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Western Australian Beaches Promoting Safe Beach use

# An outline of available sources of information 13/09/2013

With the creation of the shark information and education portal, *Sharksmart.com.au*, (name TBC) there will be four channels from which people interested in beach or shark specific information relating to Western Australian Beaches or the Western Australian Coastline can stay informed.

Each channel has a slightly different but complimentary purpose and will appeal to different audiences dependant on their frame of reference. There will be some duplication of information however this information will be delivered in different formats and with a different order of priority within each of the channels.

The overarching proposition of each of the channels is outlined below:

#### Sharksmart.com.au

### Purpose:

- To provide live and aggregated information about shark sightings, tagged shark detections, and beach closures due to shark sightings/detections.
- To provide education about shark species and initiatives to understand shark behaviour off the Western Australian coastline.

#### Audience:

 People looking for information about how to make informed decisions about safe beach / ocean usage specifically in relation to sharks.

### Usage:

- Likely to be accessed prior to making a decision to go to a beach by people who are most concerned about Sharks.
- Likely to be used to look at 'short-term' history of shark related activity at particular beaches.
- Likely to be used for a 'desktop' based information source for research and education.
- Likely to be used by water users of non-patrolled beaches or outside of patrol times.



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### Surf Life Saving WA (@SLSWA) Twitter Feed

#### Purpose:

• To provide live information about all Western Australian beach related issues (including shark sightings, rips, incidents, patrols).

#### Audience:

People interested in all news and live information relating to WA beaches.

#### Usage:

• Likely to be used as a 'quick check' of what, if anything, is happening at a particular destination beach.

### Mybeach.com.au (Surf Life Saving WA website)

### Purpose:

- To provide information about Surf Life Saving in Western Australia
- To provide current hazard information searchable by specific beaches
- To enable current beach conditions and information for patrolled beaches to be available to the public. Information is centrally managed by SurfCom communication centre with detail provided by local managers.

### Audience:

- People interested in Surf Life Saving in Western Australia
- People who consider Surf Life Saving Western Australia as the source of information relating to WA beaches.

### Usage:

- Likely to be accessed prior to making a decision to go to a beach by people who are concerned about all aspects relating to safe beach use.
- Likely to be used for a 'desktop' based information source for information about SLSWA.



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### Beachsafe (Surf Life Saving WA app)

### Purpose:

- To provide current beach hazard and conditions information searchable by specific beaches
- To provide education on safe beach use

### Audience:

- People interested in Surf Life Saving in Western Australia
- People who consider Surf Life Saving Western Australia as the source of information relating to WA beaches.
- People looking for an up to date all-hazard approach to beach safety information.

### Usage:

 Likely to be used as a 'quick check' of what, if anything, is happening at a particular destination beach

# DEPARTMENT OF FISHERIES

COMMUNITY PERCEPTIONS RESEARCH
May 2013



**Marketforce** 



## CONTENTS

RECAPPING THE OBJECTIVES	4
METHODOLOGY	5
TESTS OF STATISTICAL SIGNIFICANCE	6
THE EXTENT THAT THE FEAR OF SHARKS IN WA WATERS IS ALTERING COMMUNITY BEHAVIOUR	7
THE OCEAN USER GROUPS MOST AFFECTED BY THE FEAR OF SHARKS IN WA WATERS	19
WHETHER GEOGRAPHICAL 'POCKETS' OF CONCERN EXIST	29
COMMUNITY SEGMENTS MOST LIKELY TO PROMOTE COMMUNITY ENGAGEMENT AND UNDERSTANDING OF THE PRINCIPLE OF SELF-ACCOUNTABILITY	33
WAYS TO ENCOURAGE PERSONAL ACCOUNTABILITY IN RELATION TO SHARK SAFETY	39
THE MOST APPROPRIATE CHANNELS FOR COMMUNICATION TO VARIOUS USER GROUPS	43
Appendix A Preferred Communication Channels	59
Appendix B Questionnaire	77



### RECAPPING THE OBJECTIVES

The objectives of the study were as follows:

To understand the extent that the fear of sharks in WA waters is altering community behaviour.

To determine the ocean user groups most affected by the fear of sharks in WA waters.

To determine community segments most likely to promote community engagement, and understanding of the principle of self-accountability for mitigating the risk of shark incident in WA waters.

To establish whether geographical 'pockets' of concern exist.

To determine ways to encourage personal accountability in relation to shark safety.

To determine the most appropriate channels for communication to various user groups.

To establish a baseline of knowledge and sentiment from which to measure success of the community engagement strategy.



### **METHODOLOGY**

A sample of n=768 West Australian adults aged 18+ were interviewed between 12 and 22 April 2013.

Metropolitan residents were surveyed online and regional residents by telephone. All fieldwork was managed by WA research supplier Researchpanel. Due to the differences in methodologies the results have been presented separately throughout this report.

Fieldwork quotas were employed to capture a range of beach users (swimmers, boaters, divers/snorkelers etc.) as well as a broad demographic spread of the WA population at large. Data was post-weighted to 2011 ABS census population data by region, age and gender.

Sam	ple Structure - C	ompleted Interv	iews
Region	# Interviews	% Interviews Unweighted	% Interviews Weighted
Metropolitan	565	100%	100%
Perth North	296	52%	55%
Perth South	269	48%	45%
Regional	203	100%	100%
South West	53	26%	59%
Southern	50	25%	21%
Esperance	50	25%	3%
Mid-West	50	25%	17%



## TESTS OF STATISTICAL SIGNIFICANCE

Tests of statistical significance have been carried out at the 95% Confidence Interval.

Notations are shown on tables throughout the report, as explained below.

Circles denote significantly high scores, squares denote significantly low scores. Column notations mark which columns this score is significantly different to.

Who do you believe is most responsible for ensuring a person's safety against sharks %	Perth North	Perth South	South West a	Southern b	Esperance c	Mid-West d
The individual	53	50	61 bcd	94)acd	79	79
The Western Australian Government	29	34	28	4	8	10
Surf Life Saving WA	11	8	2	2	4	4
The local council	2	5	4	0	2	2



To understand the extent that a fear of sharks in WA waters is altering community behaviour



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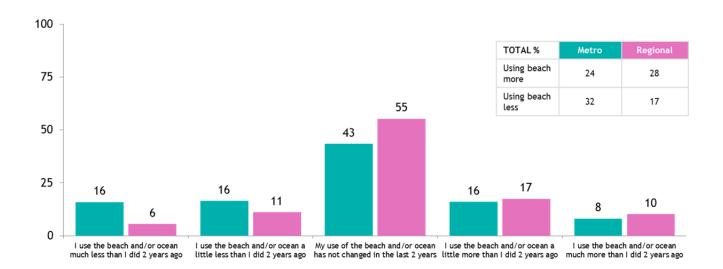


QG. Which of the following statements best describes your use of Western Australian beaches and/or the Indian Ocean in the last 2 years?

### Change in beach usage since 2011

The largest segment of West Australians (43% metro, 55% regional) have not changed their beach use over the past two years. That stated, sizeable proportions are now using the beach more (24% metro, 28% regional) and also less (32% metro, 17% regional) than in the recent past.

Metropolitan Regional (n=565) (n=203)





# QG. Which of the following statements best describes your use of Western Australian beaches and/or the Indian Ocean in the last 2 years?

				Current	Beach Use				Location		
Metropolitan	Overall	Swimming	Diving/Snorkel ling/Spearfishi ng	Surfing/Winds urfing/Kayakin g/Canoeing		Recreation al Boating	Other Activities	Do Not Use Beach	Perth North	Perth South	
Base	565	403	98	68	159	74	285	22	296	269	
I use the beach and/or ocean much less than I did 2 years ago	16	15	12	8	13	11	16	22	15	17	
I use the beach and/or ocean a little less than I did 2 years ago	16	17	13	11	12	19	15	9	14	19	
My use of the beach and/or ocean has not changed in the last 2 years	43	40	39	40	48	41	49	64	46	40	
I use the beach and/or ocean a little more than I did 2 years ago	16	19	23	19	21	18	15	0	19	13	
I use the beach and/or ocean much more than I did 2 years ago	8	9	13	21	6	11	5	4	6	10	
% Using the beach more often	24	28	36	40	27	29	20	4	25	23	
% Not using the beach as often	32	32	25	19	25	30	31	31	29	36	

			5 8	Cui	rrent Beach	Use		9	Location				
Regional	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	South West	Southern B	Esperance c		
Base	203	130	11	26	79	13	73	16	53	50	50	50	
I use the beach and/or ocean much less than I did 2 years ago	6	5	0	0	3	0	9	20	2 bcd	6 ad	8 ad	18 acb	
I use the beach and/or ocean a little less than I did 2 years ago	11	13	0	11	10	15	9	0	10	15	18	11	
My use of the beach and/or ocean has not changed in the last 2 years $$	55	49	66	38	48	52	59	79	59	54	39	47	
I use the beach and/or ocean a little more than I did 2 years ago	17	20	33	51	25	29	16	1	18	14	22	19	
I use the beach and/or ocean much more than I did 2 years ago	10	12	1	0	14	4	6	0	11	11	13	5	
% Using the beach more often	27	32	34	51	39	33	22	1	29	25	35	24	
% Not using the beach as often	17	18	0	11	13	15	18	20	12	21	26	29	

Note: Base sizes less than 30should be treated as indicative only.

Column notations, circles and squares denote significant differences.

