



Water Safety and Auckland's West Coast Fishers – 2012



Preface and Acknowledgements

This report is an evaluation of the 2012 project developed by the Auckland Council, Surf Life Saving Northern Region (SLSN), and Watersafe Auckland Incorporated (WAI).

The *West Coast Rock Fishing Safety Pilot Project* was originally set up in October 2005 in response to a spate of rock-fishing fatalities on Auckland's rugged west coast in the previous six months (5 fatalities in 4 months). Because of the success of the pilot project in 2006-2008, recommendations to continue the rock fishing safety initiative were acted upon and the safety advisory service was re-established for the summer seasons of 2009 and 2010. In addition, a 2 year trial of the installation of angel rings to provide another layer of protection at high risk sites was also initiated. *There were no fatalities over the 2011/12 summer.*

The project team is again grateful for the contribution of Cr Sandra Coney and the Parks, Recreation and Heritage Forum whose advocacy and support for the project has been pivotal to both the success of the programme.

Our thanks to the New Zealand Chinese Youth Trust for promotion of the project within the Chinese community. Our thanks to Michael Jones for his commitment to promoting water safety within the Pasifika community.

We would also like to thank the Iwi of Te Kawerau a Maki and the Lusk family for allowing some of the Angel Rings to be installed on their land and allowing us access to maintain them.

The project would not have been possible without the enthusiasm and skills of Jo Davidson and Reg Phillips, Auckland Council; Tom Burgess of Surf Life Saving Northern Region; and Teresa Stanley and Harry Aonga, WaterSafe Auckland. As was the case in previous years, Stuart Leighton, Auckland Council parks ranger again deserves recognition for his significant contribution and leadership of the project in the field.

Finally, a very special vote of thanks to the field officers, John Yoo, and lifeguard Ollie Irwin. They again were the public face of the project and their importance in making fishers aware of the rock fishing safety project has been critical to the success of the campaign.

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www.watersafe.org.nz/page.asp?page=342

Executive Summary

1. Background

In 2010, the outgoing Auckland Regional Council (ARC) recommended to the incoming Auckland Council that the Project be given 'Legends project' status in order to sustain the funding for future water safety promotion. Auckland Council, WaterSafe Auckland Inc (WAI), Safe Waitakere, and Surf Life Saving Northern Region (SLSNR) have continued to jointly conduct the rock fishing safety campaign entitled *West Coast Fishing Safety Project*.

2. Purpose

The purposes of this seventh year of the project were threefold:

- 1) To continue the on-site rock fishing safety education promotion initiated in 2006
- 2) To determine the effect of the project on Auckland's west coast fishers' safety practices and beliefs
- 3) To make recommendations for future rock fishing safety promotion based on the information obtained

3. Methods

A cross sectional study of fishers at high risk locations on Auckland's west coast was undertaken at the end of the summer safety campaign in 2012. A sample of 142 fishers voluntarily completed a written questionnaire that sought information on whether they had taken part in the previous campaigns and if they were aware of the follow-up 2012 fishing safety promotion.

4. Key Findings

4.1 Participant demographics:

- As was the case in 2006-2011, the sample was predominantly males (males 97%) and most fishers were aged between 20-44 years (63%).
- Proportionally more Asian peoples (56%), proportionally less European (10%), Maori (13%) New Zealanders took part in the survey.
- More than one fifth (20%) of fishers were of recent residency (<5 years).
- More than half (56%) had visited the site where they were interviewed <5 times. For 14% it was their first visit to the site.

4.2 Awareness of the West Coast Fishing Safety Project

- One half of fishers (49%) reported that they were aware of the previous West Coast Fishing Safety Projects 2006-2010.
- Of those, two-thirds thought that the campaign had been highly successful/successful (69%), one third (31%) felt that it had been slightly/not successful or did not know.
- Most fishers (82%) were aware of the current 2012 West Coast Fishing Safety Project.
- Of these, most (60%) identified the fishing advisors as their source of information. Other sources included newspapers (56%), magazines (18%), radio (15%), television (9%), and retail outlets (3%).

4.3. Angel ring installation

- Most fishers (84%) had seen the new on-site angel rings and, of these, 77% considered them to be *essential*.
- Most fishers (73%) thought that the angel rings were accompanied with clear instructions, 28% were *unsure*.
- Two thirds of the fishers (63%) *agreed/strongly agreed* that angel rings were the best source of public rescue equipment (PRE), one third (36%) were *unsure*.
- A majority of fishers (57%) thought that they were located in the most needed sites, 42% were *unsure*.
- On 5th August 2012, a visitor to Flat Rock, Muriwai, fell into the water and sustained a broken leg and head injuries. Bystanders used an angel ring installed at the site to maintain his head above water until they could lift him to safety prior to the arrival of the Auckland Rescue Helicopter and his evacuation to hospital for treatment.

4.4. Perceptions of Drowning Risk

- Most fishers (87%) agreed that getting swept off rocks was likely to result in their drowning (2011, 73%).
- More believed that drowning was a constant threat to life when fishing from rocks (2011, 69%; 2012 80%). This would suggest a beneficial shift in fishers' attitudes over the 5 years to one of having a more realistic appreciation of the risk of drowning.
- More than one quarter (29%) thought that others were at greater risk than themselves yet only one quarter (23%) considered that they were strong swimmers compared with others (2011, 50%)
- One fifth (18%) thought that their swimming ability would get them out of trouble

- One quarter (24%) thought that their local knowledge would keep them out of trouble
- More than one third (38%) thought that their experience of the sea would keep them safe when fishing from rocks

4.5. Water Safety Behaviours of Fishers

- Fewer fishers in 2012 than 2011 reported *often/always* wearing a life-jacket/buoyancy aid (2011, 50%; 2012, 39%), although substantially fewer reported *never* wearing them (2011, 37%; 2012, 28%).
- It is still a concern that one quarter of fishers (28%) report *never* wearing any life jacket/flotation aid.
- Most fishers (85%) in 2012 reported *never* consuming alcohol when fishing. Further promotional work on the folly of mixing alcohol with fishing from rocks is required, or even an extension of alcohol bans currently on many city beaches
- One quarter (25%) of fishers reported *sometimes/often* wearing gumboots/waders, two thirds (68%) reported going down rocks to retrieve snagged lines, both of these dangerous practices need to be targeted in future safety promotion.

4.6 Self-reported Changes in Fishers' Knowledge, Attitudes and Behaviours

- Most fishers (89%) considered that their safety knowledge had improved in the past year (2011, 74%)
 - Most fishers (85%) considered that their safety attitudes had improved, though some (5%) thought that their attitude had not improved.
 - Most fishers (89%) of the fishers thought that their safety behaviour when fishing had improved.
 - Less than half of the fishers thought that the safety behaviour of their mates (46%) or other fishers (47%) had improved.
-

5. Recommendations

In light of these findings, several recommendations are made. These are:

1. To the Auckland Council:

- Retain the services of the safety advisors for a 2013 summer campaign and on a permanent basis thereafter.
- Retain the multilingual advisory service and look to ways of presenting safety information in multiple languages
- Continue to provide regional leadership via the super-city governance structure to support future fishing safety promotion, including the installation of angel rings, and safety signage at high risk sites
- Approve the funding of 5 additional angel rings at recommended sites

2. To WaterSafe Auckland, Surf Life Saving Northern Region and other safety organizations:

- Consider ways of addressing the concerns highlighted in this Report by reinforcing and extending the current provision of public safety information and resources.
- Commit resources and personnel to the ongoing work collaboratively with all partners to promote best practice for West Coast fishing safety education beyond 2012.
- Disseminate the findings of the study to member organizations, national water safety organisations, community organisations (especially migrant community organisations), recreational fishing groups and businesses, and the public at large.

1. To recreational fishers, fishing organizations life jacket retailers:

- Adopt and endorse the fishing safety messages promoted by the West Coast Fishing Safety Project.
- Encourage others in the rock fishing fraternity to adopt safe practices - especially the wearing of life jackets when fishing at Auckland's high-risk west coast locations.
- Support the work of frontline fishing advisors and lifeguards in their efforts to make rock fishing a safe and happy experience without undue risk for all concerned.
- Advocate for the promotion of rock fishing safety with retailers.

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1. Background

In 2006, a fisher safety campaign was launched in the Auckland region of New Zealand to combat a spate of surf-related drowning incidents associated with fishing from rocky foreshores. The Auckland Regional Council (ARC), WaterSafe Auckland Inc (WAI), and Surf Life Saving Northern Region (SLSNR) jointly conducted a fishing safety campaign entitled the *West Coast Fishing Safety Project* in the summer of 2006. The purpose of that campaign was twofold. First, the campaign piloted a fishing safety education program that would help fishers identify and manage the risks associated with fishing on Auckland's rugged west coast. Second, a survey of fishers was conducted to enhance understanding of their fishing safety knowledge, beliefs, and behaviours.

