430 nontarget animals. Release rates during this period identified that only 41% of these 480 marine animals were released alive. Therefore, shark meshing has an impact on non-target species but the extent of this impact on marine biodiversity is unknown. Equally, the impact of mortality of target shark species on marine biodiversity is also unknown.

Shark meshing is not deployed at other NSW beach locations which are reliant on various alternative shark mitigation methods. The Minister for Primary Industries indicated in August 2022 that the alternative methods would be trialled until such time as these methods proved effective before considering the removal of shark nets. The Minister has also said that at some point, discussions will be had with local councils about their preferences of mitigation for their local communities.

#### Other measures

A range of initiatives including community education and engagement programs, research and partnerships with Surfing NSW and Surf Life Saving NSW are being rolled out. These include:

- Access to first aid training and customised medical kits through Surfing NSW.
- ➤ Be SharkSmart messaging which covers a range of safety principles for bathers such as swimming between the flags, staying close to shore and staying clear of shark nets and other shark mitigation measures and avoiding swimming at dawn and dusk.
- Research on the most effective mitigation measures is continuing, including further trials of shark safety technologies and research on shark biology and ecology to inform future shark safety measures.

## **Principles**

Principles have been developed for shark mitigation that are informed by the evidence base. These principles recognise the importance of both protecting recreational water users from shark attack and minimising impacts on both target and non-target species. These principles relate specifically to the NSW Government's Shark Management Program for projects conducted by the Department of Primary Industries.

The SCCG supports the following principles for shark mitigation:

- 1. Shark meshing on Sydney beaches results in mortality of target and non-target species and may have unacceptable impacts on marine biodiversity.
- 2. The provision of shark meshing be balanced against the impacts on non-target and target species and the level of protection it offers to bathers.
- 3. SMART drumlines and other non-invasive methods of shark mitigation should be progressively deployed to replace shark meshing as further evidence of their effectiveness emerges.
- 4. Simple safety education should be used by agencies to reduce risk of shark attack to an individual bather and other recreational water users.
- 5. The SCCG will continue to work with the State Government to minimise the impacts of shark mitigation on target and non-target species whilst maintaining recreational water user safety.