



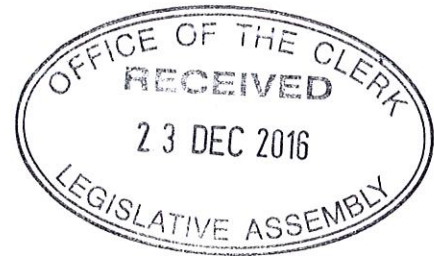
**The Hon Niall Blair MLC**

Minister for Primary Industries  
Minister for Lands and Water

MOC16/1330

Your ref: D16/19870

Ms Helen Minnican  
Acting Clerk of the Legislative Assembly  
NSW Legislative Assembly  
Parliament House  
Macquarie Street  
SYDNEY NSW 2000



Dear Ms Minnican *Helen*

I refer to the letter from Ms Ronda Miller, Clerk of the Legislative Assembly regarding Report No. 1/56 of the Committee on Investment, Industry and Regional Development – Management of Sharks in New South Wales Waters (the Report).

The NSW Government supports the recommendations of the Report. Please find enclosed the NSW Government's response which provides details of current and proposed actions in shark management.

If you require any further information on this matter, please contact Dr Geoff Allan, Deputy Director General Fisheries, Department of Primary Industries, on (02) 4916 3909.

Yours sincerely 23 DEC 2016

**The Hon Niall Blair MLC**  
**Minister for Primary Industries**  
**Minister for Lands and Water**

Encl

NSW GOVERNMENT RESPONSE TO REPORT 1/56 OF THE LA COMMITTEE ON INVESTMENT, INDUSTRY AND REGIONAL DEVELOPMENT ON MANAGEMENT OF SHARKS IN NSW

LA Committee on Investment, Industry and Regional Development – Inquiry into the Management of Sharks in NSW Waters		
Recommendations and Responses		
Rec	Description	Response
1	The Committee recommends that the Department of Primary Industries continue scientific research into shark behaviour to improve understanding of shark behaviour and population size.	<p><b>Supported</b></p> <p>The NSW Department of Primary Industries (DPI) has a strong program of existing research into sharks and other threatened species. In addition to this, the NSW Government has recently invested a further \$16 million over the next five years on shark science, research, surveillance, detection and deterrents through the Shark Management Strategy. The strategy will be driven by the best science. NSW has engaged world-leading experts to develop and implement the strategy, which also includes significant investment in new technologies to build our knowledge.</p> <p>Key measures currently being trialled to improve scientific knowledge include:</p> <ul style="list-style-type: none"> <li>• SMART drumlines – state of the art technology for catching, tagging, releasing and tracking sharks. This technology has proven so successful that the program is being expanded from 15 units to 100 Smart drumline units which can be deployed across the NSW coastline</li> <li>• Drones for aerial surveillance to allow real time vision of sharks</li> <li>• Satellite linked shark listening stations which record the presence of tagged animals</li> <li>• Clever buoy technology designed to detect sharks swimming under water, whether they are tagged or not.</li> </ul> <p>The Government is also investing in research science with a competitive grant program to support research and development in personal shark deterrents and other innovative research.</p> <p>Five new research projects have been funded by DPI. The successful projects are:</p> <ul style="list-style-type: none"> <li>• The behavioural response of white sharks to commercially-available personal shark deterrents - Flinders University</li> <li>• Using “shark-cam” to unravel shark behaviour – The University of Sydney</li> <li>• Developing a rapid method to assess personal electrical and magnet-based shark deterrent devices - Macquarie University</li> <li>• Shark deterrents and detection: Community perceptions, sentiment and preferences for shark management strategies - Charles Sturt University</li> </ul>



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		<ul style="list-style-type: none"> <li>Impacts on human behaviour following a shark-related trauma - Beyond The Bite Inc. and Macquarie University</li> </ul> <p>Additionally two PhD students have commenced and up to an additional four PhD programs are planned.</p>
2	<p>The Committee recommends that Destination NSW conduct research to determine the impact of shark attacks on tourism and related industries, using the recent spate of incidents on the NSW North Coast as a case study.</p>	<p><b>Supported in principle</b></p> <p>The NSW Government is committed to growing the NSW regional economy and tourism is an important sector for coastal communities, particularly on the North Coast.</p> <p>Destination NSW plays an important role in developing the tourism industry by working with stakeholders to support and promote tourism destinations. Tourism Research Australia, a Commonwealth Government agency undertakes the International and National Visitor Surveys which are the key data sources that provide insight on visitation and expenditure to all Australian State and Territory Tourism Organisations.</p> <p>The most recent data available shows that in the year ended June 2016, the North Coast welcomed 12.2 million visitors, an increase of 15.6 per cent compared to the previous year. The NSW Government, through Destination NSW, continues to promote destinations, attractions, experiences and events in NSW coastal areas, including the North Coast, to attract overnight visitation to contribute to the NSW Government’s goal of doubling overnight visitor expenditure in NSW by 2020.</p> <p>Further support and assistance through Small Biz Connect (the Government’s personalised and subsidised business advisory program for small business) is also available for coastal small businesses that may be affected by shark incidents.</p> <p>On 1 March 2016, Small Biz Connect ran workshops in the Northern Rivers to support communities facing a potential downturn in business because of the increase in sharks in the area. These workshops aim to build the local community’s support for small businesses and ready them for the export market.</p> <p>The NSW Government will continue to work with relevant stakeholders to ensure that any potential impacts on the tourism industry from shark interactions are monitored and mitigated</p>

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		wherever possible.
3	The Committee recommends that the Department of Primary Industries commission an independent evaluation of its Shark Management Strategy no more than two years after commencement of the Strategy.	<b>Supported</b> The Shark Management Strategy includes annual implementation reports. DPI will additionally commission an independent evaluation of the shark management strategy two years after commencement.
4	The Committee recommends that the NSW Government consider augmentation of the Observation Tower Grant Program (including but not limited to the provision of extra funding) as a means of achieving better shark and water safety.	<b>Supported</b> The Observation Tower Grant Program provides grants to councils and community organisations for new observation towers on beaches or beach headlands for effective shark spotting. Observation equipment, emergency evacuation alarms and communication systems can also be funded under the program.  The Observation Tower Grant Program commenced in 2011 providing grants up to \$30,000 each year. Since 2011, a total of 22 grants valued at \$149,967 have been provided to councils, Surf Life Saving NSW and community organisations.  The 2016/17 Grant Program opened in November. The Program has been expanded to offer grant funding up to a total of \$200,000.
5	The Committee recommends that the Department of Primary Industries consider trialling a shark spotters program where local conditions are appropriate.	<b>Supported</b> DPI will include the use of land-based spotters as and where appropriate during drone trials and will liaise with Surf Life Saving NSW organisations on the applicability of shark spotters to their routine beach safety patrols.
6	The Committee recommends that the Department of Primary Industries review the Shark Meshing (Bather Protection) Program every three years, to ensure the program is better able to adapt and incorporate innovations in technology and best practice.	<b>Supported in principle</b> The Shark Meshing Program (SMP) is currently authorised by and managed in accordance with Joint Management Agreements (JMA) and a Management Plan under both the <i>Fisheries Management Act 1994</i> and the <i>Threatened Species Conservation Act 1995</i> .  The JMAs make provision for DPI to submit an Annual Performance Report to the Fisheries Scientific Committee for review. These reports are made publicly available on the DPI website. The JMA also includes trigger points related to the catch of threatened species and reporting timeframes. Review reports are required to be prepared in the event that trigger points are breached.



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		<p>The JMA is reviewed every five years, or in the event of a new or modified listing of a threatened species.</p> <p>In addition to this, the Management Plan contains a comprehensive Strategic Research and Monitoring Program, which establishes a five year research plan related to sharks and the SMP and to trial and implement technological advances.</p> <p>The annual performance reports and JMAs referred to above can be found at <a href="http://www.dpi.nsw.gov.au/fishing/sharks/shark-management/shark-meshing-bather-protection-program">http://www.dpi.nsw.gov.au/fishing/sharks/shark-management/shark-meshing-bather-protection-program</a>.</p> <p>The NSW Government has also commenced a trial of the use of shark mesh nets at beaches on the North Coast. The Management Plan includes public reporting requirements.</p>
7	<p>The Committee recommends that, subject to the outcomes of current trials, the Department of Primary Industries move toward replacement of current shark meshing with more ecologically sustainable technologies such as the eco-barrier.</p>	<p><b>Supported</b></p> <p>The NSW Government invests close to \$1.5 million annually on the Shark Meshing (Bather Protection) Program, which was introduced in 1937. Under the program, 51 beaches between Newcastle and Wollongong are netted to reduce the chances of shark interaction, by contractors using specially designed mesh nets.</p> <p>As part of the Shark Management Strategy the government committed to trial two eco-friendly shark barriers on the North Coast. DPI worked with over 20 groups and organisations including Ballina Shire Council, Surf Life Saving NSW and local businesses to determine the best locations to trial the shark barriers, which were agreed to be Lighthouse Beach, Ballina and Lennox Head.</p> <p>Unfortunately, the trials of the eco shark barriers found that they are not suitable for the conditions on the North Coast of NSW.</p> <p>The measures in our Shark Management Strategy have at every stage been informed by the best-available science and feedback from local communities. The Government remains open to every option to ensure our beaches are safer.</p> <p>In response to a recent spate of unprovoked shark interactions at beaches on the North Coast</p>

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		<p>and calls from the community for action, the Premier and Minister for Primary Industries announced a six-month trial of shark mesh nets at beaches on the North Coast.</p> <p>To support this trial the Government has developed new legislation to enable the trial of shark management measures in NSW coastal waters. This legislation allows for the Minister to approve the conduct of a trial in accordance with a plan of management developed by the Department of Industry.</p> <p>Any trial of shark management measures, including mesh nets, will be conducted to minimise impacts on fauna. The results of the trial will inform future action on shark management measures.</p>
8	<p>The Committee recommends that the Department of Primary Industries develop an independent 'SharkSmart' website with links to relevant websites including BeachSafe.org, the Department of Primary Industries, and the Water Safety Council.</p>	<p><b>Supported</b></p> <p>The Shark Management Strategy includes funding to upgrade DPI's SharkSmart application for mobile devices and increase the capability of DPI's Twitter account. The upgrades will enable real-time tracking of tagged sharks as they swim past VR4G listening stations and provide instant alerts of shark sightings from aerial surveillance craft.</p> <p>The Department of Primary Industries is working with external providers to increase the capabilities and determine the optimal platform and composition of the SharkSmart webpage. An initial upgrade of the webpage has included a link to the BeachSafe webpage and further updates will expand the number of links to relevant websites such as the Water Safety Advisory Council.</p>
9	<p>The Committee Recommends that the Department of Justice ensures that the NSW Water Safety Council provides a link to the Department of Primary Industries SharkSmart information.</p>	<p><b>Supported</b></p> <p>The Office of Emergency Management, Department of Justice will review and update the content on the NSW Water Safety Website and as part of that process will include a link to DPI's SharkSmart webpage.</p>
10	<p>The Committee recommends that Destination NSW provide links to Department of Primary Industries SharkSmart information on its Destination NSW and visitNSW websites.</p>	<p><b>Supported</b></p> <p>Destination NSW will provide links to the SharkSmart webpage on the DestinationNSW and VisitNSW websites.</p> <p>A link to the SharkSmart page is now live on <a href="http://www.visitnsw.com/things-to-do/beaches-">http://www.visitnsw.com/things-to-do/beaches-</a></p>



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		<a href="#">and-surf</a>
11	The Committee recommends that the Department of Primary Industries work with Surf Life Saving NSW (SLNSW) to distribute SharkSmart information through SLNSW's Coastal Accommodation Network	<p><b>Supported</b></p> <p>The Shark Management Strategy includes funding to enhance existing partnerships with Surf Life Saving NSW organisations such as SLS NSW and the Australian Professional Ocean Lifeguard Association. The Department Primary Industries will continue to work with these and other coastal community organisations to ensure SharkSmart information reaches the community.</p>
12	The Committee Recommends that the Department of Primary Industries work with Surf Life Saving NSW, Surfing NSW, and all NSW coastal councils to ensure that SharkSmart information is provided on the websites of those organisations.	<p><b>Supported</b></p> <p>The NSW Government agrees with the Committee that public awareness plays a role in mitigating the risk of shark interactions. A key component of the Shark Management Strategy is community awareness programs including the dissemination of information and real-time data to the community through online and mobile channels.</p> <p>The Department of Primary Industries has already partnered with Surf Life Saving NSW and coastal councils to share information and will continue to work with communities, councils, organisations and other government agencies to ensure that SharkSmart messaging and information is reaching as wide an audience as possible.</p> <p>A link to the SharkSmart webpage is now live on the Surf Life Saving NSW website at <a href="http://www.surflifesaving.com.au/beach-safety">http://www.surflifesaving.com.au/beach-safety</a></p> <p>DPI is also working with Surfing NSW to enhance their surfer education awareness programs and to encourage the take up by surfers of personal repellent devices. DPI is also promoting the SharkSmart mobile device application and Twitter feed as a source of up to date and accurate safety information for surfers.</p>
13	The Committee recommends that the Department of Primary Industries monitor the outcomes of research and development of shark surveillance and deterrent technologies to identify technologies that could be implemented in NSW.	<p><b>Supported.</b></p> <p>The Shark Management Strategy is driven by the best science. A better understanding of shark behaviour and movement patterns will guide future investment and increase the community's understanding of risk. The NSW Government has already engaged the best scientists to help formulate the Strategy and part of its funding will go toward continuing scientific research and developing innovative approaches to shark management in NSW.</p> <p>Funding from the Shark Management Strategy will go toward an annual competitive grants</p>

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	<p>program to provide funding for emerging new technologies and the scientific evaluation of the effectiveness of such technologies, including personal protection devices and shark detection technologies.</p> <p>Funding will also be provided for PhD projects in NSW on shark biology, detection and deterrence to help build our scientific capabilities in NSW and develop solutions unique to our local areas.</p> <p>The Shark Management Strategy includes annual implementation reports. The Government will commission an independent evaluation of the Strategy two years from commencement.</p>
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