The 2006 survey revealed new and alarming statistics about risky behaviours that predisposed many fishers to harm in the highly dangerous locations in which they fished. Many had limited safety skills and an overly optimistic view of their survival skills in a high-risk fishing environment (Moran, 2008). In terms of survival ability, one third (n = 81; 32%) of fishers estimated that they could swim non-stop 25 m or less. Most fishers reported limited/no ability to perform CPR (n = 155; 62%). Many took unnecessary risks when fishing from rocks. For example, almost one half (n = 120; 48%) had gone to the water's edge to retrieve a snagged line and one fifth (n = 50; 20%) admitted having consumed alcohol while fishing from rocks. Most fishers agreed that always wearing a life jacket made fishing a lot safer (n = 177; 71%), yet almost three quarters (n = 180; 72%) admitted that they never wore a life jacket.

Fishing safety messages that address the twin dangers of overestimation of ability and underestimation of risk, especially at high-risk fishing locations, were recommended (Moran, 2008). The survey also revealed that the fishing population was culturally and linguistically diverse, was of recent residency, and were not

frequent visitors to the sites where surveyed (Moran, 2006). The implications of this diversity, the transience of the population, and the remoteness of the site of activity were recognized barriers to be overcome in subsequent safety promotion.

The Auckland-based project is unique in that the fishing safety education programme was conducted on-site at high-risk fishing locations with supplementary promotion of safety messages via relevant media outlets of television and radio, newspapers and magazines as well as through retail outlets and community organizations. Static displays of fishing safety, written material and verbal advice from the trained field officers were the educational tools used for on-site promotion of fishing safety. The findings of the initial study were reported back to the participating organizations who decided that the project would be continued for an additional two years (Moran, 2006). At the end of the 3-year period in 2008, the project was extended for another two years and the information obtained from annual surveys conducted from 2006-2010 provided the data for a paper published in 2011 entitled *Rock-based fishers safety promotion: Five years on* (Moran, 2011). This paper provided data from surveys of fishers from 2006-10 to determine if preventive behaviours have been adopted after five years of safety promotion. The most significant change in self-reported behaviour related to the increased use of life jackets with 34% (95%CI = 0.25-0.44) of fishers in 2010 compared to 72% (95%CI = 0.66-0.77) in 2006 reporting never wearing a life jacket.

Some risky behaviours (such as consuming alcohol) and at-risk attitudes (such as overconfidence in their local knowledge) persisted. No significant changes were reported in behaviours such as turning your back to the sea when fishing, taking a cell-phone when fishing, and checking weather/water conditions before setting out.

The cultural and linguistic diversity of fishers, together with their transient participation, made them a difficult group to reach with education interventions,

although changes in life jacket use were encouraging. Continuation of the safety campaign was recommended and ways to further enhance fisher safety were discussed.

This paper was the first published study to report from five years of annual data collection on an intervention aimed at reducing death by drowning among a high-risk group of recreational fishers – those that fish from rocky coastlines around surf coasts. The paper concluded that further observational studies were required to verify improvements reported anecdotally by lifeguards, park rangers, and by annual surveys, especially with regard to the reported increases in life jacket use. In its final comment, the author suggested that “Paradoxically, the limited, but positive changes observed across the years suggests a strong need to continue funding for the fishing safety interventions that are part of this project rather than curtailing them” (Moran, 2011, p.172).

At its final meeting prior to disestablishment, the Auckland Regional Council Parks and Heritage Committee received the report entitled *Water safety and Auckland's West Coast fishers 2010* (Moran, 2010), and unanimously voted to recommend to the incoming Auckland Council that this project be recognised as a ‘legends project’ in order to be retained as an ongoing project with ensuing Council funding and support.

2. Purpose and Outcomes of the Study

2.1 Purpose

The purposes of this seventh phase of the project were threefold:

- 1) To continue the on-site rock fishing safety education promotion initiated in 2006
- 2) To determine the effect of the project on Auckland's west coast fishers' safety practices and beliefs, and
- 3) To make recommendations for future rock fishing safety promotion based on the information obtained.

2.2 Outcomes

The specific outcomes of this report are:

1. Ascertain the effect of on-site rock fishing safety promotion via the deployment of field officers during the summer months of 2012,
2. Survey fishers to ascertain whether they had taken part in the previous surveys and, if so, what effect that safety campaign had had on their current understanding and practice of water safety when fishing from rocks,
3. Survey fishers opinions on the value of safety signage and angel ring floatation devices currently being piloted at high risk west coast fishing locations,
4. Compare and contrast:
 - a. fishers' perception of drowning risk,
 - b. their safety behaviour and
 - c. self-reported changes in knowledge, attitudes and behaviours, and
5. Make recommendations and suggest future strategies that enhance fishers' understanding and practice of safety when fishing from rocks on Auckland's west coast.

3. Methods

3.1 Procedures

As was the case in previous years, the field officers (n = 2) were trained to conduct all aspects of the fieldwork process from education to data collection and management. The participants in the survey were all those who were either fishing from the chosen sites or in transit to and from the site. Rock fishing was again defined as not only fishing with rod and reel but also included activities that used other devices such as baskets or hand lines as well as those gathering shellfish from the rocks. Potential participants were approached, the purpose of the Project explained and a request to voluntarily participate in an anonymous written survey was made to all adult fishers over 16 years of age.

Given the large proportion of fishers of Asian origins previously reported (Moran, 2006, 2007, 2008, 2009, 2010, 2011), the questionnaire was again produced in English, Mandarin and Korean. To further assist non-English speaking fishers, one of the field officers was a fluent Korean speaker. For the first time, a trained lifeguard was employed to access the more remote high risk sites that hadn't previously been included.

The survey data gathering took place from December – March, 2012 and included several peak holiday weekdays and weekends. The sites were chosen at random and included six popular and high risk west coast sites at Muriwai, Piha, Karekare, Bethells (including Whites beach), and Whatipu. The sample did not include fishers who used the sites at times outside 'peak' hours (such as night fishing) or fishers who frequented other high-risk west coast locations.

3.2 Measures

The structured written questionnaire (see Appendix 1) was anonymous, designed to be completed on site, and take a maximum of 10 minutes to complete. The questionnaire contained 14 questions, eleven of which had been included in the 2008 survey. Five questions sought socio-demographic information on gender, length of residency, age, ethnicity, and their previous rock fishing activity.

Two questions on at-risk fishing behaviours and perceptions of drowning risk from the earlier surveys were again included so as to compare fishing safety behaviours and attitudes. The question on behaviours asked fishers to self-report on six behaviours (for example, *when rock fishing, do you wear a life jacket/buoyancy*

aid) using four response categories *never, sometimes, often* and *always*. The question on attitudes consisted of 12 statements and required fishers to state whether they *strongly agreed, agreed, were unsure, disagreed, or strongly disagreed* with the statement. A five-part question asked fishers to estimate whether their knowledge, attitudes and behaviours (as well as that of fishing mates and other fishers) had improved in the intervening year by using three response categories - *agree, disagree or don't know*.

As was the case in 2011, three questions were included that sought information on whether fishers had seen new angel rings in five high risk locations and what they thought about them using three response categories ranging from *essential to not useful*. Fishers were also asked to suggest other locations they would like to see angel rings on the west coast. They were also asked to comment on the clarity of instruction for their use, whether they were the best source of assistance and whether they were located at the most suitable sites, using five response categories ranging from *strongly agree to strongly disagree*.

3.3 Data analysis

Data from the completed questionnaires were entered into Microsoft Excel 2003 for statistical analysis using SPSS Version 18.0 in Windows. Descriptive statistics such as means and proportions were used to describe the baseline characteristics of the population. Frequency tables were generated for all questions and, unless otherwise stated, percentages are expressed in terms of the number of respondents to each survey question within groups.



2012 Surveys were in English, Korean and Chinese (Mandarin)

4. Key Findings

The results of the 2012 survey are presented in six related sections:

4.1 Demographics of Fishers

A total of 142 questionnaires were returned from participants in rock fishing activity at six popular locations on the west coast of Auckland during the summer season of 2012. Analysis of respondents' age, gender, length of residency, and ethnicity indicated that the demographic structure of the sample reflected previous findings (Moran, 2006, 2007, 2008, 2009, 2010, 2011).

Table 1. *Demographic Characteristics of Fishers*

Demographic Characteristic		<i>n</i>	%	Total
Gender	Male	138	97.2	142 (100%)
	Female	4	2.8	
Ethnicity	European	14	9.9	142 (100%)
	Maori	18	12.7	
	Pasifika	27	19.0	
	Asian	79	55.6	
	Other	4	2.1	
Age group	15-19 years	1	0.7	142 (100%)
	20-29 years	25	17.6	
	30-44 years	65	45.8	
	45-64 years	48	33.8	
	65+ years	3	2.1	
Length of residency	< 1 year	2	1.4	142 (100%)
	1-4 years	27	19.0	
	5-9 years	43	30.3	
	>10 years	35	24.6	
	All my life	35	24.6	

As was the case in previous years, the sample population was predominantly male (97% male; 3% female) and almost two-thirds (63%; $n = 90$) were aged between 20-44 years. In terms of ethnicity, proportionally more Asian peoples (56%; $n = 79$) were included in the study, whereas proportionally less European (10%; $n = 14$) and Maori (13%; $n = 18$) New Zealanders were included. One fifth (20%; $n = 29$) of those surveyed were of recent residency (< 4 years) and one half (51%) had lived in New Zealand less than 10 years. Table 2 shows that those who self-identified as of Asian origin were predominantly Chinese (26%; $n = 37$) and Korean (25%; $n = 35$). The

English language version of the 2012 survey was completed by more half of the fishers (54%; $n = 77$), 30 (21.1%) fishers completed the Korean version, and 35 (24.6%) fishers opted to complete the Mandarin language version of the survey.

