



1 March 2017

Ms Christine McDonald  
Secretary  
Senate Environment and Communications Reference Committee

Dear Committee

## **Inquiry into the efficacy and regulation of shark mitigation and deterrent measures**

### **Introduction**

Surf Life Saving Australia is pleased to have the opportunity to present the following submission to the Committee for consideration into the inquiry into the efficacy and regulation of shark mitigation and deterrent measures.

The organisation is cognisant of public concerns relating to shark interactions. With the growth in social media, live news feeds and a digitally enabled society, the community of today is far more connected than ever before. The awareness of sightings and interactions are far more widely known and available. Surf Life Saving is conscious of this, and, throughout many states this has had a significant impact with a call for increased lifesaving services response and management requirements.

The concerns held within the community, while valid, need to be balanced with understanding and knowledge. In many instances there is little balanced information relating to shark sightings and interactions, rather an emerging trend of creating fear and alarming people.

Surf Life Saving has recorded a 24% increase in coastal drowning deaths in the last twelve months with 130 people losing their lives along the Australian coastline compared to 105 coastal drowning deaths for 2014-2015. This does not include other causes of death i.e. medical, intentional etc. In addition to this more than 13,000 rescues were performed for the 2015-2016 period.

While the potential for a shark interaction is real and there is valid community concern, Surf Life Saving Australia would recommend a balanced approach related to shark activity, drowning prevention and water safety management. This would include:

- Community education about safe swimming (swimming at patrolled beaches between the red and yellow flags)
- Community education about shark sightings (highlighting key awareness points that provide facts and tips for safety)
- Continued research into shark behaviour, interactions and safety innovations
- Continued and increased support to the provision of lifesaving and response services

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## Surf Life Saving – Who We Are

Surf Life Saving Australia (SLSA) is Australia's peak coastal water safety, drowning prevention and rescue authority. With 169,250 members and 312 affiliated Surf Life Saving clubs, Surf Life Saving Australia represents the largest volunteer movement of its kind in Australia.

From a national perspective our vision is zero preventable deaths in Australian Waters. Each year SLSA undertakes research to provide an evidence base in relation to drowning and other coastal related deaths in addition to undertaking behavioural research nationally to better identify key target groups and develop strategies aimed at those groups which are over represented in the statistics.

SLSA is a community cause committed to reducing coastal deaths and injuries. SLSA remains committed to its vision of zero preventable deaths and will continue to strive to reduce coastal deaths via awareness campaigns, education programs, joint Federal Government initiatives and community-driven activities.

During 2015-2016 Surf Life Saving active members were involved in more than 13,000 rescues, 57,100 first aid treatments and 1,408,500 preventative actions. Our volunteers delivered more than 1,330,000 volunteer patrol hours. Since Surf Life Saving (SLS) was established in 1907, over 640,000 lives have been saved.

SLS is a unique not-for-profit community cause that exists through community donations, fundraising, corporate sponsorship and government grants.

Through lifesaving, education and sport and active recreation programs, Surf Life Saving provides rescue ready volunteer services to the community.

### Why we exist – Our Mission

Surf Life Saving exists to save lives, create great Australians and build better communities. Australia has over 11,500 beaches dispersed along 36,000km of coastline and receive an estimated 100 million visitations annually.

Despite significant advancements in technology, techniques and knowledge, people still drown on the coast in unacceptable numbers with further lives lost through other causes i.e. intentional, marine creatures, medical etc. Surf Life Saving exists to save lives, and we are committed to reducing the coastal drowning toll in addition to addressing other causes of coastal death and injury that occur.

### What we do

The Surf Life Saving movement creates a safe environment on and off Australian beaches through a range of support operations. These operations include; 24/7 emergency response groups, rescue helicopter services, jet rescue boats, offshore rescue boats, rescue water craft (jet rescue skis), surveillance systems, radio control and coordination centres and volunteer lifesaving services.

Surf Life Saving, through the State and Territory Centres, operates the Australian Lifeguard Service, the country's largest lifeguard service, providing cost recovery lifesaving services to local government and other coastal land managers.

