

## Environment and Public Affairs Committee

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**From:** Donna Martin  
**Sent:** Saturday, 5 January 2019  
**To:** Environment and Public Affairs Committee  
**Subject:** Petition 099 - SMART drumline trials

Dear Mr Swinbourn,

This is my written submission regarding issues raised in the above petition, apologies as I have also sent this email from another private account which may not have been received by your office.

Below is a summary of reasons for our opposition to the WA Fisheries S.M.A.R.T Drumline Trial<sup>1</sup> and requests to the WA Government. This information is an extended form of the online version of the petition which to date, has achieved almost 7500 signatures<sup>2</sup>.

Why we are opposing S.M.A.R.T DRUMLINES (SDLs):

**SDLs LACK EVIDENCE:** There is no proof from similar operations worldwide that relocating sharks to another area is reducing the number of shark incidents overall. For instance, in Recife, Brazil, relocating sharks has been associated with an increase in attacks in adjacent areas indicating that the risk is simply being shifted<sup>3</sup>. The obvious implication of this result for WA, is that in an effort to protect all ocean users, large areas of the coastline would ultimately need to be drumlined at an enormous cost to the taxpayer. It should also be noted that the NSW trial has been underway for over 2 years and has not released any evidence that SDLs have increased safety for ocean users<sup>4</sup>. Furthermore, just recently an incident occurred at Ballina NSW where SDL's are installed<sup>5</sup>. We believe that SDLs will create a false sense of security only.

**SDLs COULD INCREASE RISK:** There is concern that attracting sharks with baits will increase risk to beach users. Many people have expressed that they would not be confident to swim at a beach where drumlines are installed. A case in point is that swimmers of the 2014 Rottneest Channel Swim demanded that baited drumlines be removed just before the event due to concerns about sharks being attracted and posing a risk. If it were the case that SDLs were effective for beach users, these would not provide protection to deeper ocean users such as divers, when sharks are to be released in deeper water where they could be diving.

It has also been warned that sharks carrying new injuries (such as from hook wounds in the mouth/jaw, ingestion of hook and trace, dislocation of jaw from struggling and hormonal changes from prolonged periods of stress) will increase the chance of a released shark to head to the surf zone where there is higher moving water where it the shark will be able to extract oxygen more easily and expend less energy while recovering.

**AUSTRALIANS DO NOT WANT LETHAL MEASURES:** The vast majority of Australians surveyed do NOT support the use of lethal shark risk mitigation strategies, and SDL's are potentially lethal. The "anti-lethal" sentiment is apparent in the numerous online polls that have been conducted in recent years, as well as results from WA government's own research commissioned in 2012<sup>7</sup>. We expect that even if the trial operations are conducted properly, a number of sharks will still die, and this number will be much higher if operations are inadequate or guidelines are not adhered to. Already there are concerns that the operational procedures (as set out in the tender document) will risk the animal's welfare. It should be emphasised that while sharks might appear to be stable upon release, they can ultimately succumb to stress, hook or tag injuries over time. Research indicates that Grey Nurse sharks are especially vulnerable

to hook injuries<sup>8</sup>. Regarding the 2014 drum line shark hazard mitigation trial, 14% of sharks were found dead on the gear or had to be destroyed due to their injuries, 91% of sharks caught were tiger sharks, and most of these (61%) were undersized. Regarding undersized animals that were released, WA Fisheries admit that a proportion of these would have died post release<sup>9</sup>. There were also horrific reports of animals being released “alive”, where concerned onlookers observed them sinking to the bottom of the ocean, or having hooks cut out by operators in the most brutal and careless manner. We expect that fatalities will comprise non-target animals also. Regarding the NSW SDL trial, since December 2016, approximately 145 non-target animals (including non-target sharks) have been caught<sup>10</sup>. While these animals were released “alive”, it can be assumed that some of these will have died post release due to their injuries.

**OUR OCEAN ENVIRONMENT IS UNDER THREAT:** Sharks (especially large sharks), are critical for maintaining the health of our oceans<sup>11</sup>. Large sharks are also crucial for maintaining fish stocks which are put in jeopardy when they are removed<sup>12</sup>. It is a well cited fact that an estimated 90% of shark populations worldwide have been decimated, and they continue to be threatened by operations such as illegal fishing, and shark control programs. If WA sharks (in particular the protected Great White) perish due to SDLs, this puts their numbers and our environment at further risk.

**THERE ARE CONCERNS THAT THIS ACTION WILL BE EXPANDED AND ULTIMATELY LEAD TO AN INTENTIONALLY LETHAL CAMPAIGN** similar to the cull implemented in 2014 by Premier Barnett. If this happens, it could have devastating consequences for the marine environment, and cost the taxpayer many millions of dollars without necessarily improving safety to ocean goers.