Table 2. *Self-identified Ethnicity of Asian Fishers*

Ethnic group	<i>n</i>	%
Chinese/Taiwanese	37	26.1
Korean	35	24.6
Indian	7	4.9
Total	79	55.6%

Fishers were asked to describe how often they had fished at the location where they completed the questionnaire (see survey question 8, Appendix 1). Table 3 shows that, as was the case in previous surveys, many of the fishers were not frequent visitors to the site, with 15% ($n = 21$) reporting that this was their first visit and 41% ($n = 58$) reporting that they had visited the site 2-5 times.

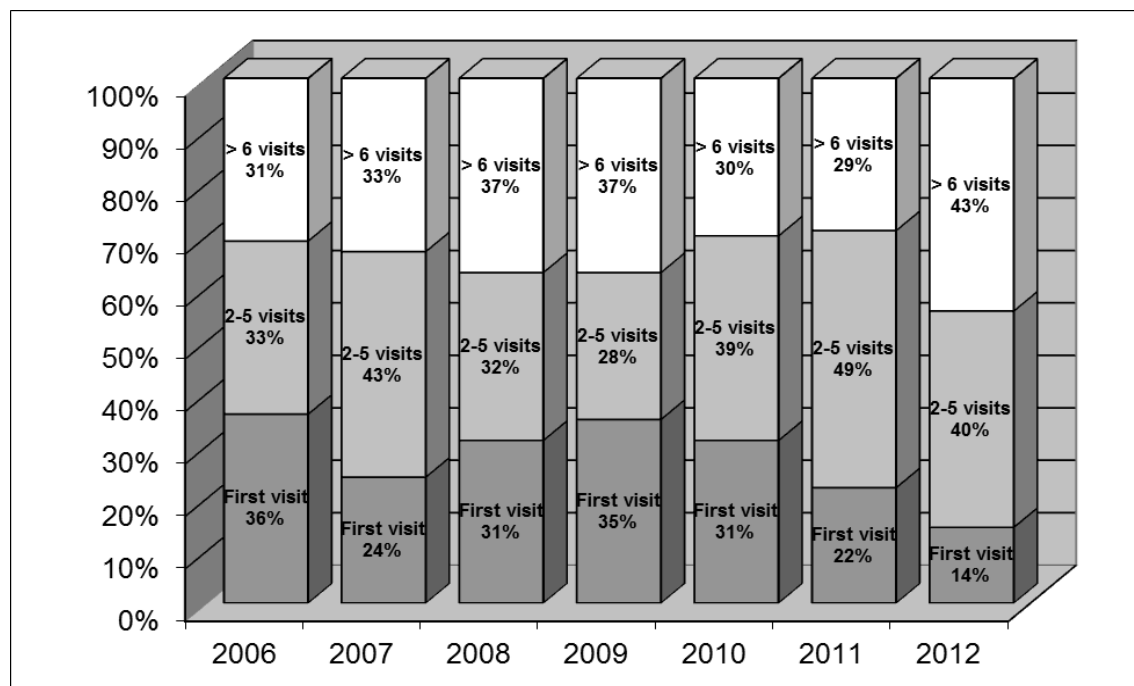
Table 3. *Fishing Frequency at Site where Interviewed and Other Places Fished*

How often have you fished at this site?	<i>n</i>	%	Cumulative %
First time at site	21	14.8	14.8
2-5 times	58	40.8	55.6
6-10 times	36	25.4	81.0
11-20 times	22	15.5	96.5
>20 times	5	3.5	100.0
Where else have you fished?	<i>n</i>		
Other Auckland west coast sites	41		
Northland	4		
Auckland Harbours (inc. Manukau, Waitemata)	15		
Inner Hauraki Gulf (inc. Whangaparoa, Maraetai etc)	3		
Outer Hauraki Gulf (inc. Coromandel, Great Barrier Island)	2		
Other New Zealand sites	2		

Cumulatively, more than half (56%; $n = 79$) had visited the site less than five times, a frequency unlikely for them to accumulate an extensive knowledge and experience of the hazards associated with the site in a range of environmental conditions (i.e. variable state of tides, swell, and weather conditions). Collectively, almost one fifth (19%; $n = 27$) of the fishers had visited the site more than 10 times, with only five fishers (4%) having visited the site (where they completed the survey) more than 20 times.

Figure 1 shows the changes in the number of times fishers had visited the site at which they completed the survey from 2006 to 2012. It would appear that fishers are becoming more familiar with the sites with a consistent decline in the number of first time visitors (2006, 36%; 2012, 14%) and an increase (though not consistent) in the number of fishers who had visited the site where interviewed (2006, 31%; 2012, 43%).

Figure 1. Comparison of site visits, 2007-2012



This trend in the number of visits to the site where interviewed is encouraging because it is hoped that fishers are becoming more familiar with the hazards of the site and more knowledgeable about the local vagaries of each site.

4.2 Awareness of West Coast Rock Fishing Safety Project

Almost half (49%; $n = 69$) of fishers surveyed reported that they had taken part in any west coast rock fishing safety surveys (see survey question 1, Appendix1), a slightly less, but not statistically significant different, percentage than that reported in 2011 (51%).

Table 4. *Participation in, and estimation of success of, the previous fisher safety projects*

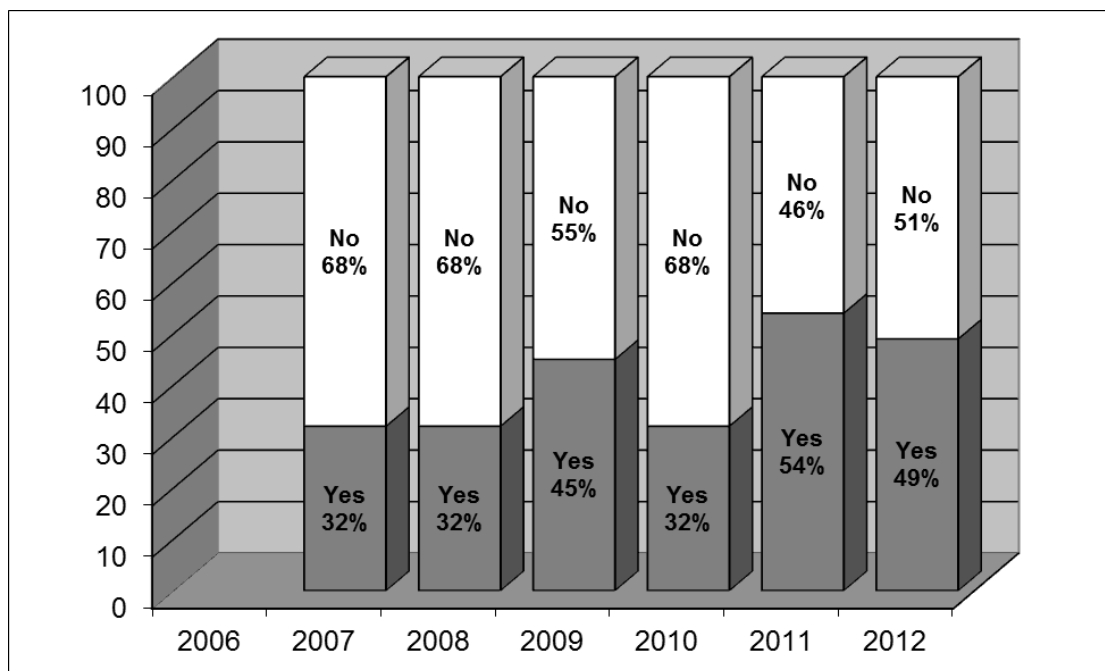
Did you take part in the previous rock fishing projects?	<i>n</i>	%
Yes	69	48.6
No	73	51.4
Total	142	100.0
If Yes, how successful do you think it was?	<i>n</i>	%
Highly successful	2	2.9
Successful	42	60.9
Slightly successful	19	27.5
Not successful	2	2.9
Don't know	4	5.8
Total	69	100.0

Table 4 shows that, of the 69 fishers who had taken part in the previous surveys, slightly less than two-thirds (61%; $n = 44$) considered that the campaign had been *highly successful/successful* compared with one third who either considered it *slightly/not successful* (30%; $n = 21$) or who *did not know* (5.8%; $n = 4$).

