

Memorandum

To: Branch Directors of Lifesaving, Club Captains, Patrol Captains
From: Andy Kent - Lifesaving Manager
Date: Wednesday 21 September 2016
Pages: 4
Subject: Update on Shark Response Procedures and DPI VR4G receivers

Background:

Surf Life Saving New South Wales (SLSNSW) has been working closely with the NSW Department of Primary Industries (DPI) on aspects of the NSW Government's Shark Management Strategy. SLSNSW support the DPI and the stated objectives of increasing protection for bathers from shark interactions, while also minimising harm to sharks and other marine life.

Click this link for more information on the [NSW Shark Management Strategy](#).

SLSNSW have been liaising with DPI on a number of initiatives. Some have already been implemented while others will be rolled out during the 2016/17 season. These include;

- VR4G Receivers (To identify sharks tagged with acoustic implant).
- DPI Helicopter Research & Surveillance Patrols.
- Upgrade of Shark Smart - app/twitter feed/website.

Summary Of Key Points For Lifesaving Personnel:

- There are only three shark species with the DPI consider a potential threatening species for unprovoked attacks. These are White Sharks (Great Whites), Tiger Sharks and Bull Sharks.
- Helicopters conducting aerial surveillance are not officially branded, however all contracted services will have radio contact with SurfCom in order to report any sightings.
- It is important to note that not all shark sightings require an immediate on water or on beach response from surf lifesaving services. The location of the shark in relation to swimmers or surfers, the time of day, and whether there is a plentiful food supply nearby will all play a part in determining the response.
- The SLSNSW Standard Operating Procedure - Shark Incidents (LS 9.6 V4 & LS 8.6 V5) has been approved by the SLSNSW Board and NSW DPI. As this has been adopted as the current procedures in the event of a shark incident 2016/17 season, club captains and patrol captains are encouraged to familiarise themselves with this text.

Additional information about each project is provided in the circular below. For further clarification about any point contained within this document, please contact the SLSNSW Lifesaving team.

VR4G Acoustic Receivers & Shark Smart App

VR4G receivers are designed to transmit a digital signal when a shark which has been tagged with an acoustic implant swims within 500m of the receiver. This signal is automatically sent to the Shark Smart App and Shark Smart [Twitter page](#). The [SLSNSW Twitter account](#) (@slnsw) will retweet warnings that are deemed a threat to ocean users. The DPI have now deployed the first 10 buoys (1-10) as demonstrated in the below table. At each location they have been placed approximately 500 metres off shore and at a depth of about 10 metres. From November 2016 the DPI will begin deploying the VR4G buoys at a further 10 locations as identified below.

Current VR4G buoy locations:

Location	Beach
1. Tweed Heads	Kingscliff Beach
2. Byron Bay	Clarkes Beach
3. Lennox Head	Lennox Point
4. Ballina	Sharps Beach
5. Evans Head	Main Beach
6. Yamba	Main Beach
7. Coffs Harbour	Park Beach
8. South West Rocks	Front Beach
9. Port Macquarie	Lighthouse Beach
10. Foster	Main Beach

Planned future locations of VR4G buoys:

Location	
11. Crescent Head	Crescent Head Beach
12. Old Bar	Old Bar Beach
13. Hawkes Nest	Bennet's Beach
14. Redhead	Redhead Beach
15. Sydney	Bondi Beach
16. Kiama	Kiama Beach/Kendells Beach
17. Sussex Inlet	Cudmirrah Beach
18. Mollymook	Mollymook Beach
19. Batemans Bay	Malua Bay Beach
20. Merimbula	Main Beach

Key Points:

- Surf Lifesavers are **not** expected to monitor the App or Twitter during patrol. The notifications to the app and the twitter feed are not considered warnings / sightings. This is due to the range of VR4G receivers and the fact that most identified sharks only 'ping' once or twice before moving out of the area.
- The SLSNSW State Operations Centre will monitor the twitter feed and may notify patrols and/or Duty Officer if there is a considerable amount of the shark activity at one location.
- If a member of the public reports a suspected sighting to a patrol member normal operating procedures apply.



DPI Helicopter Research & Surveillance Patrols

DPI Helicopter Research & Surveillance Patrols will occur at various times throughout the season. In order to get a consistent response and streamline the communication process between the helicopters in the air, lifesavers on patrol, and SurfCom support operations, SLNSW and the DPI have been working closely together to develop guidelines.

Helicopters conducting aerial surveillance are not officially branded, however all contracted services radio in to SurfCom at the start and at the conclusion of the surveillance flights.