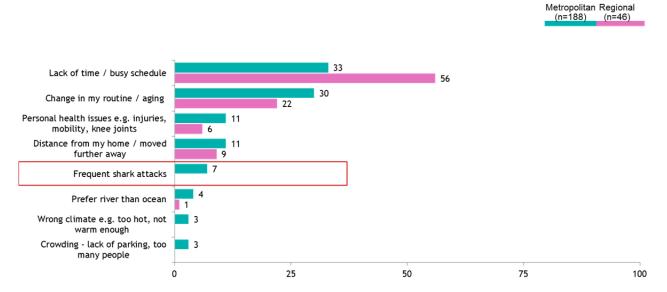


QH. In a short sentence please explain your reasons for using Western Australian Beaches and/or the Indian Ocean less frequently in the last 2 years

### Reasons for using WA beaches less frequently

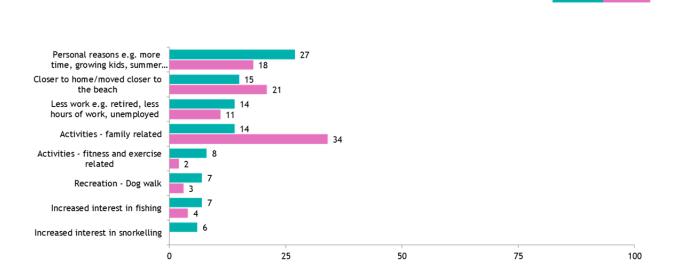
Shark attacks were mentioned by metropolitan residents without prompting as one reason for visiting the beach less frequently. This result (7%) is significant and equates to 2% of *all* WA metropolitan residents (34,577 ppl).

However, shark attacks were not the most common reason for using beaches less often, and were not mentioned at all by regional residents.



% using beach and/or ocean less frequently

Demographic changes to WA's population such as aging and retirement, children growing up and moving closer to the beach contribute strongly to an increase in beach use over the past two years.





Metropolitan Regional (n=128) (n=55) QI. Thinking now about the chances of you personally encountering a shark at Western Australian Beaches or off the Western Australian coast, which of the following statements do you most agree with?

### Perceived risk of a shark encounter

Significant proportions of WA residents (40% metro, 37% regional) expect they are more likely to encounter a shark today than they were two years ago.

Metropolitan Regional (n=565) (n=203) 100 Regional TOTAL % Metropolitan More likely 40 37 75 % General Population 18+ Less likely 8 8 55 52 50 25 23 25 15 14 7 6 2 1 I believe I am much less likely I believe I am a little less likely I believe I am no more or less I believe I am a little more I believe I am much more to encounter a shark today than I was 2 years ago to encounter a shark today than I was 2 years ago likely to encounter a shark likely to encounter a shark likely to encounter a shark today than I was 2 years ago today than I was 2 years ago today than I was 2 years ago



# QI. Thinking now about the chances of you personally encountering a shark at Western Australian Beaches or off the Western Australian coast, which of the following statements do you most agree with?

					Location					
Metropolitan	Overall	Swimming	Diving/Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	Perth North	Perth South
Base	565	403	98	68	159	74	285	22	296	269
I believe I am much less likely to encounter a shark today than I was 2 years ago	6	4	4	2	6	6	7	5	5	7
I believe I am a little less likely to encounter a shark today than I was 2 years ago	2	3	1	3	2	2	2	0	3	2
I believe I am no more or less likely to encounter a shark today than I was 2 years ago	52	53	59	59	49	53	52	63	52	51
I believe I am a little more likely to encounter a shark today than I was 2 years ago	25	25	25	24	26	21	24	18	26	24
I believe I am much more likely to encounter a shark today than I was 2 years ago	15	15	10	12	16	18	15	14	14	17
% I am more likely	40	40	35	36	43	39	39	32	40	41
% I am less likely	8	7	5	5	8	7	9	5	8	8

				Cur	rent Beach	Use			Location				
Regional	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	South Western WA	Southern WA	Esperance	Mid-Western WA	
Base	203	130	11	26	79	13	73	16	53	50	50	50	
I believe I am much less likely to encounter a shark today than I was 2 years ago	7	6	7	0	5	0	9	14	4	16	8	8	
I believe I am a little less likely to encounter a shark today than I was 2 years ago	1	2	12	6	2	1	2	0	0	3	11	2	
I believe I am no more or less likely to encounter a shark today than I was 2 years ago	55	53	44	22	55	60	59	55	56	54	52	52	
I believe I am a little more likely to encounter a shark today than I was 2 years ago	23	25	3	53	24	1	17	15	24	17	19	29	
I believe I am much more likely to encounter a shark today than I was 2 years ago	14	15	34	18	14	38	12	16	16	10	10	9	
% I am more likely	37	40	36	72	38	39	30	31	40	27	29	38	
% I am less likely	8	8	19	6	7	1	11	14	4 b,c,d	19 a,c,d	18 a,b,d	10 a,b,c	

Note: Base sizes less than 30should be treated as indicative only. Column notations, circles and squares denote significant differences.

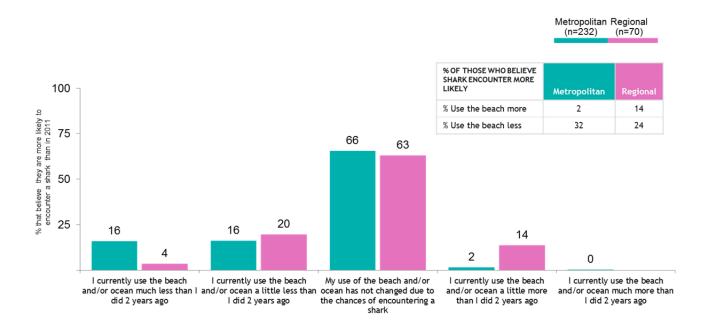


# QJ. How would you say your chances of encountering a shark have influenced how you use Western Australian Beaches and/or the Indian Ocean today?

# Change in beach use among residents who perceive they are <u>more likely</u> to encounter a shark today than in 2011

Of those West Australians who feel they are more likely to encounter a shark today, approximately 2 in 3 say their use of the beach/ocean has not changed as a result.

Some of these West Australians are using WA beaches less than they did two years ago. This segment equates to 13% of all metro residents (+/- 225k) and 8% of all regional residents (+/- 40K).





# QJ. How would you say your chances of encountering a shark have influenced how you use Western Australian Beaches and/or the Indian Ocean today?

				Current	Beach Use				Loca	tion
Metropolitan	Overall	Swimming	Diving/Snorkelling/ Spearfishing	Surfing/Windsurfing /Kayaking/Canoein g	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	Perth North	Perth South
Base	232	166	36	26	71	32	110	7	120	112
I currently use the beach and/or ocean much less than I did 2 years ago	16	16	4	7	10	8	18	15	12	21
I currently use the beach and/or ocean a little less than I did 2 years ago	16	17	21	26	23	27	14	0	12	22
My use of the beach and/or ocean has not changed due to the chances of encountering a shark	66	66	76	67	64	62	64	85	75	55
currently use the beach and/or ocean a little more than idid 2 years ago	2	1	0	0	3	3	3	0	1	2
I currently use the beach and/or ocean much more than I did 2 years ago	0	0	0	0	0	0	1	0	0	1
% Using beach more often	2	1	0	0	3	3	3	0	1	3
% Using beach less often	32	33	24	33	33	35	32	15	24	43

				Cu	rrent Beach	Use				Loca	tion	
Regional	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	South Western WA	Southern WA	Esperance	Mid-Western WA
Base	70	46	4	15	26	3	18	6	21	14	16	19
I currently use the beach and/or ocean much less than I did 2 years ago	4	4	0	0	0	0	10	14	5	0	6	2
I currently use the beach and/or ocean a little less than I did 2 years ago	20	12	0	14	21	43	46	0	23	23	19	5
My use of the beach and/or ocean has not changed due to the chances of encountering a shark	63	67	100	60	70	57	32	84	56	69	72	82
I currently use the beach and/or ocean a little more than I did 2 years ago	14	17	0	25	9	0	12	2	16	8	2	12
I currently use the beach and/or ocean much more than I did 2 years ago	0	0	0	0	0	0	0	0	0	0	0	0
% Using beach more often	14	17	0	25	9	0	12	2	16	8	2	12
% Using beach less often	23	16	0	14	21	43	57	14	28	23	26	7

Note: Base sizes less than 30should be treated as indicative only.

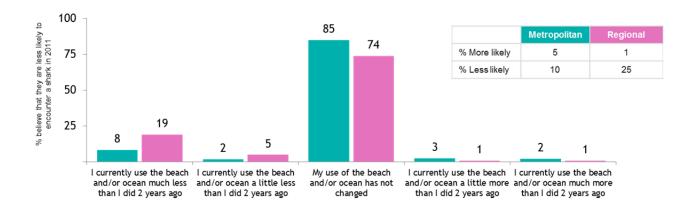
Column notations, circles and squares denote significant differences.



# QJ. How would you say your chances of encountering a shark have influenced how you use Western Australian Beaches and/or the Indian Ocean today?

Among the minority (8% metro, 8% regional) who perceive they are less likely to encounter a shark today than in 2011, most (85%, 74%) state their beach use has not changed as a result.

Metropolitan Regional (n=45) (n=27)

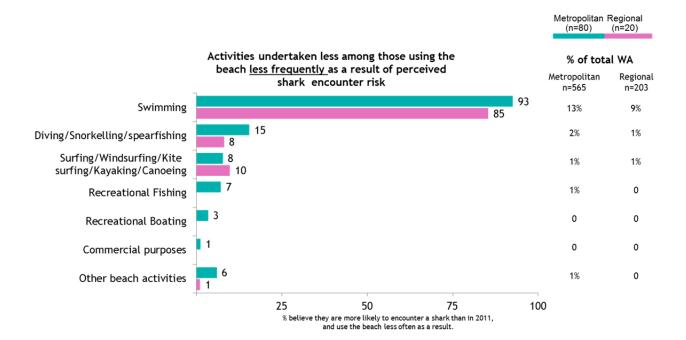




# QK. Which activities are you using the beach and/or ocean less often for due to your chances of encountering a shark?

### Impact on beach activities as a result of the risk of a shark encounter

Reflecting overall levels of participation, swimming is the activity most affected by the perceived risk of a shark encounter.