Figure 2 shows the number of fishers who had previously taken part in previous surveys from 2007. It would appear that a half of fishers had taken part in the 2 most recent annual surveys (2011, 51%; 2012, 49%), an improvement on the previous 4 years (except 2009) where approximately two thirds of fishers had not taken part. This would suggest that the programme may be reaching more fishers, and that the fisher population may be coming less transitory in nature. However, with half of the fishers reporting not having taken part in previous surveys in the latest 2012 results, it would suggest that there is still a need to persist with current practice and

look at other ways of extending the reach of the safety project and fisher involvement in it.

Figure 2. *Participation in west coast fisher survey, 2007-2012*



Fishers were asked whether they were aware of the current fisher safety campaign. Most fishers (82%; $n = 116$) reported that they were aware of the current campaign, a much improved proportion compared with the previous year where slightly less than half of the fishers (71%; $n = 102$) reported that they were aware of the current project (Moran, 2011). Table 5 shows that, when those who were aware of the current project were asked how they had found out about the project, most fishers (60%; $n = 70$) identified the fishing safety advisors as their source of information. Considerably more fishers (2012, 56%: 2011, 20%) reported newspapers as their source of information. This may be a reflection of the heightened sensitivity in the media to several net fishing tragedies on west coast beaches at the beginning of the 2011-2012 summer season. Other sources of information, in descending order of frequency, included magazines (18%), radio (15%), television (9%), retail outlets (3%), and other sources such as friends (2%).

As was the case in the previous years, many fishers had heard of the current safety promotion through the council employed fishing safety advisors, which again suggests the benefit of engaging staff for on-site safety promotion to a group that is characteristically diverse and who may be difficult to reach through traditional

channels such as television, retail outlets, and magazines as indicated by the lesser recall of the current project via these channels.

Table 5. *Are you aware of, and how did you find out about, the current (2012) project?*

Are you aware of the current (2010) project?	<i>n</i>	%
Yes	116	81.7
No	26	18.3
Total	142	100.0
If Yes, how did you find out about the current project?*	<i>n</i>	%
Fishing safety advisors	70	60.3
Newspapers	65	56.0
Magazines	21	18.3
Radio	17	14.7
Television	10	8.6
Retail outlets	4	3.4
Other sources (e.g. friends)	2	1.7
Total	118	100.0

*respondents were able to tick more than source of information



Examples of resources available in multiple languages for rock fisher safety

4.3 The Installation and Usage of Angel rings

As was the case in the previous three years, angel rings were maintained at eight dangerous fishing sites at five west coast beaches. During the summer months, weekly checks of the angel rings were made by lifeguards at the local surf clubs and parks staff would complete any necessary maintenance. The exception was Whatipu, which was checked year round by parks staff because there is no surf club at that location.

Most fishers (84%; $n = 119$) reported having seen the angel rings, compared with slightly more than one half of the respondents (52%; $n = 67$) in 2009 who reported having seen the angel rings when they were first installed. Of those, three quarters (77%, $n = 92$) of the fisher considered them to be *essential*, 22% ($n = 26$) considered them to be *useful*, and 1% ($n = 1$) reported that they were *not very useful*.

Table 6. *Awareness and success of the angel rings, 2012*

Have you seen the angel rings?	<i>n</i>	%
Yes	119	83.8
No	23	16.2
Total	142	100.0
If YES, how effective do you think they are?*	<i>n</i>	%
Essential	92	77.3
Useful	26	21.8
Not very useful	1	0.7
Total	119	100.0

Fishers were also asked to comment on the clarity of the instruction for their use, whether they were considered to be the best source of assistance, and whether they were located in the most suitable sites (see question 10, Appendix 2). Table 7 shows that almost three-quarters (73%; $n = 103$) *agreed/strongly* agreed that the angel rings were accompanied with clear instructions, and 28% ($n = 39$) were *unsure*. Table 7 shows that these figures are again a considerable improvement on the approval ratings received from fishers in the 2009 survey after the initial year of installation. As was the case in 2009, most of those who were unsure about the clarity of instructions were recent immigrants for whom English was a second language (71%;

$n = 75$), which again suggests that further multilingual signage may be necessary for the angel rings as was recommended in the 2011 Report (Moran, 2011)

Table 7 also shows that more fishers (63% in 2012 vs. 45% in 2009) *agreed/strongly agreed* that angel rings were the best source of public rescue equipment (PRE). More fishers agreed that the angel rings were located in the best possible sites (58% in 2012 vs. 43% in 2009). In response to each of the three questions about the value of the angel rings, fewer fishers were *unsure* as to whether they had the clearest instruction (28% in 2012 vs. 47% in 2009), whether they were the best form of assistance (37% in 2012 vs. 47% in 2009), or whether they were located in the best possible sites (42% in 2012 vs. 46% in 2009).

Table 7. Comparisons of fisher opinions on the angel rings, 2012 and 2009

Do you think that-	Year	Strongly agree/ Agree		Unsure		Strongly disagree/ Disagree	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
-the angel rings have clear instructions	2012	103	72.5	39	27.5	-	-
	2009*	75	70.1	21	19.6	11	10.3
- the angel rings are the best source of assistance	2012	90	63.4	52	36.6	-	-
	2009*	71	66.4	29	27.1	7	6.5
- the angel rings are located at the most suitable sites	2012	92	57.7	60	42.3	-	-
	2009*	63	58.9	37	34.6	7	6.5

*2009 was the first year that angel rings were installed at multiple sites



Angel Ring Use: Case study

New Zealand Herald, 5th August, 2012

A Russian man in his 30s was plucked from the sea by passersby after he fell 4m from rocks at Muriwai yesterday afternoon.

Horse trainer Dean Lockwood, 50, was heading off fishing when he saw the victim slip and plunge into the sea.

"He slipped off the rocks like a wet seal, disappeared down a blowhole area and was sitting in waist-deep water," Lockwood said. "I shouted to two other guys to help me and we threw him down a life ring.

"I just knew he had bad head injuries."

Lockwood said he got into the water and put the flotation device around the man's waist before he was hauled to safety.

"By the time we got him out, the water was getting up to our necks. If it had been high tide, he would have been a goner." The man was airlifted to Auckland City Hospital by helicopter where he is being treated for head injuries and a broken leg.

"The rescuers did really well to get him out of the water," a spokesman for the Westpac rescue helicopter said



Flat Rock, Muriwai, 4th August 2012

(Photo with permission of Auckland Rescue Helicopter Trust)

Note: Angel ring to the left of the patient

4.4 Fisher perceptions of drowning risk

As in previous years, fishers were asked to respond to a series of 12 statements relating to their perception of the risk of drowning associated with fishing from rocks (see survey question 12, Appendix 1). The question consisted of a 5-point scale that included the categories *strongly agree*, *agree*, *unsure*, *disagree* and *strongly disagree*. For ease of interpretation, the *strongly agree/agree* and *disagree/strongly disagree* responses were aggregated.

Table 8. *Fishers' Perceptions of Risk of Drowning, 2012*

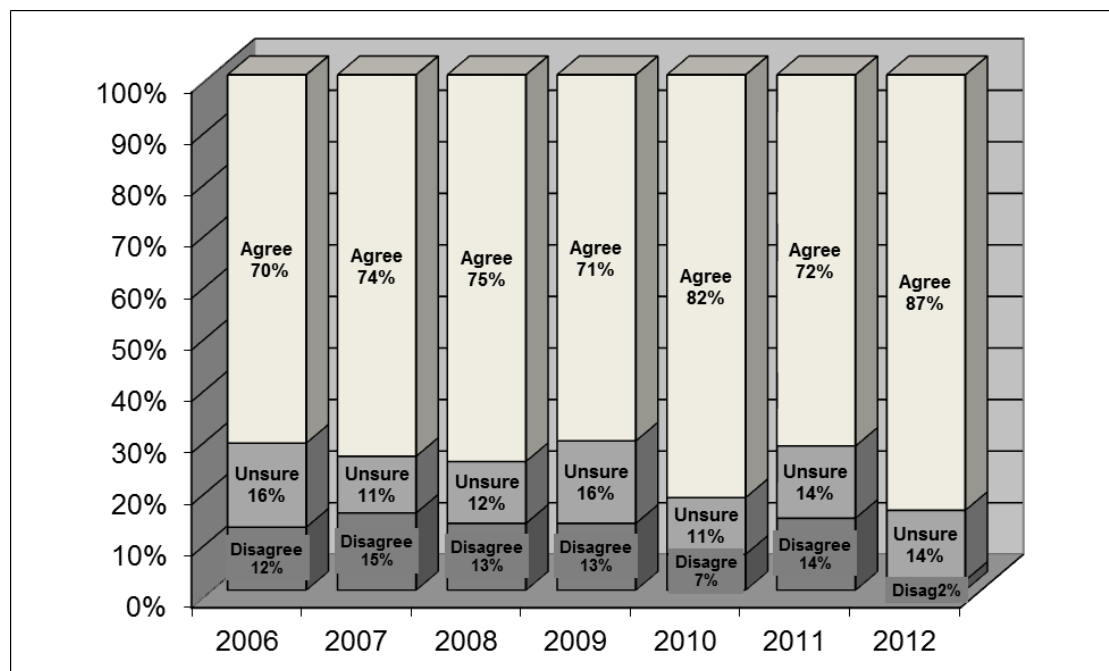
Do you think that-	Strongly agree/ Agree		Unsure		Strongly disagree/ Disagree	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
1. Getting swept off the rocks is likely to result in my drowning	124	87.3	15	13.9	3	2.1
2. Rock fishing is no more risky than other water activities	20	14.1	22	15.5	100	70.4
3. Drowning is a constant threat to my life when rock fishing	113	79.6	19	13.4	10	7.0
4. I am not concerned about the risks of rock fishing	15	10.6	24	16.9	103	72.5
5. Others rock fishers are at greater risk of drowning than me	42	29.6	65	45.8	35	24.6
6. I am a strong swimmer compared with most other people	33	23.2	61	43.0	48	33.8
7. I avoid fishing in bad conditions to reduce the risk of drowning	116	81.7	18	12.7	6	5.6
8. Always wearing a life jacket makes fishing a lot safer	124	87.3	10	7.0	8	5.6
9. Turning my back to the waves when rock fishing is very dangerous	126	88.7	11	7.7	5	3.5
10. My local knowledge of this site means I'm unlikely to get caught out	34	23.9	76	53.5	32	22.5
11. My experience of the sea will keep me safe when rock fishing	54	38.0	52	36.6	36	25.3
12. My swimming ability means I can get myself out of trouble	26	18.3	37	26.1	79	55.6