To maximise coverage, NSW has been divided into seven zones/regions for the DPI aerial surveillance program.

- Zone/Region 1 - South Ballina to Point Danger
- Zone/Region 2 - South Sawtell to Woolli
- Zone/Region 3 - Lighthouse Beach, Port Macquarie to Nambucca Heads
- Zone/Region 4 - Birubi to Crowdy Head
- Zone/Region 5 - Moruya to South Wollongong
- Zone/Region 6 - Bega River to Boyd Tower, Twofold Bay
- Zone/Region 7 - Stockton to Wollongong (Shark Meshing Program)

Flight Schedules: Zone/Region 1

Date	Day
30 April – 19 June 2016	Every Sat & Sun
25 June – 18 July 2016	Daily school holidays (Qld & NSW)
23 July – 11 Sept 2016	Every Sat & Sun
17 Sept – 9 Oct 2016	Daily school holidays (Qld & NSW)
15 Oct – 4 Dec 2016	Every Sat & Sun
10 Dec 2016 - 29 Jan 2017	Daily school holidays (Qld & NSW)
04 Feb – 26 March 2017	Every Sat & Sun
01 - 25 April 2017	Daily school holidays (Qld & NSW)

Zone/Region 2, 3 & 4

Date	Day
2 July – 18 July 2016	Daily NSW school holidays
24 Sept – 9 Oct 2016	Daily NSW school holidays
17 Dec 2016 - 29 Jan 2017	Daily NSW school holidays
08 - 25 April 2017	Daily NSW school holidays

Zone/Region 5 & 6

Date	Day
17 Dec 2016 - 29 Jan 2017	Daily NSW school holidays
08 - 25 April 2017	Daily NSW school holidays

Zone/Region 7

Month & year	Dates
August 2016	Sat20, Wed24, Sat27, Wed31
September 2016	Sat3, Wed7, Sat10, Wed14, Sat17, Wed21, Sat24, Sun25, Wed28
October 2016	Sat1, Sun2, Mon3, Wed5, Sat8, Sun9
December 2016	Sat17, Sun18, Wed21, Sat24, Sun25, Mon26, Tue27, Wed28, Thu29, Fri30, Sat31
January 2017	Sun1, Mon2, Wed4, Sat7, Sun8, Wed11, Sat14, Sun15, Wed18, Sat21, Sun22, Wed25, Thu26, Fri27, Sat28, Sun29
April 2017	Sat8, Sun9, Wed12, Fri14, Sat15, Sun16, Mon17, Wed19, Sat22, Sun23, Mon24, Tue25

Protocols for a Surveillance Flight – when lifesaving patrols are on the beach

The follow protocol has been developed with the DPI to be put into action if a surveillance flight confirm as a shark sighting during patrol hours.

A number of protocols have been established in the event a DPI helicopter needs to contact local lifesaving services about shark activity in the vicinity. These have been established to ensure that there is no panic on the part of the public and that there is a clear communication process for lifesavers to ensure they have the most up-to-date information.

Non-Threatening Species	Threatening Shark/s
<p>If a DPI helicopter visually circles an object in the water, and the public and/or Lifesavers on the beach have seen the circling and may raise concerns, the Helicopter is to radio the local lifesaving service on the simplex channel (Channel 1).</p> <p>On repeater channel; <i>“SurfCom SurfCom this is DPI Helicopter Zone 1”. Can you please advise the Lifeguards/Lifesavers in xxx to go to channel 1?”</i></p> <p>SurfCom will then radio the SLS assets in the area and get them to go to channel 1 to talk direct to the DPI Helicopter.</p> <p><i>On channel 1, “All stations, all stations this is DPI Helicopter Zone X. I am currently situated over X Beach. We have circled an object in the water and sighted a non-threatening hammer head/turtle/seaweed. No alarm needed.”</i></p>	<p>If a DPI helicopter visually circles at a low altitude a potentially dangerous shark or group of unidentified sharks and which is in the immediate vicinity of Surfers/Swimmer in the water the helicopter can radio the local lifesaving service on the simplex channel (Channel 1).</p> <p>On repeater channel; <i>“SurfCom SurfCom this is DPI Helicopter Zone 1”. Can you please advise the Lifeguards/Lifesavers in xxx to go to channel 1?”</i></p> <p><i>On channel 1, “All stations, all stations this is DPI Helicopter Zone X. We are currently situated over X Beach. We have circled a (species of shark/group of approximately X unidentified sharks) in the water; the shark/s is/are at (advise location) and approximately x metres away from surfers/swimmers. We will stay on the channel for assistance.</i></p>

For more information or questions contact:

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