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To determine the ocean user groups most affected by a fear of sharks in WA waters



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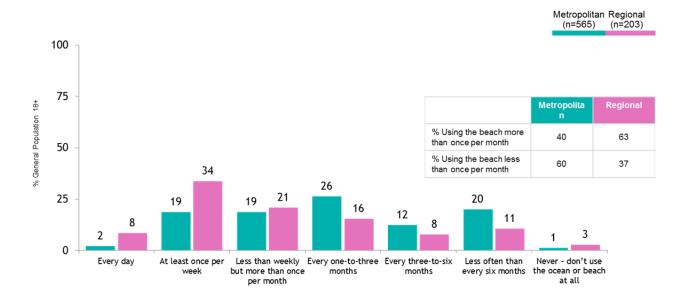


### QB. On average, how often do you use Western Australian Beaches and/or the Indian Ocean?

### Frequency of beach usage

Western Australia's beaches are widely used by metropolitan (40% visit more than once per month) and regional residents (63%).

More frequent beach users include surfers/windsurfers/kayakers/canoeists, boaters and divers/snorkelers.





## QB. On average, how often do you use Western Australian Beaches and/or the Indian Ocean?

			Cur	rent Beach Use %	(unless base)			Location		
Metropolitan	Overall	Swimming	Diving/Snorkelling/S pearfishing	Surfing/Windsurfing/ Kayaking/Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Perth North	Perth South	
Base	565	403	98	68	159	74	285	296	269	
Every day	2	2	3	6	3	5	2	2	2	
At least once per week	19	21	25	51	23	18	16	21	16	
Less than weekly but more than once per month	19	20	23	22	19	26	18	22	14	
Every one-to-three months	26	28	33	13	28	30	26	20	34	
Every three-to-six months	12	12	9	1	12	8	14	13	12	
Less often than every six months	20	16	7	6	15	13	24	20	20	
Never - don't use the ocean or beach at all	1	0	0	0	0	0	0	1	1	

			Curr	ent Beach Us	se (% unless i	base)		Location				
Regional	Overall	Swimming	Diving/Snorke lling/Spearfis hing	Surfing/Winds urfing/Kayaki ng/Canoeing	Recreational Fishing	Recreational Boating	Other Activities	South Western WA	Southern WA	Esperance	Mid-Western WA	
Base	203	130	11	26	79	13	73	53	50	50	50	
Every day	8	11	3	11	12		9	11	2	14	6	
At least once per week	34	37	26	48	37	50	38	39	27	42	23	
Less than weekly but more than once per month	21	22	44	25	22	45	15	20	24	14	22	
Every one-to-three months	16	16	1	15	13	1	16	18	12	9	13	
Every three-to-six months	8	8	17	0	4	0	10	7	12	14	6	
Less often than every six months	11	7	8	0	13	5	12	3 bcd	20 ac	5 abd	26 ac	
Never - don't use the ocean or beach at all	3	0	0	0	0	0	0	3	3	2	4	

Column notations, circles and squares denote significant differences.

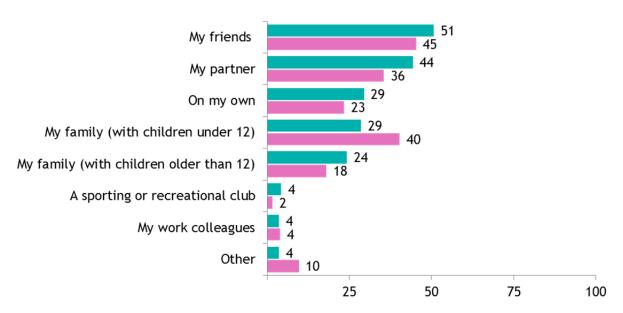


### QE Who do you usually use Western Australian Beaches and/or the Indian Ocean with?

### Beach visitation party

Individuals tend to visit the beach with others (71% metropolitan, 77% regional) rather than visiting alone. Beach companionship is naturally dependent on family and relationship status (e.g. visit with partner) but various beach activities (e.g. surfing/windsurfing/kayaking/canoeing, boating) also lend themselves to different companions.

Metropolitan Regional (n=543) (n=187)



n=730 % of beach users (at QB)



.../23

## QE Who do you usually use Western Australian Beaches and/or the Indian Ocean with?

				Current E	each Use			Location		
Metropolitan	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Perth North	Perth South	
Base	543	403	98	68	159	74	285	285	258	
On my own	29	32	39	45	31	31	29	28	31	
My friends	51	56	69	74	58	70	47	50	51	
My family (with children under 12)	29	32	29	27	33	27	28	30	27	
My family (with children older than 12)	24	25	23	24	33	28	24	25	23	
My partner	44	44	47	48	47	42	53	42	47	
My work colleagues	4	5	6	5	6	4	4	3	4	
A sporting or recreational club	4	5	7	13	6	5	2	4	4	
Other	4	3	1	2	3	1	4	3	4	

		Current Beach Use							Location			
Regional	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	South Westem WA	Southern WA	Esperance	Mid-Western WA	
Base	187	130	11	26	79	13	73	49	46	47	45	
On my own	23	24	36	35	28	26	28	26	21	20	16	
My friends	45	53	73	60	55	61	34	45	55	40	35	
My family (with children under 12)	40	46	70	45	46	74	36	41	34	43	46	
My family (with children older than 12)	18	20	46	28	(34)	30	18	14	28	24	19	
My partner	36	29	77	39	51	49	42	29	55	45	34	
My work colleagues	4	4	38	25	8	21	4	2	10	5	2	
A sporting or recreational club	2	2	12	6	3	0	0	0	7	0	0	
Other	10	8	0	11	6	0	8	10	11	10	8	

Column notations, circles and squares denote significant differences.

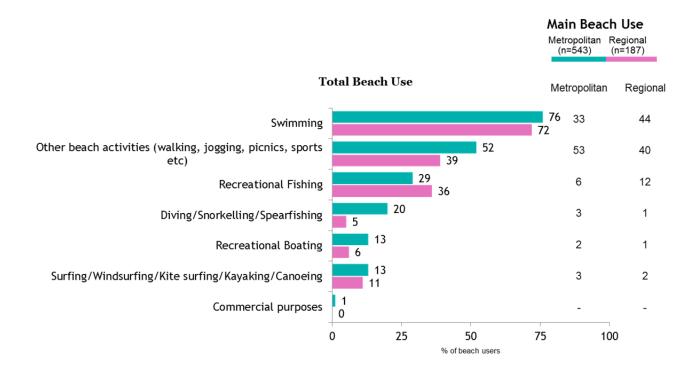


- QC. What do you mainly use Western Australian Beaches and the Indian Ocean for?
- QD. In what other ways do you use Western Australian beaches and the Indian Ocean for?

### Purpose of using the beach

Swimming represents the main use of WA's beaches with more than seven in ten beach users (76% metropolitan, 72% regional) engaging in this activity.

On average, people use the beach for 2 activities in metropolitan WA and 1.7 activities in regional WA.





### QD In what other ways do you use Western Australian Beaches and the Indian Ocean for?

## Purpose of using the beach (total use)

				Location					
Metropolitan	Overall	Swimming	Diving/Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Perth North	Perth South
Base	565	403	98	68	159	74	285	296	269
Swimming	76	100	88	89	75	84	64	77	74
Diving/Snorkelling/spearfishing	20	23	100	46	33	45	10	19	21
Surfing/Windsurfing/Kite surfing/Kayaking/Canoeing	13	15	31	100	25	33	6	14	12
Recreational Fishing	29	28	48	54	100	68	20	27	31
Recreational Boating	12	14	28	31	29	100	6	13	12
Commercial purposes	1	1	2	5	2	1	1	2	1
Other beach activities (walking, jogging, picnics, sports etc.)	52	44	26	25	37	27	100	51	54
Don't use beaches/Indian Ocean for anything else	1	0	0	0	0	0	0	1	1

		Current Beach Use							Location			
Regional	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing /Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	South Western WA	Southern WA	Esperance	Mid-Western WA	
Base	203	130	11	26	79	13	73	53	50	50	50	
Swimming	72	100	74	80	75	63	53	74	68	68	68	
Diving/ Snorkelling / spearfishing	5	6	100	23	12	22	3	5	12	9	0	
Surfing / Windsurfing/ Kite surfing/ Kayaking/ Canoeing	11	13	47	100	15	22	7	10	12	22	13	
Recreational Fishing	36	38	81	48	100	50	22	33	50	50	29	
Recreational Boating	6	5	25	12	9	100	10	7	5	7	3	
Commercial purposes	0	0	1	0	0	0	0	0	0	4	0	
Other beach activities (walking, jogging, picnics, sports etc)	39	29	24	23	23	61	100	40	38	40	35	
Don't use beaches/Indian Ocean for anything else	3	0	0	0	0	0	0	3	3	2	4	

Tests of statistical significance not presented.

Column notations, circles and squares denote significant differences.



### QD In what other ways do you use Western Australian Beaches and the Indian Ocean for?

### Ocean user groups most affected - Metropolitan WA

In the metro area, the increased risk of a shark encounter is more apparent as age increases, and is highest amongst those aged 55 years and over.