Table 8 shows responses to statements 1-3 (Question 12) that relate to fisher perceptions of the severity of the risk of drowning when fishing from rocks (see

Appendix 1 – survey questionnaire). Almost all fishers (87%) agreed that getting swept off rocks was likely to result in drowning, almost three quarters (70%) disagreed that fishing from rocks was no more risky than other water activities, and most (80%) agreed that drowning was a constant threat to their life when rock fishing. This would again suggest (as was the case in 2011) that a beneficial shift in fishers’ attitudes to one of having a greater appreciation of the risk of drowning associated with fishing from rocks off Auckland’s west coast.

Figure 3 shows the change in opinions on the severity of the risk of drowning related to getting swept off the rocks from 2006 -2012. While previous responses that agree with this statement have varied in previous years (2006, 70%; 2010, 82%), the 2012 results reinforces a continued shift in risk awareness over the 7 years. Whether this shift in attitude has an effect on improved fisher behaviour is unknown.

Figure 3. *Changes in opinion of the severity of risk of drowning if swept off rocks while fishing, 2006-2012.*



Responses to statements 4-6 (Question 12) related to fisher perceptions of their vulnerability to drowning when fishing from rocks (see Appendix 1 – survey questionnaire). Three quarters (73%) of the fishers disagreed that they were not concerned about the risk of drowning (2011, 52%), one quarter (25%) disagreed that other fishers were at greater risk of drowning than themselves but almost half (46%) were unsure of this. One third (33%) disagreed that they were strong swimmers

compared with other fishers, but again, almost half (46%) were unsure. However, almost one quarter (23%) thought they were strong swimmers compared with other fishers and almost half (43%) were unsure. Fewer fishers in 2012 considered that: they were strong swimmers compared with others (2012, 23%; 2011, 34%; 2010, 50%); other fishers were at greater risk of drowning (2012, 28%; 2011, 29%; 2010, 43%), and fewer agreed that they were not concerned about the risks of drowning when fishing from rocks (2012, 11%; 2011, 22%; 2010, 32%). As was the case in previous years, these slight shifts in attitudes are typical of the shift in attitude reported from 2006 (Moran, 2011) and suggest an enhanced perception of vulnerability that, in turn, may reflect a more realistic appraisal of the magnitude of the risk of drowning when fishing.

Responses to statements 7-9 (Question 12) related to fisher perceptions of the efficacy of preventive action in reducing drowning risk when fishing from rocks (see Appendix 1 – survey questionnaire). As was the case in previous surveys, most fishers taking part in the 2012 survey responded positively to all three statements of the efficacy of preventive actions to reduce drowning risk and their responses were more safety conscious than in 2011 (See Table 8). Most fishers agreed that they avoided fishing in conditions that were bad (2012, 82%; 2011, 78%), that wearing a life jacket made fishing a lot safer (2012, 87%; 2011, 70%) and that turning your back to the sea when fishing from rocks was very dangerous (2012, 89%; 2011, 76%).

Responses to statements 10-12 (Question 12) related to fisher perceptions of the self-efficacy of their preventive behaviours in reducing drowning risk when fishing from rocks (see Appendix 1 – survey questionnaire). Responses from the participants in 2012 to each of these three statements were more positive than those of the fishers who took part in the 2011 survey. In 2012, less than a quarter of fishers (24%) believed their local knowledge of the site would keep them out of trouble compared with slightly more than one third (35%) in 2011. Fewer fishers (38%) in 2012 believed that their knowledge of the sea would keep them safe compared with more than half (54%) of fishers in 2011. Similarly, fewer fishers in 2012 thought that their swimming ability would get them out of trouble if necessary (2012, 18%; 2011, 36%).

It would appear that the trend towards a more realistic appreciation of the risks associated with fishing from rocks on a surf coastline has been persistent and continuous in the past 6 years. Table 9 shows that this attitudinal shift is pronounced. Whether this has led to a concomitant shift towards safer behaviour is difficult to determine, especially given the male propensity to underestimate risk and

overestimate ability to cope with that risk in an aquatic context, as previously reported among fishers (Moran, 2009).

Table 9. Comparison of fisher risk awareness, 2006 and 2012

Do you think that-		Strongly agree/ Agree	Unsure	Strongly disagree/ Disagree
1. Getting swept off the rocks is likely to result in my drowning	2012	87%	14%	2%
	2006	70%	16%	12%
2. Rock fishing is no more risky than other water activities	2012	14%	15%	70%
	2006	41%	18%	39%
3. Drowning is a constant threat to my life when rock fishing	2012	80%	13%	7%
	2006	50%	11%	15%



Safety signage at Muriwai Beach Regional Park car park

4.5 Water Safety Behaviours of Fishers

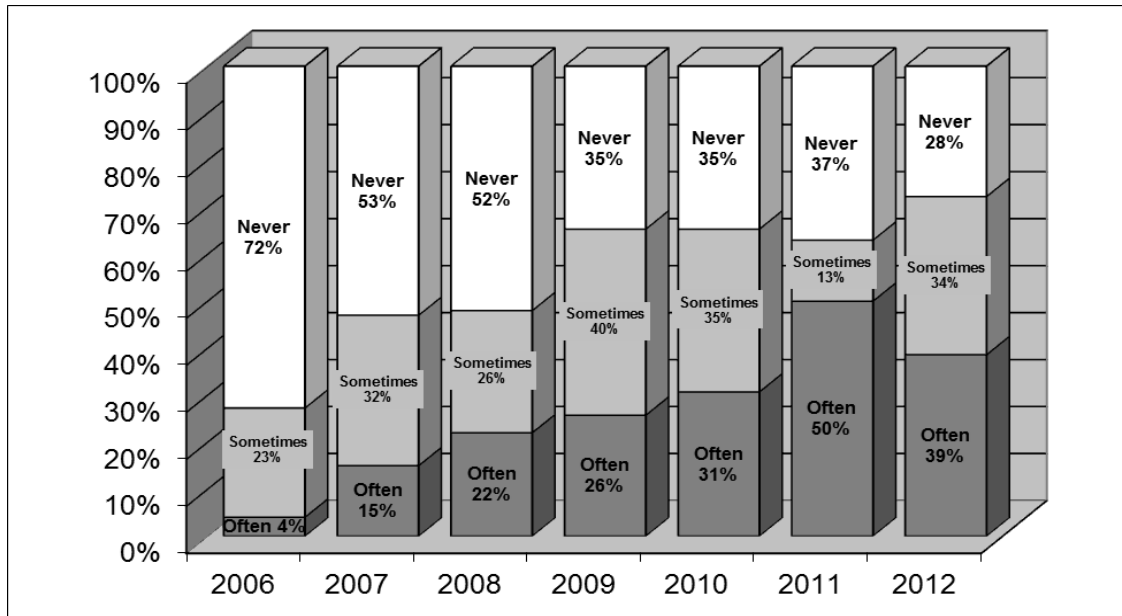
Fishers were asked to report their previous water safety behaviours (see survey question 13, Appendix 1) using a four-point frequency scale including *never*, *sometimes*, *often* and *always* in order to describe whether they had performed at-risk behaviours when fishing from rocks. The latter two responses were aggregated and are reported in the tables and text as *often/always* (see Table 10).