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## Drowning and Shark Fatality Deaths: 1 July 2004 – 30 June 2016

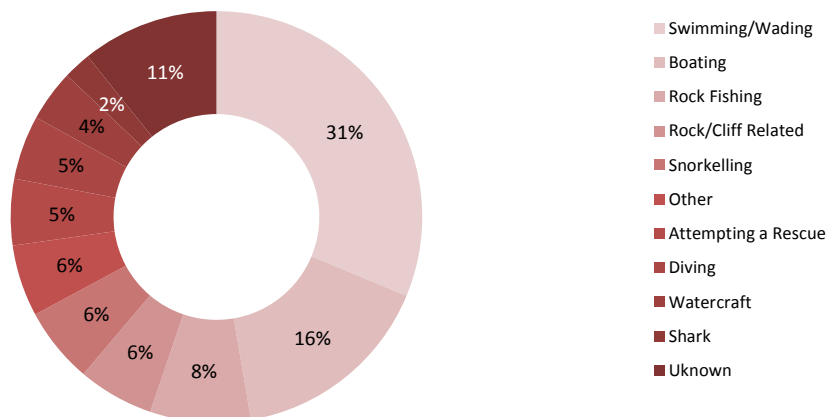
### Coastal Drowning Deaths and Shark Fatalities

The following information provides a comparative overview of coastal related drowning deaths and fatal shark attacks for the twelve-year period 1 July 2004 – 30 June 2016.

### 12-Year Summary of Coastal Deaths\*

1 July 2004 - 30 June 2016

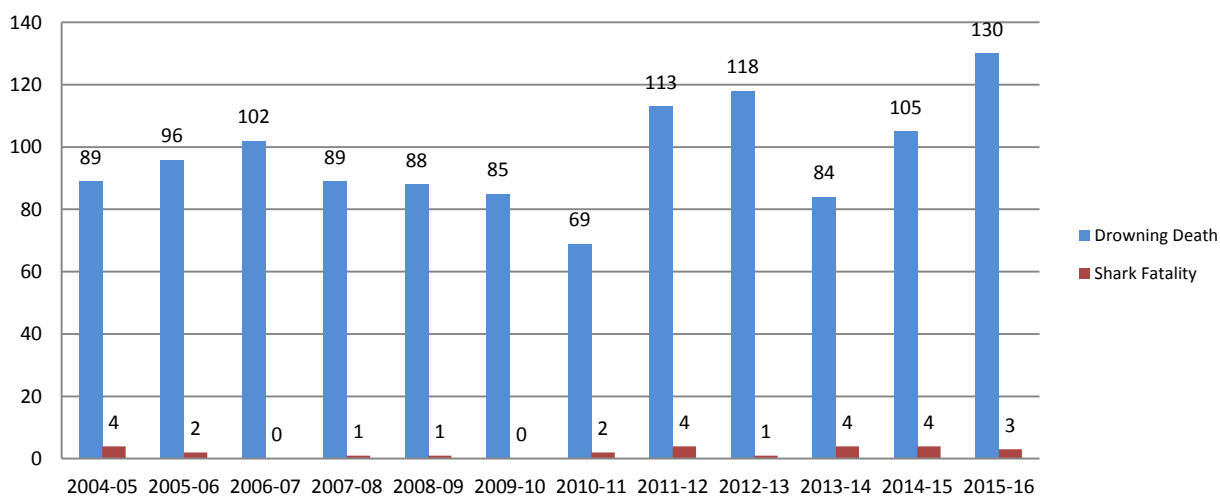
Total (n = 1,190)



As shown above the number of coastal related drowning deaths and shark attack fatalities for the 12-year period is 1,190\* (*\*excludes intentional and other causes of death not classed as drowning or shark fatality*). Key notations include:

- **Swimming/Wading** is the major activity when a drowning has occurred with 31% (n=372)
- **Boating** is the second highest activity when a drowning has occurred with 16% (n=191)
- **Rock fishing** the third highest activity when a drowning has occurred with 8% (n=94)
- **Shark** fatality represents 2% (n=26) of the coastal deaths shown above.