		100	Age Groups	v.	Frequency of Beach Use					
%	Total Metro	18 to 34 Years Old a	35 to 54 Years Old b	55+ Years Old c	Heavy Beach User ( <weekly)< th=""><th>Regular Beach User (<every 3<br="">months)</every></th><th>Occasional Beach User (3 months +)</th><th>Non-Beach User</th></weekly)<>	Regular Beach User ( <every 3<br="">months)</every>	Occasional Beach User (3 months +)	Non-Beach User		
Metropolitan (base)	565	59	221	285	112	245	186	22		
More likely to encounter a shark than 2 years ago	40	24 b,c	38 a,c	46 a,b	38	43	39	32		
Metropolitan more likely (base)	232	14	86	132	44	108	73	7		
Among more likely Using beach <u>less often</u> as a result of being more likely to encounter a shark	32	36	31	33	23	32	40	15		
Metropolitan (base)	565	59	221	285	112	245	186	22		
Among all (approximation) Using beach <u>less often</u> as a result of being more likely to encounter a shark	14	10	13	16	9	14	17	5		

Circles denote significantly high scores. Squares denote significantly low scores.

### Ocean user groups most affected - Regional WA

%	Total Regional		Age Groups		Frequency of Beach Use					
		18 to 34 Years Old a	35 to 54 Years Old b	55+ Years Old c	Heavy Beach User ( <weekly)< th=""><th>Regular Beach User (<every 3<br="">months)</every></th><th>Occasional Beach User (3 months +)</th><th>Non-Beach User</th></weekly)<>	Regular Beach User ( <every 3<br="">months)</every>	Occasional Beach User (3 months +)	Non-Beach User		
Regional (base)	203	14	82	107	78	63	46	16		
More likely to encounter a shark than 2 years ago	37	26	46	30	37	39	33	31		
Regional more likely (base)	70	4	32	34	27	23	14	6		
Among more likely Using beach <u>less often</u> as a result of being more likely to encounter a shark	23	3	20	31	28	15	32	14		
Regional (base)	203	14	82	107	78	63	46	16		
Among all (approximation) Using beach <u>less often</u> as a result of being more likely to encounter a shark	11	1	9	14	13	6	15	4		

Circles denote significantly high scores. Squares denote significantly low scores.

bcd Column notations mark which other columns this score is significantly different to.



bcd Column notations mark which other columns this score is significantly different to.

### Ocean user groups most affected - Metropolitan WA

Divers and snorkelers are less likely to change their behaviour

			Current Beach Use							
%	Total Metro	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach		
Metropolitan (base)	565	403	98	68	159	74	285	22		
More likely to encounter a shark than 2 years ago	40	40	35	36	43	39	39	32		
Metropolitan more likely (base)	232	166	36	26	71	32	110	7		
Among more likely Using beach <u>less often</u> as a result of being more likely to encounter a shark	32	33	24	33	33	35	32	15		
Metropolitan (base)	565	403	98	68	159	74	285	22		
Among all (approximation) Using beach <u>less often</u> as a result of being more likely to encounter a shark	14	14	9	12	15	16	13	5		

Circles denote significantly high scores.

Squares denote significantly low scores.

bcd Column notations mark which other columns this score is significantly different to.

### Ocean user groups most affected - Regional WA

Regional residents who surf/windsurf/kayak/canoe are more likely to expect that the risk of shark encounter is higher now, than 2 years ago. But this hasn't affected their use of the beach/ocean.

Regional residents that swim are less likely to be using the beach less; those that engage in 'other' activities are more likely to be using the beach less.

					urrent Beach Us	e				
%	Total Regional	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach		
Regional (base)	203	130	11	26	79	13	73	16		
More likely to encounter a shark than 2 years ago	37	40	36	72	38	39	30	31		
Regional more likely (base)	70	46	4	15	26	3	18	6		
Among more likely Using beach <u>less often</u> as a result of being more likely to encounter a shark	23	16	0	14	21	43	57	14		
Regional (base)	203	130	11	26	79	13	73	16		
Among all (approximation) Using beach <u>less often</u> as a result of being more likely to encounter a shark	11	8	7	10	9	17	21	4		

Circles denote significantly high scores.

Squares denote significantly low scores.

bcd Column notations mark which other columns this score is significantly different to.



To establish whether geographical 'pockets' of concern exist



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## GEOGRAPHICAL POCKETS OF CONCERN

In the metro area, people living south of the river are more inclined to be using the beach less often, as a result of a perceived higher shark encounter risk.

%	Total Metro	Total Regional	Perth North a	Perth South	South West	Southern	Esperance	Mid-West
Base	565	203	296	269	53	50	50	50
More likely to encounter a shark than 2 years ago	40	37	40	41	40	27	29	38
Base (more likely)	232	70	120	112	21	14	16	19
Among more likely Using beach <u>less often</u> as a result of being more likely to encounter a shark	32	23	24 b	43 a	28	23	26	7
Base	565	203	296	269	53	50	50	50
Among all (approximation) Using beach <u>less often</u> as a result of being more likely to encounter a shark	14	11	10 b	18 a	13	10	11	3



bcd Column notations mark which other columns this score is significantly different to.



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To determine community segments most likely to promote community engagement, and understanding of the principle of self-accountability for mitigating the risk of shark incident in WA waters



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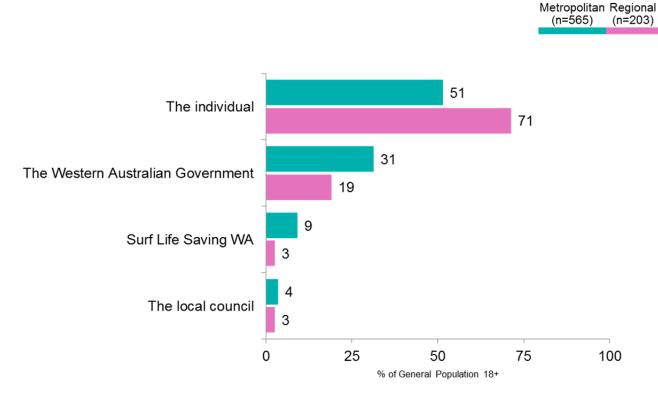


QL Who do you believe is most responsible for ensuring a person's safety against sharks at Western Australian Beaches and/or in the Indian Ocean?

### Responsibility for ensuring beach safety

The majority of Western Australians believe the responsibility for ensuring beach safety against sharks lies with the individual. Of the balance, most defer this responsibility to the Western Australian government.

Regional residents, non-beach goers, and those who engage in non-water based activities (e.g. walks, games, picnics), are most likely to assign responsibility to the individual.



Note other responses (4% Metro, 4% Regional) are not shown on chart.



QM	Why do	you feel	that	is responsible?
----	--------	----------	------	-----------------

# Reasons for responsibility delegation

The unprompted reasons for responsibility delegation are provided below.

Individual (n=453)	The WA Government (n=199)	The Local Council (n=23)	Surf Life Saving WA (n=60)
Safety at own discretion - 89%	They are the law makers for fishing or shark culling - 21%	The beach belongs to local council - 23%	They are responsible for patrolling - 49%
This ocean is shark's territory - 27%	They handle our money/taxes - 18%		They are life savers - 17%
	They are responsible for safety - 13%		
	It is government's duty - 11%		



.../36

QL Who do you believe is most responsible for ensuring a person's safety against sharks at Western Australian Beaches and/or in the Indian Ocean?

# Responsibility for ensuring ocean / beach safety - By region

In regional areas, residents in Southern WA almost universally assign responsibility to the individual, while those in the South West are comparatively more likely to assign responsibility to the WA government (28%).

%	Total Metro	Total Regional	Perth North	Perth South	South West	Southern	Esperance	Mid-West
Base	565	203	296	269	53	50	50	50
The individual	51	71	53	50	61	94	79	79
The Western Australian Government	31	19	29	34	28	4	8	10
Surf Life Saving WA	9	3	11	8	2	2	4	4
The local council	4	3	2	5	4	0	2	2



bcd Column notations mark which other columns this score is significantly different to.



QL Who do you believe is most responsible for ensuring a person's safety against sharks at Western Australian Beaches and/or in the Indian Ocean?

# Responsibility for ensuring ocean safety - Metropolitan WA, by activity

In the metro area there are some minor differences by type of activity.

					urrent Beach Us	e		
%	Total Metro	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach
Metropolitan (base)	565	403	98	68	159	74	285	22
The individual	51	49	49	45	46	42	56	69
The Western Australian Government	31	33	34	36	37	40	26	14
Surf Life Saving WA	9	9	8	10	9	9	10	17
The local council	4	4	4	5	3	0	4	0

Circles denote significantly high scores. Squares denote significantly low scores.

# Responsibility for ensuring ocean safety - Regional WA, by activity

%	Total Regional	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/Ka yaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach
Regional (base)	203	130	11	26	79	13	73	16
The individual	71	71	76	64	66	61	75	86
The Western Australian Government	19	23	24	32	23	21	14	0
Surf Life Saving WA	3	1	0	0	1	1	5	13
The local council	3	2	0	0	7	0	3	0

Circles denote significantly high scores.

bcd Column notations mark which other columns this score is significantly different to.



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To determine ways to encourage personal accountability in relation to shark safety



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QN What do you believe needs to be done in order to ensure that individuals take responsibility for their safety in relation to the likelihood of encountering a shark at a Western Australian Beach and/or in the Indian Ocean?

### The top coded themes in relation to verbatim responses to this question were:

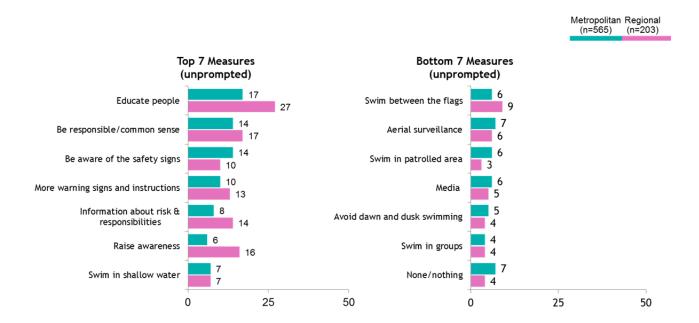
- 1. Educate People
- 2. Take care / be aware / watch out / look out / be responsible / common sense
- 3. Outdoor signs and instructions
- 4. Raise awareness
- 5. Information about risks and responsibilities
- 6. Swim between the flags
- 7. Swim shallow
- 8. Aerial surveillance / surf patrol / monitoring
- 9. Swim in patrolled area
- 10. Media
- 11. Avoid dawn or dusk swimming
- 12. Swim in groups
- 13. Advertising



QN What do you believe needs to be done in order to ensure that individuals take responsibility for their safety in relation to the likelihood of encountering a shark at a Western Australian Beach and/or in the Indian Ocean?

### Ensuring individuals take responsibility

A range of suggestions were made to ensure individuals take responsibility for their safety in relation to the likelihood of encountering a shark. Some of the suggestions were directed at an authority (e.g. providing education, providing beach signage and instructions, raising awareness) while others were directed at the individual (e.g. using common sense, being aware of safety signs, swimming in the shallows).





To determine the most appropriate channels for communication to various user groups



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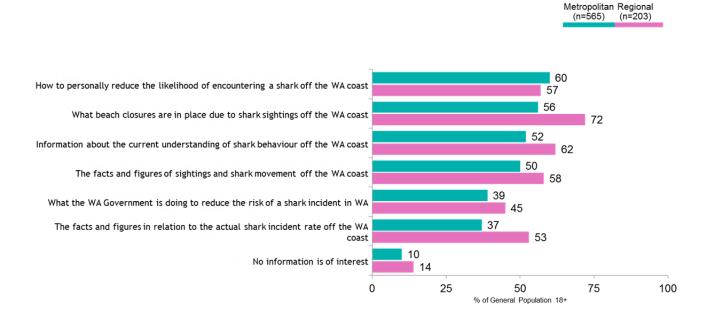


### QO. What information about sharks off the WA coast would be of interest to you?

### Interest in information about sharks

The majority of West Australians are interested in receiving information about sharks off the WA coast. Knowing what beach closures are in place (due to shark sightings) has a very high level of interest among both metropolitan (56%) and regional (72%) residents.

Knowing what the WA Government is doing to reduce the risk of shark incidents, and actual statistics on shark incidents, receive a lower level of interest.





# QO. What information about sharks off the WA coast would be of interest to you?

# Interest in information about sharks

la de la companya de					Location					
Metropolitan	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	Perth North	Perth South
Base	565	403	98	68	159	74	285	22	296	269
The facts and figures of sightings and shark movement off the WA coast	50	52	58	62	55	53	49	32	50	50
The facts and figures in relation to the actual shark incident rate off the WA coast	37	38	48	46	42	46	37	19	35	40
How to personally reduce the likelihood of encountering a shark off the WA coast	60	64	65	60	55	49	62	40	59	61
What beach closures are in place due to shark sightings off the WA coast	56	59	55	63	55	55	58	37	53	58
What the WA Government is doing to reduce the risk of a shark incident in Western	39	41	47	49	46	40	36	19	35	43
Information about the current understanding of shark behaviour off the WA coast	52	56	63	73	49	64	55	32	49	57

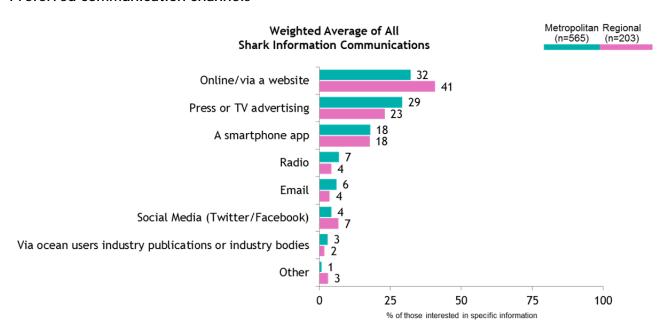
				Cur	rent Beach	Use				Location				
Regional	Overall	Swimmin g	Diving/S norkellin g/Spearf ishing	Surfing/ Windsurf ing/Kaya king/Can oeing	Recreati onal Fishing	Recreati onal Boating	Other Activitie S	Do Not Use Beach	South Western WA	Southern WA	Esperanc e	Mid- Western WA		
Base	203	130	11	26	79	13	73	16	53	50	50	50		
The facts and figures of sightings and shark movement off the WA coast	58	60	72	48	50	93	65	42	62	58	47	43		
The facts and figures in relation to the actual shark incident rate off the WA coast	53	55	65	69	43	69	57	61	58	47	45	46		
How to personally reduce the likelihood of encountering a shark off the WA coast	57	61	62	63	42	77	66	34	55	63	42	55		
What beach closures are in place due to shark sightings off the WA coast	72	79	88	77	60	76	77	53	74	69	48	69		
What the WA Government is doing to reduce the risk of a shark incident in Western	45	46	53	49	40	87	54	55	44	53	42	41		
Information about the current understanding of shark behaviour off the WA coast	62	63	72	68	57	88	76	52	55	83	55	59		

Column notations, circles and squares denote significant differences.



### QP1-6. How would you most like to access this information?

### Preferred communication channels



	Facts and figures of sightings and shark incident rate off the WA coast	Facts and figures in relation to the actual shark incident rate off the WA coast	How to personally reduce the likelihood of encountering a shark off the WA coast	What beach closures are in place due to shark sightings off the WA coast	What the WA government is doing to reduce the risk of a shark incident in Western Australia	Information about the current understanding of shark behaviour off the WA coast
Metropolitan WA (base)	280	203	333	314	218	293
A smartphone app	22	17	16	29	11	10
Online/via a website	(33)	(38)	28	24	30	(43)
Press or TV advertising	26	25	(35)	21	(41)	29
Social Media (Twitter/ Facebook)	4	3	5	5	5	3
Via ocean users industry publications or industry bodies	2	4	3	2	2	4
Email	7	5	6	6	6	7
Radio	6	7	5	13	6	4
Other	1	1	1	1	1	1
Regional WA (base)	104	98	106	128	91	128
A smartphone app	24	14	19	25	10	11
Online/via a website	33	(49)	38	33	43	(50)
Press or TV advertising	20	22	(24)	15	(33)	(27)
Social Media (Twitter/ Facebook)	7	7	8	6	7	5
Via ocean users industry publications or industry bodies	0	2	1	0	1	0
Email	5	1	4	3	2	2
Radio	8	3	2	12	3	4

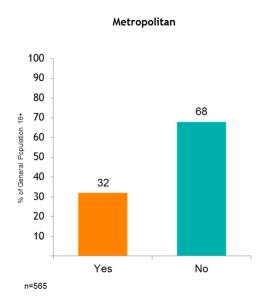
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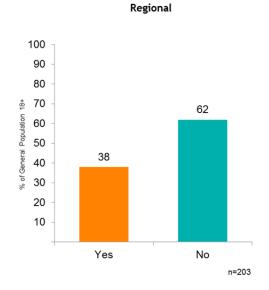


QQ. Are you aware of any initiatives implemented by the Government of Western Australia in the last 12 months to reduce the risk of shark incidents and understand shark behaviour off the Western Australian coast?

### Awareness of Government initiatives

More than three in ten West Australians (32% metro, 38% regional) are aware of initiatives implemented by the Government of Western Australia in the last 12 months to reduce the risk of shark incidents and understand shark behaviour off the Western Australian coast.







QQ. Are you aware of any initiatives implemented by the Government of Western Australia in the last 12 months to reduce the risk of shark incidents and understand shark behaviour off the Western Australian coast?

### **Awareness of Government initiatives**

						Location				
Metropolitan	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreation al Fishing	Recreation al Boating		Do Not Use Beach	Perth North	Perth South
Base	565	403	98	68	159	74	285	22	296	269
Yes	32	33	34	37	33	45	28	42	34	28
No	68	67	66	63	67	55	72	58	66	72

Regional				Cur			Location					
	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	South Western WA	Southern WA	Esperance	Mid-Western WA
Base	203	130	11	26	79	13	73	16	53	50	50	50
Yes	38	40	12	43	35	40	44	29	35	39	42	46
No	62	60	88	57	65	60	56	71	65	61	58	54

Note: Base sizes less than 30should be treated as indicative only. Column notations, circles and squares denote significant differences.



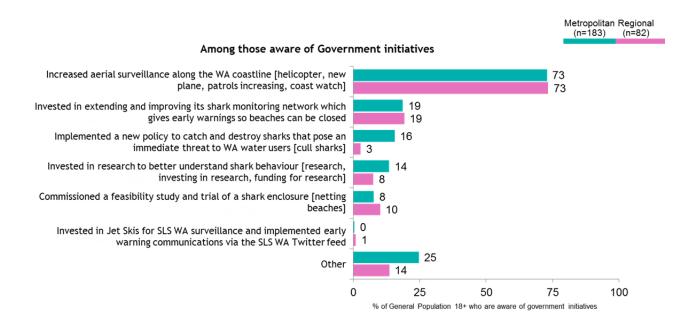
QR Please list any of the actions or initiatives you are aware that the Government of Western

Australia has taken in the last 12 months to reduce the risk of shark incidents and understand shark

behaviour off the Western Australian coast

### Specific knowledge of Government initiatives - unprompted responses

Among Western Australians aware of Government initiatives, over seven in ten spontaneously mention increased aerial surveillance along the WA coastline.