Table 10. *Fishers' Self-reported Water Safety Behaviours, 2012*

When rock fishing, do you -	Never		Sometimes		Often/Always	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
1. Wear a life jacket or other flotation device	39	27.5	48	33.8	55	38.7
2. Check weather/water conditions first	2	1.4	8	5.6	132	92.9
3. Drink alcohol when you are fishing	120	84.5	22	15.5	-	-
4. Wear gumboots or waders	106	74.6	28	19.7	8	5.6
5. Turn your back to the sea when fishing	80	56.3	54	38.0	8	5.6
6. Take a cell phone in case of emergencies	2	1.4	5	3.5	135	95.1
7. Go down rocks to retrieve snagged line	46	32.4	78	54.9	18	12.7

As was the case in 2011, a positive change in self-reported behaviour related to the use of life jackets or buoyancy aids was again evident in 2012 although not quite so pronounced. Fewer fishers in 2012 than 2011 reported *often/always* wearing a life-jacket/buoyancy aid (2011, 50%; 2012, 39%), although substantially fewer reported *never* wearing them (2011, 37%; 2012, 28%). While the positive change in behaviour related to the use of life jackets/flotation devices is gratifying, it is still a concern that more than one quarter of fishers (28%) report *never* wearing any life jacket/buoyancy aid.

Figure 4. Self-reported safety behaviours, 2006-2012
- When fishing from rocks do you wear a life jacket? (Q13, part 1)



A similar result as 2011 was evident in the second self-reported behaviour – checking the weather before fishing – with 84% of fishers *often /always* checking beforehand, and of these more than three quarters (77.5%) *always* checked weather conditions.

Figure 5. Self-reported safety behaviours, 2006-2012
- When fishing from rocks do you check weather beforehand? (Q13, part 2)

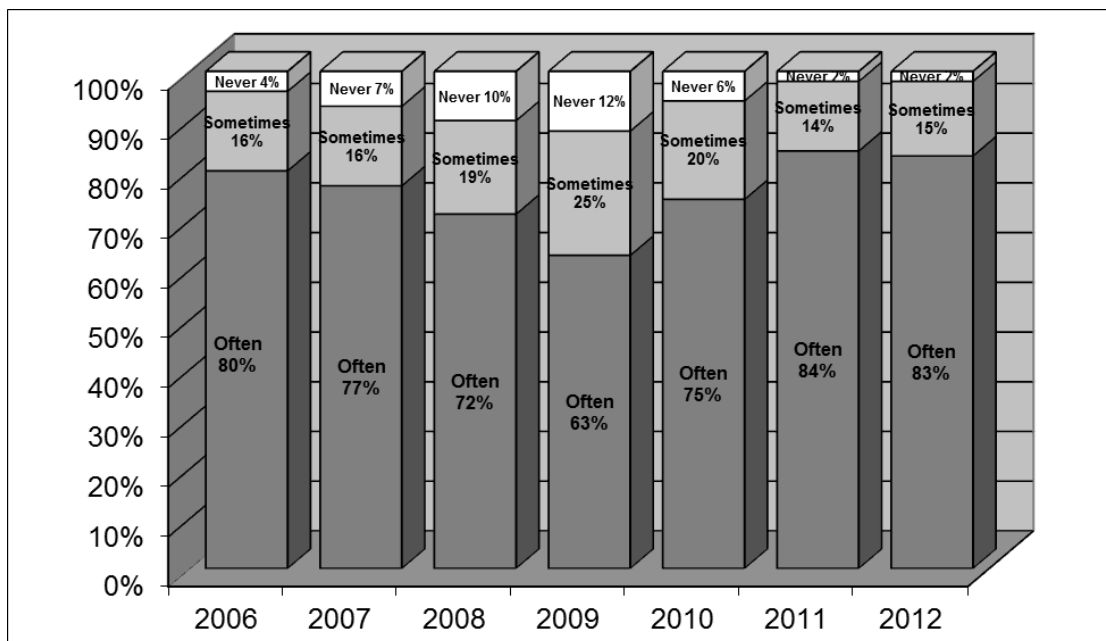
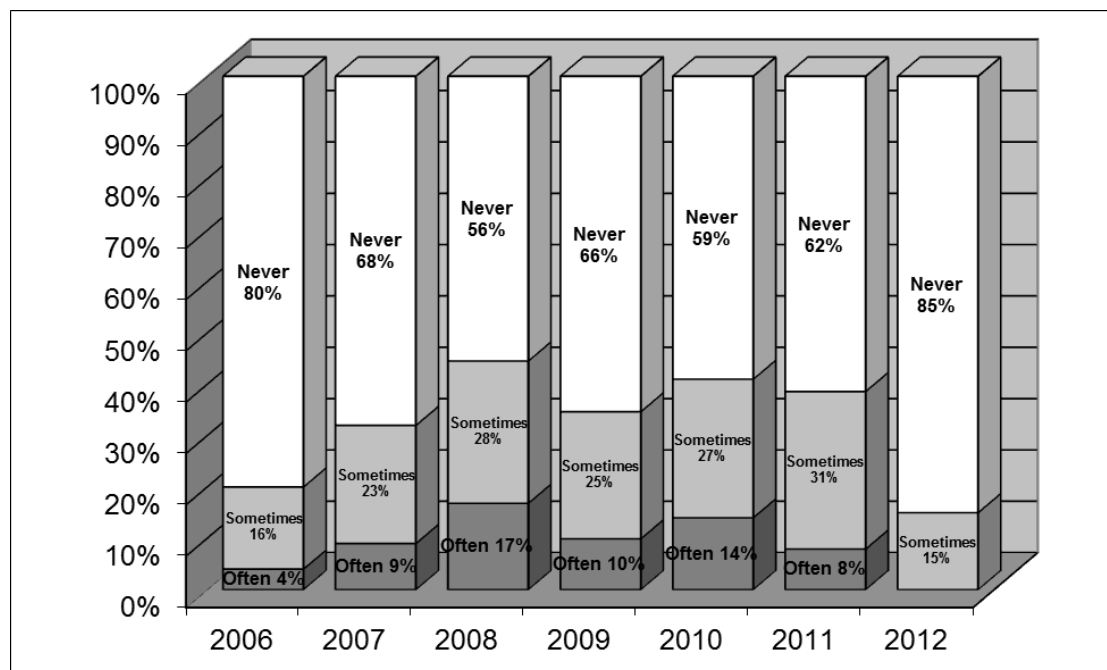


Figure 5 shows a consistent pattern of compliance with this important safety behaviour from 2006 when most fishers (80%) also reported *often/always* checking the weather beforehand. Figure 3 shows from 2006 -2012, that approximately three-quarters of fishers (range 72-84%) often checked the weather beforehand and a small proportion (range 2-12%) consistently *never* checked the weather.

The third self-reported safety behaviour related to the consumption of alcohol when fishing from rocks. Figure 6 shows that almost all fishers (85%) reported that they never mixed alcohol and fishing, and only 15% of fishers reported that they *sometimes* engaged in this risky behaviour. While this result is very encouraging, it is too soon to say that a downward trend is evident, given that Figure 5 shows that consistently over the prior six-year period, one third of fishers *sometimes* or *often* consumed alcohol when fishing at these high risk site, and the proportion abstaining from alcohol consumption appeared to drop slightly (2006, 80%; 2010, 62%).

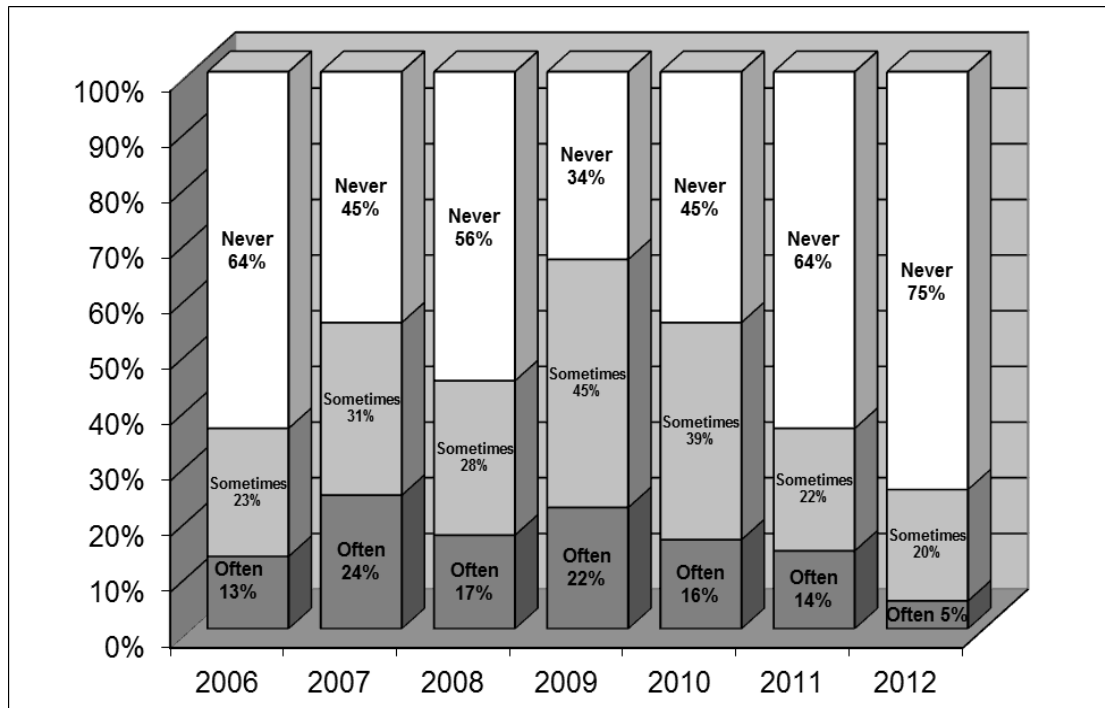
Figure 6. Self-reported safety behaviours, 2006-2012
- When fishing from rocks do you drink alcohol? (Q13, part 3)