### Coastal Drowning Deaths - Shark Fatality by Year



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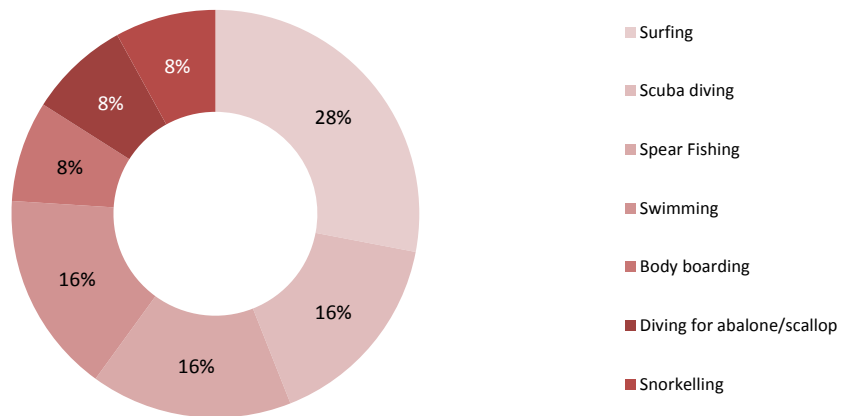
As is shown the above chart the 12-year total and average for:

- **Coastal related drowning deaths** is 1,168 with an average of 97 per year
- **Shark fatality deaths** is 26 with an average of 2 per year.

### Shark Fatalities and Interactions

The following is an overview to shark fatalities and non-fatal attacks/interactions.

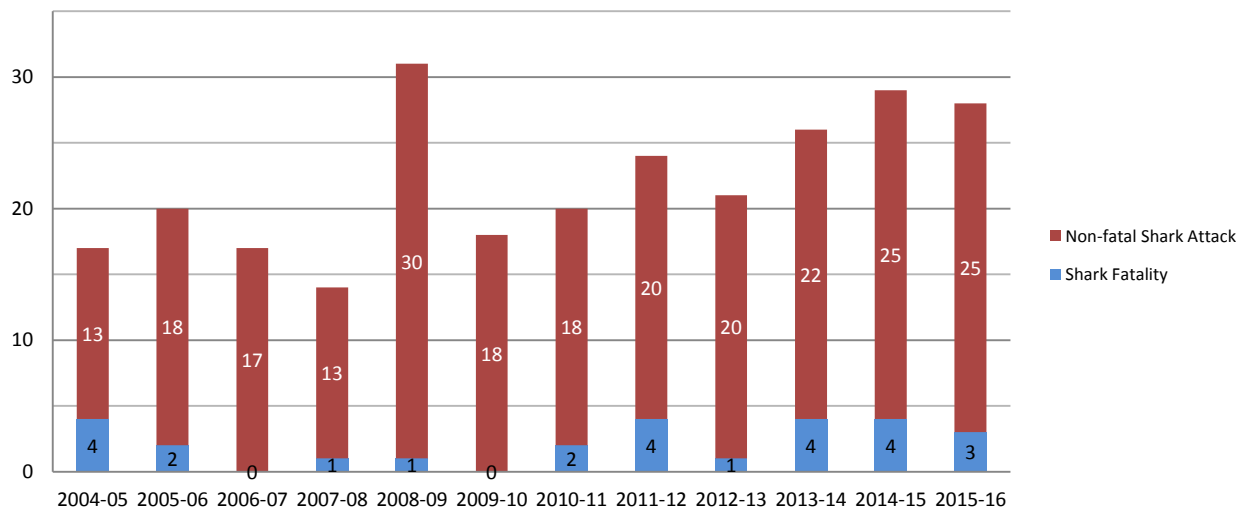
**12-Year Summary of Shark Fatalities\***  
1 July 2004 - 30 June 2016  
Total (n = 26)



Shark attack fatalities for the 12-year period is 26. Key notations include:

- **Surfing** is the major activity when a shark fatality has occurred with 28% (n=7)
- **Scuba diving, spear fishing and swimming** were all ranked the second highest activities when a shark fatality has occurred with 16% (n=4) each.

**Non-Fatal Shark Attack and Shark Fatality by Year**



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Shark interactions for the 12-year period are recorded as n=265.

- **A Non-Fatal Shark Attack** is inclusive of individuals suffering injuries through to incidents of no injury i.e. shark biting board.
- On average for the 12-year period there has been 22 shark related incidents each year.

### **Mitigation Strategies:**

There are a range of mitigation strategies in place around Australia due largely to the varying State and Local Government initiatives in these areas.

However, consistent throughout every jurisdiction is the importance of the delivery of services provided by Surf Life Saving, these include but are not limited to:

- **Lifesaving patrol services:**

Delivered by volunteer surf lifesavers on weekends and public holidays who set up patrolled areas which surveillance is conducted at. The provision of this service provides a supervised bathing environment for the public.

Patrolling members performed more than 1.3 million volunteer patrol hours last season.

- **Lifeguard services:**

Delivered by paid lifeguards who in some instances work with volunteer surf lifesavers on weekends and public holidays, however provide a patrol service on weekdays when volunteers are not available.

- **Water patrols:**

In a number of States the Surf Life Saving service provides a range of water craft that patrols the waters, this varies from Rescue Water Craft (jet rescue skis), to Jet Rescue Boats, Inflatable Rescue Boats and Offshore Rescue Boats.

- **Aerial patrols:**

A number of States provide an aerial patrol using the Westpac Lifesaver Rescue Helicopter to provide a patrolling service to the community through looking for dangers including the sighting of sharks.

- **BeachSafe:**

A website and App available to the community which has been developed by SLSA to provide essential information on safety and information for coastal locations. Provided in 30 different languages the site and app can provide visitors information on the nearest beach (or any beach) and safety information for that location. The site and app also provide details on hazards and risks in addition to information on marine stingers, sharks, rip currents and much more. The BeachSafe app can be downloaded to any person's smartphone for free <https://beachsafe.org.au/>.

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In all States a communications system is in place including an emergency communication network with all Surf Life Saving services working in with other key emergency agencies such as Police to ensure effective and efficient response and action incidents as required. This may also involve working with other agencies who are undertaking the task of shark surveillance.

In most states the sighting of a shark will result in the closing of a beach for a period of time with Surf Life Saving assets (helicopters, rescue craft, personnel) allocated to the area to ensure risk is minimised to the community. The water is cleared and surf lifesavers and lifeguards will monitor the area and liaise with Police as required.

As is evidenced in the submissions provided by a number of affiliates of Surf Life Saving Australia there is a range of other mitigation strategies that are undertaken including but not limited to:

- Shark nets
- Shark buoys
- Alert systems
- Swimming enclosures

### **Future Directions:**

It is the firm belief of Surf Life Saving Australia that all initiatives and actions that reduce the loss of life at coastal locations is of vital importance. The organisation is well positioned to work and collaborate with government departments, response agencies, research institutes and other authorities and groups with a focus to mitigating risk and providing key services to improve safety and reduce the loss of life.

SLSA would encourage and support:

- further research and development for initiatives that assist in reducing interactions between sharks and the community including independent and objective testing procedures to look at the effectiveness and practicality of proposed improvements to surveillance, deterrence or avoidance methods/systems
- further research into white shark behaviour
- statistical analysis of white shark and human interactions to understand (and alleviate) beachgoers concerns
- the development of education and awareness campaigns to create greater understanding
- support to current services being provided by Surf Life Saving entities i.e. patrol services, helicopter services, on water services
- support to extending services and providing new services
- support for new initiatives for Surf Life Saving to put in place e.g. RPA (remote piloted aircraft) Drones, fixed camera surveillance in high risk beach areas
- collaboration and partnerships between research groups and frontline service groups in delivering outcomes
- understanding that all coastal related deaths and injuries need to be considered as part of a total water safety plan.

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Attached are the independent submissions from our State based entities: Surf Life Saving NSW, Queensland, Western Australia and South Australia which will delve into particular state based perspectives. While separate submissions from Victoria, Northern Territory and Tasmania are not forthcoming as a national organisation we are aligned in the views provided herein.

In closing we thank you for the opportunity to provide this submission for consideration into the inquiry into the efficacy and regulation of shark mitigation and deterrent measures. Surf Life Saving Australia is prepared to be involved in any future developments and initiatives that contribute to preventing the loss of life or injury on the Australian coastline.

Should you wish to progress our offer please contact \_\_\_\_\_, \_\_\_\_\_ on \_\_\_\_\_ or call \_\_\_\_\_

Yours sincerely

**MELISSA KING**  
Chief Executive

References:

Surf Life Saving Australia (2016). *National Coastal Safety Report 2016*  
Surf Life Saving Australia (2016). *Annual Report 2015-2016*  
Global Shark Attack File. Shark Research Institute

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