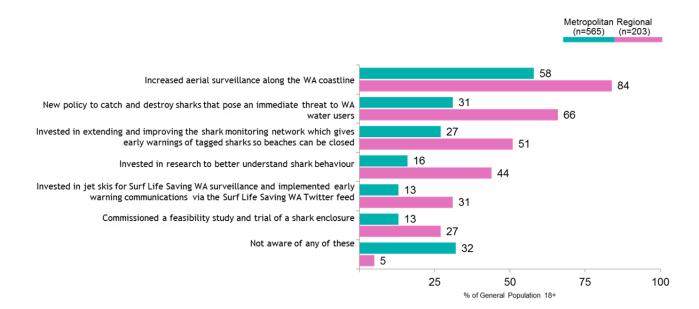




QS. Are you aware that in the last 12 months the Government of Western Australia has done the following to reduce the risk of shark incidents and understand shark behaviour off the Western Australian coast?

### Knowledge of Government initiatives - prompted responses

Among all Western Australians, aerial surveillance is clearly the most well known Government shark initiative. The Government's 'catch and destroy' policy and the shark tagging and monitoring network are also well known.





QS. Are you aware that in the last 12 months the Government of Western Australia has done the following to reduce the risk of shark incidents and understand shark behaviour off the Western Australian coast?

# Knowledge of Government initiatives - prompted responses

			and the second	Cu	rrent Beach L	lse			Loca	tion
	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canneing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	Perth North	Perth South
Metropolitan WA (Base)	565	403	98	68	159	74	285	22	296	269
Increased aerial surveillance along the WA coastline [helicopter, new plane, patrols increasing, coast watch]	58	59	54	62	60	63	58	73	58	57
Commissioned a feasibility study and trial of a shark enclosure [netting beaches]	13	13	15	18	16	19	12	18	13	13
Invested in research to better understand shark behaviour [research, investing in research, funding for research]	16	16	20	25	21	32	13	28	16	15
Invested in Jet Skis for SLS WA surveillance and implemented early warning communications via the SLS WA Twitter feed	13	14	19	21	18	21	11	19	13	14
Invested in extending and improving its shark monitoring network which gives early warnings so beaches can be closed	27	28	27	41	32	37	25	42	30	24
Implemented a new policy to catch and destroy sharks that pose an immediate threat to WA water users [cull sharks]	31	33	32	46	37	40	26	47	31	31

				Cu	rrent Beach I	Use			Location			
	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing /Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	South Western WA	Southern WA	Esperance	Mid-Western WA
Regional WA (Base)	203	130	11	26	79	13	73	16	53	50	50	50
Increased aerial surveillance along the WA coastline [helicopter, new plane, patrols increasing, coast watch]	84	82	49	79	83	73	84	66	81	93	74	86
Commissioned a feasibility study and trial of a shark enclosure [netting beaches]	27	23	34	31	34	49	27	18	23	31	36	36
Invested in research to better understand shark behaviour [research, investing in research, funding for research]	44	37	31	45	47	26	54	60	41	56	34	40
Invested in Jet Skis for SLS WA surveillance and implemented early warning communications via the SLS WA Twitter feed	31	28	26	46	36	22	33	37	38	23	22	17
Invested in extending and improving its shark monitoring network which gives early warnings so beaches can be closed	51	49	27	64	55	46	45	76	48	51	57	61
Implemented a new policy to catch and destroy sharks that pose an immediate threat to WA water users [cull sharks]	66	64	40	45	63	59	60	56	66	65	53	70

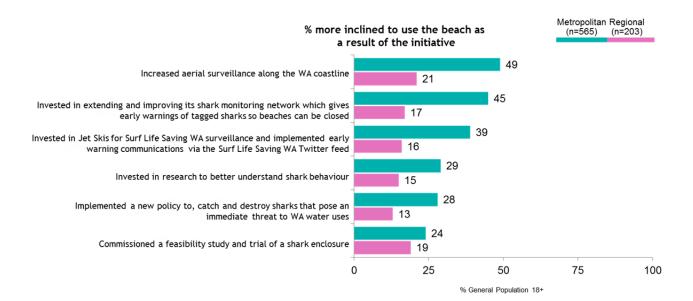
Note: Base sizes less than 30should be treated as indicative only.

Column notations, circles and squares denote significant differences.



### Potential impact of Government initiatives - more inclined to use the beach

Increased aerial surveillance and the shark tagging and monitoring network drive the strongest levels of increased beach visitation among Western Australians.





# More inclined to use the beach as a result of government initiatives

		oo.		-	% More In	clined		50	Location			
				Current	Beach Use				Loca	ition		
Metropolitan	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	Perth North	Perth South		
Base	565	403	98	68	159	74	285	22	296	269		
Increased aerial surveillance along the WA coastline	49	52	41	61	48	42	50	22	49	50		
Commissioned a feasibility study and trial or a shark enclosure	24	26	23	29	24	21	24	9	24	25		
Invested in Jet Skis for Surf Life Saving WA surveillance and implemented early warning communications via the Surf Life Saving WA Twitter feed	39	44	39	49	39	33	40	17	39	39		
Invested in extending and improving its shark monitoring network which gives early warnings of tagged sharks so beaches can be closed	45	49	46	58	46	42	45	9	46	45		
Invested in research to better understand shark behaviour	29	31	35	45	34	31	27	13	29	29		
Implemented a new policy to, catch and destroy sharks that pose an immediate threat to WA water uses	28	30	25	38	33	22	26	13	26	30		

						% Mor	e Inclined					
Access to the second se				Cu	rrent Beach	Use				Loca	tion	
Regional	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	South Western WA	Southern WA	Esperance	Mid-Western WA
Base	203	130	11	26	79	13	73	16	53	50	50	50
Increased aerial surveillance along the WA coastline	21	22	24	9	31	8	22	10	20	28	12	18
Commissioned a feasibility study and trial or a shark enclosure	19	19	0	4	26	7	24	10	18	27	9	13
Invested in Jet Skis for Surf Life Saving WA surveillance and implemented early warning communications via the Surf Life Saving WA Twitter feed	16	16	0	5	16	9	22	10	14	18	8	20
Invested in extending and improving its shark monitoring network which gives early warnings of tagged sharks so beaches can be closed	17	18	16	9	22	7	24	10	14	27	13	18
Invested in research to better understand shark behaviour	15	14	16	4	18	0	20	10	14	22	7	11
Implemented a new policy to, catch and destroy sharks that pose an immediate threat to WA water uses	13	13	0	4	13	0	16	14	14	7	7	16

Note: Base sizes less than 30should be treated as indicative only.

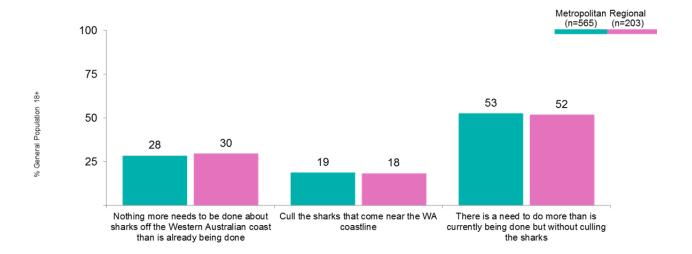
Column notations, circles and squares denote significant differences.



# QU. Which of the following statements do you most agree with?

### Attitudes towards sharks - prompted

Most Western Australians (53% metropolitan, 52% regional) believe that more needs to be done about sharks, but culling is not the answer. However, significant proportions (19%, 18%) believe culling is the answer, while others believe that nothing more needs to be done (28%, 30%).





# QU. Which of the following statements do you most agree with?

# Attitudes towards sharks - prompted

				Current	Beach Use				Location		
Metropolitan	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	Perth North	Perth South	
Base	565	403	98	68	159	74	285	22	296	269	
Nothing more needs to be done about sharks off the Western Australian coast than is already being done	28	25	27	18	27	27	30	51	28	29	
Cull the sharks that come near the WA coastline	19	20	11	23	23	22	14	19	16	22	
There is a need to do more than is currently being done but without culling the sharks	53	55	61	59	50	50	56	31	56	49	

				Cur	rent Beach		Location					
Regional	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	South Western WA	Southern WA	Esperance	Mid-Western WA
Base	203	130	11	26	79	13	73	16	53	50	50	50
Nothing more needs to be done about sharks off the Western Australian coast than is already being done	30	33	45	19	33	6	22	35	25	37	44	35
Cull the sharks that come near the WA coastline	18	21	32	55	15	38	12	5	19	17	16	19
There is a need to do more than is currently being done but without culling the sharks	52	47	23	26	52	56	66	60	56	47	40	45

Note: Base sizes less than 30should be treated as indicative only.

Column notations, circles and squares denote significant differences.



# QV. What else do you think should be done about sharks off the Western Australian Coast?

### The top coded themes in relation to verbatim responses to this question were:

- 1. Nothing
- 2. Don't know
- 3. Shark nets
- 4. Educate public
- 5. Monitor sharks
- 6. Study into shark behaviour
- 7. Media / TV / Newspaper / Publicity / Web / Accessible information
- 8. Increase Surveillance
- 9. Keep tagging sharks
- 10. Taking responsibility / taking care / listening to lifeguards
- 11. Research into something other than shark behaviour
- 12. Beach pools / enclosures
- 13. Prevent commercial fishing / less commercial fishing / don't deplete sharks food sources



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# Appendix A Preferred Communication Channels



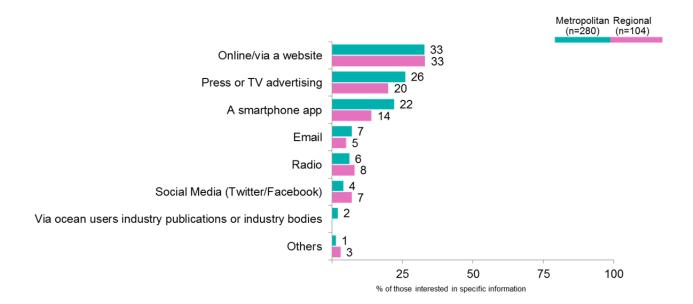
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# PREFERRED COMMUNICATION CHANNEL

QP1. How would you most like to access this information?