The fourth risky practice related to the wearing of waders or gumboots. Figure 7 shows that three quarters (75%) of fishers reported that they *never* wore gumboots or wader, but one quarter (25%) did, with one fifth (20%) *sometimes* and 6% *often/always* wearing gumboots or waders. It would appear that the practice of

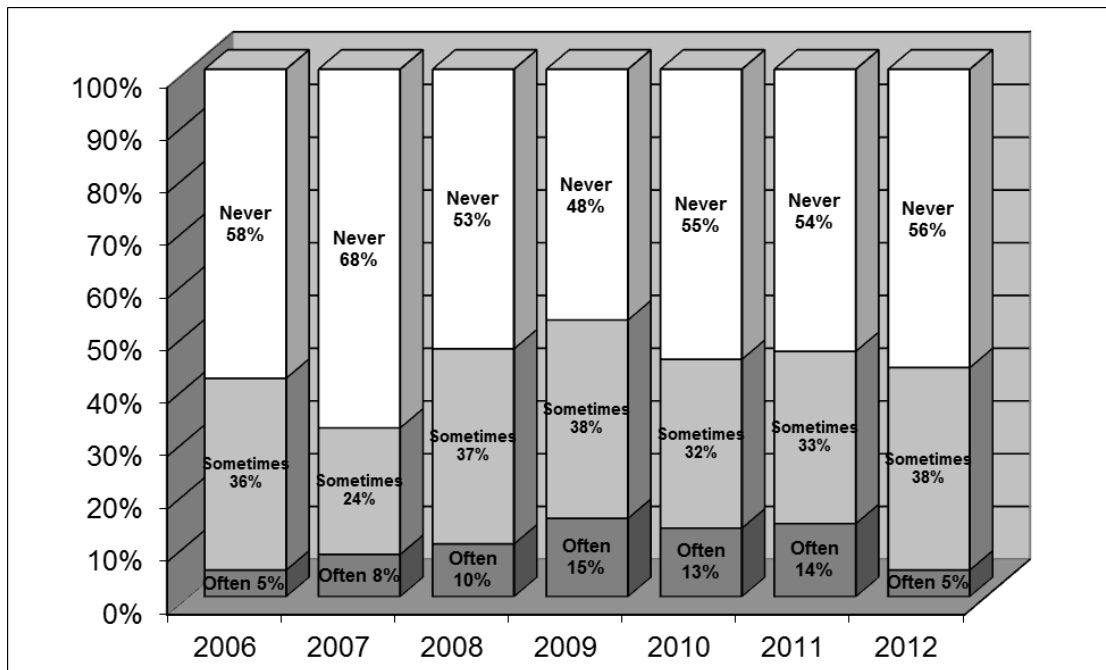
wearing gumboots or waders is on the decline as Figure 7 shows more fishers reporting that they never wear them especially in the past 3 years from 2010.

Figure 7. Self-reported safety behaviours, 2006-2012
- When fishing from rocks do you wear gumboots or waders? (Q13, part 4)



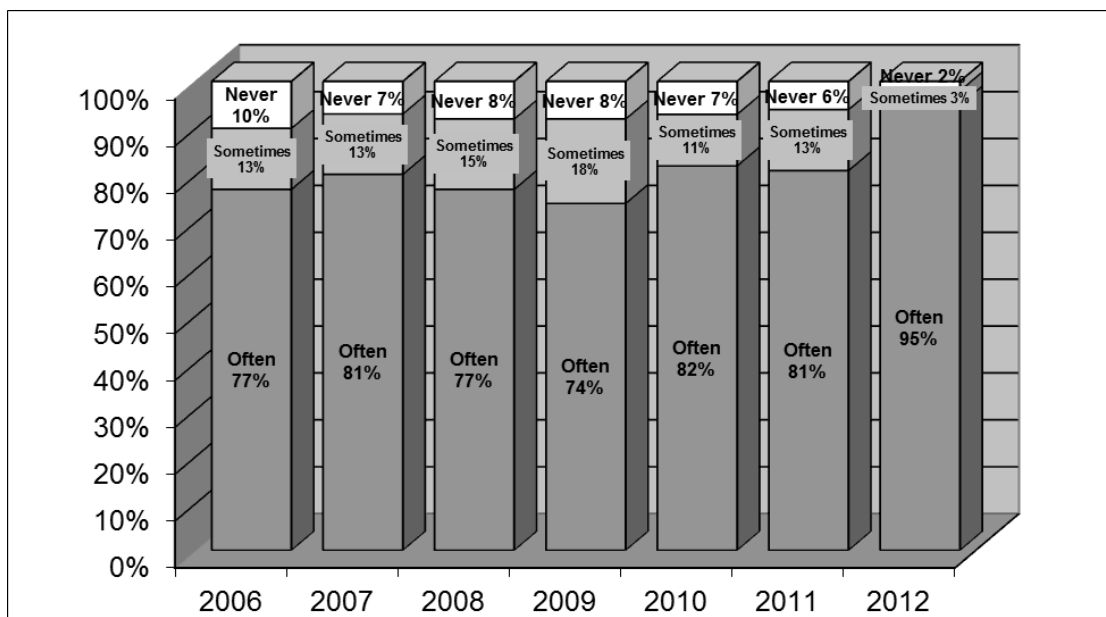
The fifth self-reported risk behaviour – that of turning your back to the sea – was reported by almost half (42%) of the fishers, with more than one third of fishers (38%) *sometimes* and 5% *often/always* turning their backs to the sea at some time when fishing from rocks. Figure 8 shows that, throughout the 7 years of the study, approximately half of participants (range 48-68%) *never* turned their back to the sea when fishing, but that many did *sometimes* (range 24-38%) or *often* (range 5-15%). Given that almost half of fishers persistently engage in this risky practice in spite of strong messaging about this dangerous practice, it is suggested that again that it should be highlighted in future rock-based fishing campaigns. Furthermore, it is suggested that an observational study might indicate more accurately the extent of this (and other risky practices) activity and give more specific information on the severity of the risk.

Figure 8. Self-reported safety behaviours, 2006-2012
-When fishing from rocks do you turn you back on the sea? (Q13, part 5)



Fishers were asked whether they carried a cell phone for emergency use. Figure 9 shows that almost fishers (95%) reported that they *often/always* carried a cell phone, with four fifths (82%) reporting that they *always* did and a further 13% that they *often* did. This continued increase in the carriage of cell phones is encouraging and suggests that getting emergency services may be better able to respond to incidents in these traditionally remote locations.

Figure 9. Self-reported safety behaviours, 2006-2012
- When fishing from rocks do you carry a cell phone (Q13, part 6)



Given the almost universal availability of cell phones and the much improved cell phone reception on the remote Auckland's west coast fishing sites, it may be prudent to ask fishers (and groups of fishers who may have different providers) to check reception upon arrival at the site in case the phone is required for an emergency call. As suggested in 2011, it may be worth asking fishers in future surveys if they have used cell phones for emergency purposes when fishing and, given the number of fishers for whom English is their second language, if they are aware of emergency phone procedures.

The final self-reported behaviour related to the dangerous practice of going down the rocks to the waters edge to retrieve a snagged line.

Figure 10. Self-reported safety behaviours, 2006-2012
 - **Do you go down the rocks to retrieve snagged line? (Q13, part 7)**

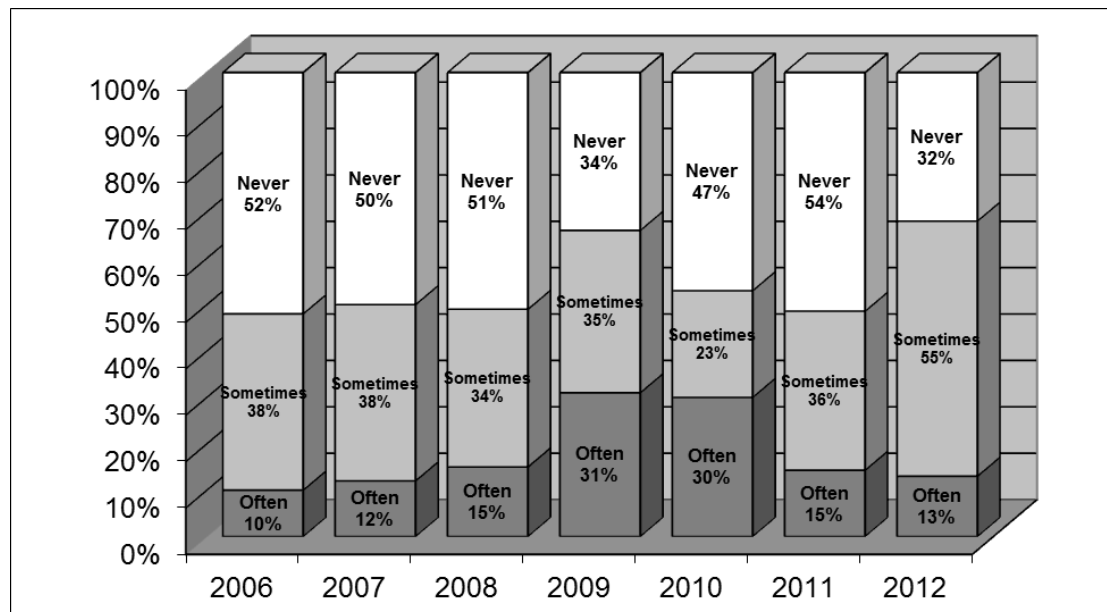


Figure 10 shows that approximately one third (32%) of the fishers reported that they *never* went down the rocks to retrieve a snagged line **but** more than two thirds (68%) did, with half reporting that they did *sometimes* (55%) or often (13%). As is the case with turning your back to the sea this persistent risky behaviour requires further examination firstly by observation to see the true extent of the practice and then by follow-up enquiry of perpetrators as to why they risk their safety for the cost of a hook and sinker.

4.6. Changes in Fishers' Knowledge, Attitudes and Behaviours

Fishers were asked to estimate whether their fishing safety knowledge, attitudes, and behaviour and that of their mates and other fishers had improved since the inception of the Project in 2006 (see question 14, Appendix 1). Table 11 shows that most fishers (89%) considered that their safety knowledge had improved in recent years, a small proportion (4%) thought that it had not improved and 6% didn't know whether it had improved, a slight improvement on the 2011 findings.

Table 11. Comparison of Self-Reported Changes in Fishers' Safety Knowledge, Attitudes and Behaviours, 2011-2012

Do you think that -	Year	Agree		Disagree		Don't know		Total	
		n	%	n	%	n	%	n	%
Your rock fishing safety knowledge has improved?	2012	127	89.4	6	4.2	9	6.3	142	100.0
	2011	106	73.6	7	4.9	31	21.5	144	100.0
Your rock fishing safety attitude has improved?	2012	121	85.2	7	4.9	14	9.9	142	100.0
	2011	102	70.8	9	6.3	33	22.9	144	100.0
Your rock fishing safety behaviour has improved?	2012	127	89.4	4	2.8	11	7.7	142	100.0
	2011	105	72.9	6	4.2	33	22.9	144	100.0
Your mates rock fishing behaviour has improved?	2012	65	45.8	23	16.2	54	38.0	142	100.0
	2011	75	52.1	9	6.3	60	41.7	144	100.0
Other rock fisher's behaviour has improved?	2012	66	46.5	20	14.1	56	39.4	142	100.0
	2011	80	55.6	9	6.3	55	38.2	144	100.0

Most fishers (85%) also believed that their safety attitudes had improved, though some (5%) considered that their attitude had not improved. Most fishers (89%) also considered that their safety behaviour had improved, an improvement on the previous year when 73% of the fishers thought that their safety behaviour when fishing had improved

To ascertain whether there had been an overall improvement in safety behaviour among the fishing community, fishers were asked to indicate whether they thought the safety behaviour of friends or other rock fishers had improved. Table 11

also shows that slightly less than half (46%) of the fishers thought that the safety behaviour of their mates had improved, slightly down on the previous year (52%). Almost half (47%) considered that the safety behaviour of other fishers had improved, again less than 2011 (56%). In both instances, a large proportion of fishers were unsure as to whether there had been any change in their mates (38%) or other fishers (39%) behaviour, similar to the previous year (42% and 38% respectively).

5. Recommendations

In light of these findings, several recommendations are made. These are:

1. To the Auckland Council:

- Retain the services of the safety advisors for a 2013 summer campaign and on a permanent basis thereafter
- Retain the multilingual advisory service and look to ways of presenting safety information in multiple languages
- Continue to provide regional leadership via the super-city governance structure to support future fishing safety promotion, including the installation of angel rings, and safety signage at high risk
- Approve the funding of 5 additional angel rings at recommended sites

2. To WaterSafe Auckland, Surf Life Saving Northern Region and other safety organizations:

- Consider ways of addressing the concerns highlighted in this Report by reinforcing and extending the current provision of public safety information and resources
- Commit resources and personnel to the ongoing work collaboratively with all partners to promote best practice for West Coast fishing safety education beyond 2012
- Disseminate the findings of the study to member organizations, national water safety organisations, community organisations (especially migrant community organisations), recreational fishing groups and businesses and the public at large
- Consider extending the project to other known high risk sites throughout New Zealand

3. To recreational fishers, fishing organizations life jacket retailers:

- Adopt and endorse the fishing safety messages promoted by the West Coast Fishing Safety Project.
- Encourage others in the rock fishing fraternity to adopt safe practices - especially the wearing of life jackets when fishing at Auckland's high-risk west coast locations.
- Support the work of frontline fishing advisors and lifeguards in their efforts to make rock fishing a safe and happy experience without undue risk for all concerned.
- Advocate for the promotion of rock fishing safety with retailers.

References

- Moran, K. (2011). *Water safety and Auckland's west coast fishers- Report 2011*. Report to the Auckland Regional Council, Surf life Saving Northern and Watersafe Auckland. Auckland: Watersafe Auckland. Available in PDF format at: <http://www.watersafe.org.nz/page.asp?page=342>
- Moran, K. (2010). *Water safety and Auckland's west coast fishers- Report 2010*. Report to the Auckland Regional Council, Surf life Saving Northern and Watersafe Auckland. Auckland: Watersafe Auckland. Available in PDF format at: <http://www.watersafe.org.nz/page.asp?page=342>
- Moran, K. (2011). Rock-based fisher safety promotion: Five years on. *International Journal of Aquatic Research and Education*, 5(2), 164-173.
- Moran, K. (2010). *Water safety and Auckland's west coast fishers- Five years on*. Report to the Auckland Regional Council, Surf life Saving Northern and Watersafe Auckland. Auckland: Watersafe Auckland. Available in PDF format at: <http://www.watersafe.org.nz/page.asp?page=342>
- Moran, K. (2009). *Water safety and Auckland's west coast fishers- Report 2009*. Report to the Auckland Regional Council, Surf life Saving Northern and Watersafe Auckland. Auckland: Watersafe Auckland. Available in PDF format at: <http://www.watersafe.org.nz/page.asp?page=342>
- Moran, K. (2008). Water safety beliefs and behaviours of Auckland's west coast rock fishers. *International Journal of Aquatic Education and Research*, 2, 127-138.
- Moran, K. (2008, July). *Water safety and Auckland's West Coast fishers – Final report 2008*. Report to the Auckland Regional Council, Surf Life Saving Northern Region and WaterSafe Auckland. Auckland: Watersafe Auckland Incorporated.
- Moran, K. (2007). *Water safety and Auckland's West Coast fishers – Follow-up report 2007*. Report to the Auckland Regional Council, Surf Life Saving Northern Region and WaterSafe Auckland. Auckland: Watersafe Auckland Incorporated.
- Moran, K. (2006, May). *Water safety and Auckland's West Coast fishers*. Report to the Auckland Regional Council, Surf Life Saving Northern Region and WaterSafe Auckland, Auckland: Watersafe Auckland Incorporated.

7. Appendix

7.1 Appendix 1 - The survey questionnaire



Rock-Fishing in Auckland: 2012

From 2006-10, Auckland's west coast rock fishers have been asked their opinions on rock fishing water safety. This follow-up survey is designed to gather further information from you about your current views. Many of the questions ask you about the possible dangers of fishing from rocks and your opinions on rock fishing safety. Most questions offer a range of responses, for these questions there are no right or wrong answers –an answer is correct if it is true for you.

Please do not take too long over each question – normally your first answer is best. Please be honest in your responses, the survey is voluntary and anonymous so no names will ever be known.

If you have any queries about the survey please ask the researcher who will be happy to assist you.

1. Did you take part in the Auckland west coast rock-fishing project in the past?

Yes No

If Yes, do you think the project was:

- Highly successful
- Successful
- Slightly successful
- Not successful
- Don't know

2. Are you aware of the current rock fishing safety promotion in Auckland?

Yes No

If Yes, how do you know about it?

- Radio
 - Television
 - Rock fishing advisors
 - Newspapers
 - Magazines
 - Retail outlets (eg fishing shops, gas stations)
 - Other
-

3. Are you?

Male Female

4. How old are you?

- 15-19 years
- 20-29 years
- 30-44 years
- 45-64 years
- 65+years

5. Where else have you fished in the last year?

6. How would you best describe yourself?

- European New Zealander
 - Maori
 - Pasifika
 - Chinese/Taiwanese
 - Korean
 - Indian
 - Other,
-

7. How long have you lived in New Zealand?

- