Shark mitigation and deterrent measures

Submission 13



24 February 2017

Ms. Christine McDonald Secretary Senate Environment and Communications Reference Committee Department of the Senate

Dear Committee,

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

Thank-you for providing Surf Life Saving Western Australia (**SLSWA**) with the opportunity to provide a submission to the Senate Environment and Communications Reference Committee (**Committee**) on the above matter.

SLSWA has worked over the past 8 years in conjunction with the WA State Government to implement a state wide shark mitigation strategy. As the largest volunteer organisation of its type in the State, SLSWA has been committed to ensuring a sustainable approach to keep the public as safe as practicable from the risks presented by the inshore presence of sharks.

The attached submission demonstrates the work the movement has already invested into this issue. This demonstrates our commitment in ensuring our beach going culture is not eroded by this issue. We believe our expertise with respect to this issue can assist the Committee with its inquiry.

Please note that our submission is only in relation to the West Australian jurisdiction. We believe that whilst the issue may be present across Australia, the degrees of impact and response necessary may vary.

Should you require any further detail please contact me at your convenience.

Yours sincerely

Chris Peck General Manager | Lifesaving and Training

Surf Life Saving Western Australia (Inc)



Submission Surf Life Saving Western Australia (SLSWA)

Background

In Western Australia the emergence of sharks as a frequent and persistent hazard has been occurring since 2008 with the death of Brian Guest off a beach at Port Kennedy. SLSWA now has the opinion that the frequent identification of sharks at inshore beach locations is having a significant impact on the way of life for Western Australian's, visitors to the states beaches and in particular for Surf Life Savers in maintaining their ability to undertake training and development and frontline service delivery. The significance of the issue is critical so SLSWA believe that we must continue to work hard, review and improve the shark mitigation strategy so the beach going public can continue to enjoy West Australian beaches. SLSWA does not believe there is a so called 'silver bullet' for the issue but it does believe that work needs to continue to ensure a reasonable response to the issue.

SLSWA believe that the mitigation from the potential threat of sharks is increasingly a national issue; however, understands that the impact of the issue differs across the States. SLSWA believes that the opportunity exists to learn from the experience of other states as more states become effected by the issue.

SLSWA's submission hereafter provides:

- A) A brief summary of the existing WA Shark Mitigation Strategy including key initiative highlights.
- B) A brief summary of assessment process of existing strategies; and
- C) A brief review of the existing Strategy including summarised limitations and recommendations for improvement to the Strategy.

WA Shark Mitigation Strategy

SLSWA considers there are six (6) distinct mitigation phases that must be assessed and developed to create a successful coastal safety strategy.

SLSWA believes that the same process should be applied to improve the safety of individuals from the risk of a shark interaction when participating in coastal aquatic recreation and leisure activity. These six (6) distinct mitigation phases are:

- 1. Research and Development
- 2. Education and Awareness
- 3. Surveillance
- 4. Communication
- 5. Preventative Action
- 6. Emergency Response

SLSWA believes that initiatives to mitigate the risk of a shark interaction need to exist under each of these phases.

SLSWA believe each phase of a safety strategy will include overlapping initiatives which are only included on the basis that:

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- No single initiative, applied in isolation is fail safe.
- Each initiative is tried and proven.
- Each initiative represents the most efficient use of finite budgets and resources.
- Each initiative utilises the capabilities of SLSWA's existing lifesaving resources and networks.

SLSWA, the WA State Government and other public agencies work in partnership to deliver the overall Strategy with Initiatives delivered through:

- Volunteer Surf Life Saving Clubs and Members
- SLSWA in a self-funded capacity
- SLSWA with the financial support of the State Government and other public agencies
- The State Government directly



A. WA SHARK MITIGATION STRATEGY

DUACE	EXISTING INITIATIVES		
PHASE	Surf Life Saving WA	State Government	Others
RESEARCH & DEVELOPMENT	Automated Detection Systems Surveillance Platforms (air/land/water)	Automated Warning Systems Personal Protective Equipment Automated Detection Systems	Hard Barrier Technology Personal Protective Equipment Automated Detection Systems – Cleverbuoy Trial
EDUCATION & AWARENESS	Media Promotion SLS "Nippers" Junior Ed Program SLSWA BeachSAFE Programs	Media Campaigns	
SURVEILLANCE	Aerial Patrols – Helicopters plus Drone Trial Jetski Patrols Beach Patrols	Shark Monitoring Program Surveillance Towers	
COMMUNICATION	SurfCom Operations Centre Emergency & Rescue Network SLSWA Twitter Feed Beachsafe App	Sharksmart Website WA Police/ Dept. of Fisheries SMS Network	
PREVENTATIVE ACTION	Water Clearances Flagged Swimming Areas	Shark Barriers Beach Closures	Beach Closures



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	EMERGENCY RESPONSE	13SURF	Imminent Threat Policy	
		Patron Retrievals		
		Emergency Care		
		Emergency Response Equipment		



B. SLSWA PROCESS OF ASSESSMENT AND REVIEW OF EXISTING STRATEGY

The WA Shark Mitigation Strategy is an evolving response to shark hazards and continual improvement must be sought to ensure that it continues to represent the most effective overall shark mitigation solution. On this basis, SLSWA continually reviews and monitors the performance of the existing mitigation strategy.

- 1. Review of existing initiatives
 - Collation and analysis of statistics
 - Gap Analysis
 - Identification of limitations
- 2. Assessment of new and emerging shark mitigation initiatives
 - Independent investigation and review
 - Participation in industry representative groups
 - Operational trials
 - Ability to interact with and complement the existing Strategy
- 3. Recommendations for Improvement within existing initiatives
- 4. Recommendations for inclusion of new additional initiatives into the existing Strategy

As a result of this assessment in a recent review SLSWA have identified 13 recommendations to improve the WA Shark Mitigation Strategy. A summary matrix appears below.



C. STRATEGY REVIEW and RECOMMENDATION SUMMARY MATRIX

PHASE	LIMITATIONS	RECOMMENDATIONS
RESEARCH & DEVELOPMENT	Limited independent assessment of privately developed initiatives Limited consideration given to the interoperability of new initiatives with the existing Strategy	1. As an independent group with a mandate to preserve human life across our coastline Surf Life Saving is the ideal group to provide a consultancy role for the review of emerging mitigation initiatives and within each variable of a jurisdiction. SLSWA is largely playing this role already.
EDUCATION & AWARENESS	Limited general public awareness of existing initiatives Limited existing shark mitigation education programs	2. Surf Life Saving requires funds to implement a Shark Mitigation Education & Awareness campaign including on-beach and off-beach components
SURVEILLANCE	 Aerial (Helicopter) Patrols are not operational during winter and do not provide dedicated local area surveillance, especially when at risk groups are using the beaches Small Drone trials are occurring at patrolled beaches and for use during community mass participation events Jetski Patrols provide limited weekday coverage Beach Patrols provide limited cover only during winter months Surveillance Towers are not present at the majority of locations that have existing beach patrols or shark enclosures 	 Extension of the existing Aerial (Helicopter) Surveillance Programs Introduction of a localised Aerial (Drone) Surveillance Program at each WA volunteer SLS Club and Lifeguard patrol locations. A trial of this technology is already occurring with funding provided by the WA State Government. Extension of on water Jetski Patrols Purchase and deployment of additional Surveillance Towers
COMMUNICATION	SurfCom is not operational 24/7/365 which may result in communication delays especially in the space of public information Public awareness communications (Twitter, Beachsafe App & Sharksmart Website) do not reach water based patrons	 Extension of SurfCom operational hours to 12/7/365 Development and on beach installation of permanent automated shark hazard alert systems (lights/sirens/emergency response points) that is integrated into other emergency response organisation assets and systems.
PREVENTATIVE ACTION	Shark Barriers are not suitable for high energy locations and may impact upon recreational activities Water Clearances and beach closures are less effective where lifesaving	 9. Resource provision to enable increased deployment of volunteer beach and water based lifesaving services 10. Development of standard operational guidelines for Water Clearances and



	services are not present	Beach Closures (also refer recommendation 8)	
	Inconsistent application of water clearance and beach closure actions and limited public understanding of requirements		
	Limited operational availability and capacity of Jet Ski Patrols	11. Increased Jet Ski Patrol locations and operators	
EMERGENCY RESPONSE	Capacity of the public to provide emergency first aid	12. Increased public access to specific aquatic emergency care training	
	Emergency Responder efficiency	13. Review and improvement of the Beach Track Identification Coding System	