Facts and figures of sightings and shark movement off the WA coast.





# QP1. How would you most like to access this information?

# Facts and figures of sightings and shark movement off the WA coast

					Location					
Metropolitan	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	Perth North	Perth South
Base	280	210	57	42	88	40	138	7	148	132
A smartphone app	22	24	26	29	25	29	24	0	20	24
Online/via a website	33	34	31	30	33	30	32	44	33	33
Press or TV advertising	26	23	21	14	24	25	29	43	29	22
Social Media (Twitter/Facebook)	4	4	2	7	3	2	3	0	2	6
Via ocean users industry publications or industry bodies	2	2	8	9	4	4	3	0	2	2
Email	7	8	7	8	5	8	2	0	7	6
Radio	6	5	5	4	4	2	5	14	5	6
Other	1	1	0	0	1	0	1	0	1	1

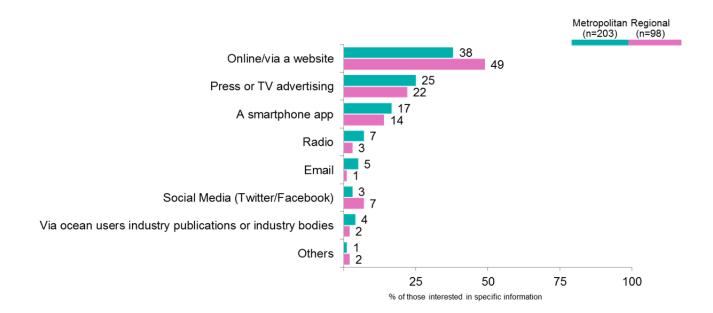
				Curre	ent Beach Use				Location				
Regional	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	South Western WA	Southern WA	Esperance	Mid- Western WA	
Base	203	130	11	26	79	13	73	16	53	50	50	50	
A smartphone app	58	60	72	48	50	93	65	42	62	58	47	43	
Online/via a website	53	55	65	69	43	69	57	61	58	47	45	46	
Press or TV advertising	57	61	62	63	42	77	66	34	55	63	42	55	
Social Media (Twitter/Facebook)	72	79	88	77	60	76	77	53	74	69	48	69	
Via ocean users industry publications or industry bodies	45	46	53	49	40	87	54	55	44	53	42	41	
Email	62	63	72	68	57	88	76	52	55	83	55	59	
Radio	0	0	0	0	0	0	0	0	0	0	0	0	
Other	0	0	0	0	0	0	0	0	0	0	0	0	

Column notations, circles and squares denote significant differences.



# QP2. How would you most like to access this information?

# Facts and figures in relation to the actual shark incident rate off the WA coast





# QP2. How would you most like to access this information?

# Facts and figures in relation to the actual shark incident rate off the WA coast

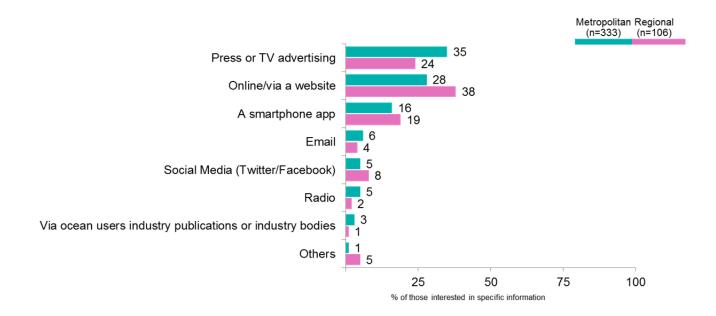
					Location					
Metropolitan	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	Perth North	Perth South
Base	203	148	45	31	66	34	104	4	101	102
A smartphone app	17	19	23	15	20	22	22	25	20	15
Online/via a website	38	40	41	36	38	35	32	52	37	39
Press or TV advertising	25	22	16	15	22	21	30	0	26	23
Social Media (Twitter/Facebook)	3	2	2	6	3	0	3	0	0	6
Via ocean users industry publications or industry bodies	4	4	5	8	5	7	5	23	4	4
Email	5	6	6	4	4	8	3	0	5	5
Radio	7	6	6	15	6	7	4	0	7	6
Other	1	1	0	0	3	0	1	0	1	1

				Curre	nt Beach Us	ie .			Location				
Regional	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreation al Fishing	Recreational Boating	Other Activities	Do Not Use Beach	South Western WA	Southern WA	Esperance	Mid- Westem WA	
Base	98	65	8	14	34	7	35	7	30	24	22	22	
A smartphone app	14	10	13	0	20	0	13	0	18	8	11	5	
Online/via a website	49	53	83	77	68	99	37	7	50	55	32	40	
Press or TV advertising	22	18	2	17	11	0	29	61	20	26	27	25	
Social Media (Twitter/Facebook)	7	9	0	5	0	0	8	0	9	0	5	11	
Via ocean users industry publications or industry bodies	2	3	0	0	0	0	5	0	3	0	0	0	
Email	1	2	2	0	1	0	2	0	0	0	9	9	
Radio	3	4	0	1	0	1	7	0	0	9	16	7	
Other	2	1	0	0	0	0	0	32	1	2	0	4	



### QP3. How would you most like to access this information?

# How to personally reduce the likelihood of encountering a shark off the WA coast





# QP3. How would you most like to access this information?

# How to personally reduce the likelihood of encountering a shark off the WA coast

				Curre	nt Beach Use				Loca	ation
Metropolitan	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	Perth North	Perth South
Base	333	258	64	41	87	38	174	9	171	162
A smartphone app	16	15	27	12	21	20	17	22	17	16
Online/via a website	28	28	22	23	28	31	29	44	26	30
Press or TV advertising	35	35	29	29	34	38	36	33	40	30
Social Media (Twitter/Facebook)	5	5	7	11	4	0	3	0	4	6
Via ocean users industry publications or industry bodies	3	3	6	11	3	6	4	0	3	4
Email	6	7	8	15	6	2	4	0	5	8
Radio	5	6	1	0	3	2	5	0	5	6
Other	1	1	0	0	1	0	1	0	1	1

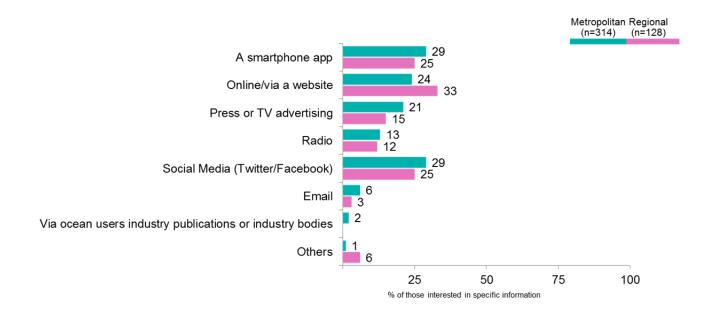
				Curre	ent Beach Use	•				Loca	ation	
Regional	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	South Western WA	Southern WA	Esperance	Mid- Western WA
Base	98	65	8	14	34	7	35	7	30	24	22	22
A smartphone app	19	17	12	0	11	0	19	0	25	11	5	14
Online/via a website	38	40	32	53	40	33	35	13	35	38	34	49
Press or TV advertising	24	23	0	15	29	10	34	13	28	20	31	14
Social Media (Twitter/Facebook)	8	9	39	31	9	28	7	0	8	9	5	9
Via ocean users industry publications or industry bodies	1	1	15	0	0	0	0	0	0	4	0	0
Email	4	5	2	0	8	7	2	0	0	9	12	8
Radio	2	2	0	1	2	0	2	0	0	3	13	3
Other	5	3	0	0	0	22	2	75	4	6	0	4

Column notations, circles and squares denote significant differences.



# QP4. How would you most like to access this information?

# What beach closures are in place due to shark sightings off the WA coast





# QP4. How would you most like to access this information?

# What beach closures are in place due to shark sightings off the WA coast

				Currer	nt Beach Use				Loca	ation
Metropolitan	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	Perth North	Perth South
Base	314	243	54	43	88	41	166	8	158	156
A smartphone app	29	31	44	40	32	33	27	13	31	27
Online/via a website	24	25	22	23	21	20	21	37	24	23
Press or TV advertising	21	19	11	8	21	20	25	24	21	21
Social Media (Twitter/Facebook)	5	4	5	11	3	5	4	0	4	6
Via ocean users industry publications or industry bodies	2	2	8	6	3	3	2	0	1	3
Email	6	6	0	4	6	3	6	0	5	7
Radio	13	11	9	7	14	16	15	0	13	13
Other	1	1	0	0	0	0	1	26	2	0

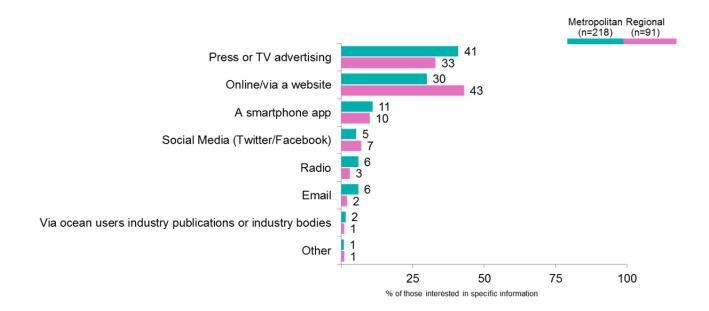
				Curre	ent Beach Use					Loca	ation	
Regional	Overall	Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreation al Boating	Other Activities	Do Not Use Beach	South Western WA	Southern WA	Esperance	Mid- Westem WA
Base	128	91	7	17	43	9	51	6	38	33	25	32
A smartphone app	25	21	22	12	23	11	37	0	26	27	27	19
Online/via a website	33	33	38	51	26	30	27	34	35	30	33	29
Press or TV advertising	15	14	0	12	16	0	17	66	12	22	13	18
Social Media (Twitter/Facebook)	6	6	28	25	8	29	6	0	6	3	11	11
Via ocean users industry publications or industry bodies	3	4	1	0	4	0	1	0	0	6	4	9
Email	12	15	11	0	18	7	9	0	15	6	12	8
Radio	6	7	0	0	4	23	3	0	6	6	0	6
Other	25	21	22	12	23	11	37	0	26	27	27	19

Column notations, circles and squares denote significant differences.



# QP5. How would you most like to access this information?

# What the WA Government is doing to reduce the risk of a shark incident in WA





# QP5. How would you most like to access this information?

# What the WA Government is doing to reduce the risk of a shark incident in WA

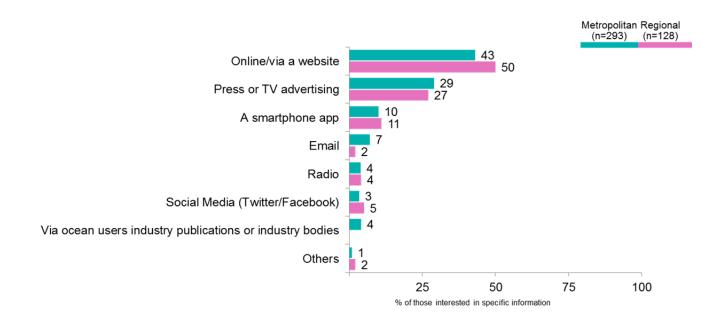
Metropolitan	Overall		Location							
		Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	Perth North	Perth South
Base	218	165	46	34	73	30	103	4	103	115
A smartphone app	11	12	24	18	19	15	15	0	14	9
Online/via a website	30	29	25	33	31	28	25	50	25	34
Press or TV advertising	41	42	35	26	34	37	39	25	43	38
Social Media (Twitter/Facebook)	5	3	4	11	8	4	5	0	2	7
Via ocean users industry publications or industry bodies	2	1	3	4	2	5	2	25	4	0
Email	6	6	7	9	3	0	5	0	6	5
Radio	6	5	2	0	3	12	8	0	6	5
Other	1	1	0	0	1	0	1	0	0	2

Regional	Overall		Current Beach Use								Location			
		Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreation al Boating	Other Activities	Do Not Use Beach	South Westem WA	Southern WA	Esperance	Mid- Western WA		
Base	91	61	5	14	32	9	35	6	24	26	21	20		
A smartphone app	10	8	14	1	12	0	8	0	14	4	5	5		
Online/via a website	43	48	84	61	57	59	34	33	37	53	20	55		
Press or TV advertising	33	28	0	29	27	39	42	58	35	39	47	12		
Social Media (Twitter/Facebook)	7	9	0	9	0	1	7	0	9	0	15	12		
Via ocean users industry publications or industry bodies	1	0	0	0	0	0	2	0	0	0	0	5		
Email	2	3	2	0	3	0	2	0	0	4	5	5		
Radio	3	4	0	1	0	1	6	0	5	0	9	0		
Other	1	1	0	0	0	0	0	10	0	1	0	5		



# QP6. How would you most like to access this information?

# Information about the current understanding of shark behaviour off the WA coast





# QP6. How would you most like to access this information?

# Information about the current understanding of shark behaviour off the WA coast

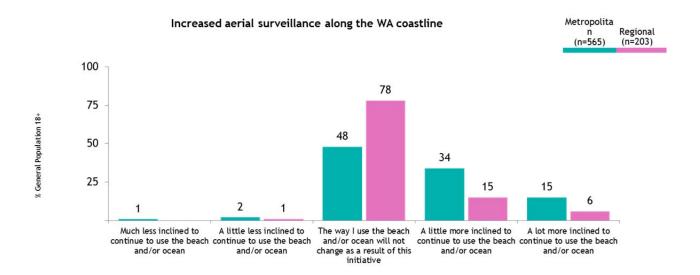
Metropolitan	Overall		Location							
		Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing/ Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	Perth North	Perth South
Base	293	226	63	49	78	48	158	7	143	150
A smartphone app	10	10	16	12	14	17	11	15	12	9
Online/via a website	43	44	36	44	41	38	41	57	39	47
Press or TV advertising	29	26	25	12	30	26	33	28	32	25
Social Media (Twitter/Facebook)	3	2	3	7	0	0	3	0	1	5
Via ocean users industry publications or industry bodies	4	4	7	10	4	5	4	0	5	3
Email	7	8	11	16	8	10	4	0	7	7
Radio	4	4	2	0	1	4	3	0	4	4
Other	1	1	0	0	1	0	1	0	0	1

Regional	Overall	Current Beach Use								Location				
		Swimming	Diving/ Snorkelling/ Spearfishing	Surfing/ Windsurfing /Kayaking/ Canoeing	Recreational Fishing	Recreational Boating	Other Activities	Do Not Use Beach	South Westem WA	Southern WA	Esperance	Mid- Western WA		
Base	128	84	8	19	49	10	49	8	30	41	28	29		
A smartphone app	11	7	10		11	20	13	0	13	9	0	9		
Online/via a website	50	52	75	75	57	73	45	46	45	56	45	55		
Press or TV advertising	27	29	2	14	19	6	37	28	36	21	26	7		
Social Media (Twitter/Facebook)	5	5	0	6	0	1	2	0	4	0	7	16		
Via ocean users industry publications or industry bodies	2	2	2	4	3	0	1	0	0	3	4	7		
Email	4	4	12	1	9	0	2	0	0	10	11	3		
Radio	2	2	0	0	2	1	0	27	1	2	6	3		
Other	11	7	10	0	11	20	13	0	13	9	0	9		

Column notations, circles and squares denote significant differences.

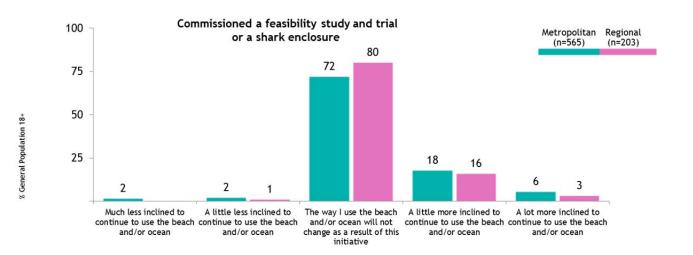


# Potential impact of Government initiatives on Beach Use

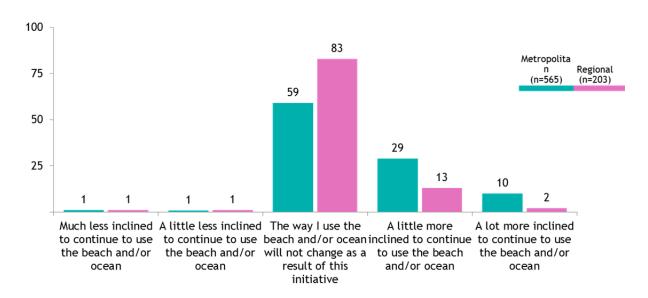




### Potential impact of Government initiatives on Beach Use



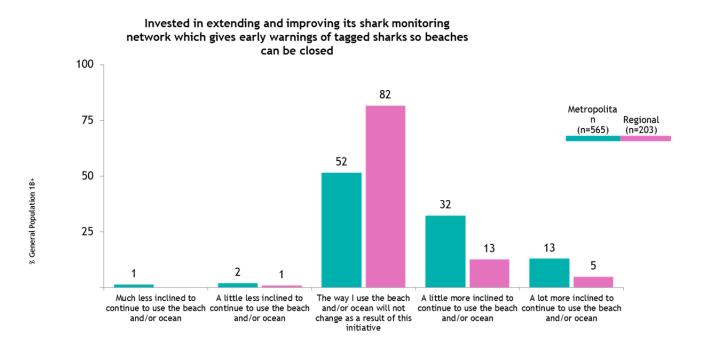
# Invested in Jet Skis for Surf Life Saving WA surveillance and implemented early warning communications via the Surf Life Saving WA Twitter feed



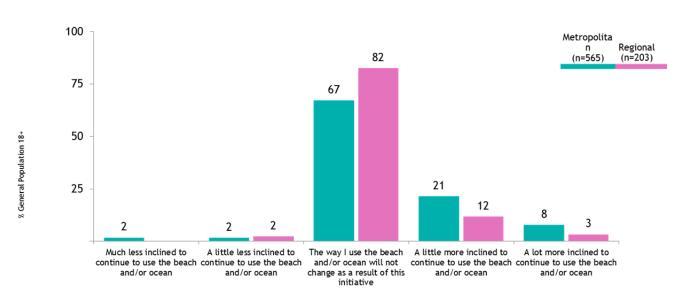


% General Population 18+

### Potential impact of Government initiatives on Beach Use



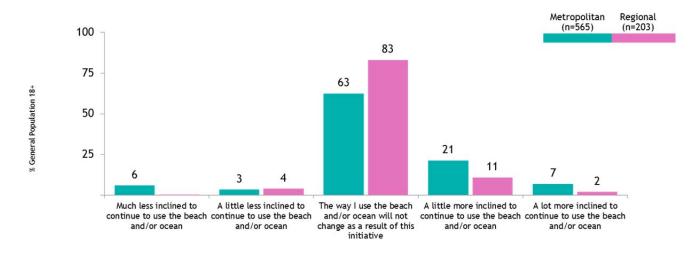
### Invested in research to better understand shark behaviour





# Potential impact of Government initiatives on Beach Use

# Implemented a new policy to, catch and destroy sharks that pose an immediate threat to WA water users





# Appendix B Questionnaire