**SHARKS ARE BEING DEMONISED:** Utilising drastic shark hazard mitigation measures reinforces the negative view, so often sensationalised in the media, that sharks are “monsters” who “lurk”, “stalk” and “prey” on humans, and that something must be done. This portrayal is irresponsible as it exaggerates the risk, minimises personal responsibility, encourages negative sentiment towards sharks, and puts them in danger of further decline.

What we want the WA Government to do:

**DO NOT PROCEED WITH THIS TRIAL. WAIT FOR SOLID EVIDENCE FROM NSW THAT SDLs INCREASE SAFETY AND PROTECT SHARKS** before considering their use in WA. By solid evidence we do not mean anecdotal reports or preliminary findings. We mean scientific data that shows a statistically significant decline in shark incidents due to SDL use, and is an outcome which doesn't put shark populations at risk.

**BETTER PROMOTE TECHNOLOGY THAT DOES HAVE SCIENTIFIC BACKING** by offering a higher rebate when purchasing approved shark repellent devices such as the Shark Shield/Ocean Guardian<sup>13</sup>, and by including other promising repellents in the rebate scheme such as the Rpela<sup>14</sup>. The government should also support developers of currently approved devices to further refine the technology especially for surfers.

**PROVIDE A MORE TIMELY RESPONSE TO THE REMOVAL OF WHALE CARCASSES THAT ARE KNOWN TO ATTRACT SHARKS.** In addition, address the issue of migrating salmon and seals, as well cray pot use for attracting sharks. Provide appropriate warning signs about all of these risks.

**TRIAL OTHER SYSTEMS THAT DO NOT RISK THE ENVIRONMENT.** Consider technologies such as the Ocean Guardian BEACH<sup>0115</sup>, the SharkSafe Barrier<sup>16</sup>, the Eco Shark Barrier<sup>17</sup>, Shark Spotters<sup>18</sup>, as well as drones. In addition, increase relevant warning signs at all beaches, and install shark trauma medical kits<sup>19</sup> at remote beaches.

BETTER ASSIST COMMUNITIES TEMPORARILY AFFECTED BY SHARK INCIDENTS. This could involve investment in new tourism ventures such as responsible shark activities that have been an economic boon for other coastal communities around the world (e.g., Cape Cod, USA<sup>20</sup>). Communities should also be encouraged to time certain events (e.g. surfing competitions) in a way that minimises risk to competitors.

DO MORE TO COUNTER NEGATIVE STEREOTYPES AND SENSATIONALISTIC REPORTS REGARDING SHARKS by conveying a more constructive, moderate, and realistic message. This could include education about the small risk that sharks pose to ocean users compared to greater risks such as drowning, in addition to the importance of sharks for the health of our ocean environment. This education should also emphasise personal responsibility when using the ocean. Recent research by Peppin-Neff et al., suggests that modifying perceptions of intentionality, reducing fear, and increasing pride in sharks, are important targets of education and would help reduce support for lethal measures<sup>21</sup>. Education should especially be directed towards policy makers, including politicians, to encourage more moderate responses, and minimise “knee jerk” reactions including extreme/outlandish rhetoric that often occurs following an incident. Finally, more effort should be made by Fisheries to counter messages conveyed by sensationalistic media reports immediately following an incident to mitigate the damage that such reports cause.

CONCLUDING COMMENTS AND SUGGESTIONS: We ask that the WA Government do not overreact when shark incidents occur and measure their response according to the risk. Shark incidents are incredibly rare, with an average of less than one fatality per year in WA. The risk of drowning in our ocean is far greater with approximately 15 deaths per year (17 reported in 2014<sup>22</sup>). Obviously, this is a more serious issue which should attract more attention and resources. Additionally, the WA Government should not be quick to conclude that shark incidents are a serious threat to the economy. While there are anecdotal reports from some that this is the case, McPhee notes that there is no independence evidence regarding the negative impact of shark incidents on economic activity broadly, and suggests that revenue rather than being withheld, is redistributed<sup>23</sup>. And as mentioned before, some communities throughout the world are benefitting from the additional revenue that responsible shark tourism can bring. It is particularly ironic that the Government are promoting this trial as “scientific” when one of the reasons they are conducting it - economic protection, lacks scientific evidence. While SDL trial is being promoted as “non-lethal”, this term is quite misleading since the procedures used are very invasive and as such are harmful or deadly to some animals. SDL’s are also a slippery slope that could eventually lead to an intentionally lethal campaign. We believe that the majority of Western Australians do not want to go down the lethal path that Queensland and New South Wales have been on for many decades now. Regarding Australia’s many other deadly creatures, the tendency is to respect them, leave them alone, accept the risk they pose, and exercise personal responsibility, instead of interfering with them or killing them. So why should sharks be any different? And the fact that many sharks are protected by state, federal and international laws, and are recognised as playing a crucial role in maintaining the health of our oceans which we all benefit from, is an even more compelling reason why we should leave them alone.

Sincerely

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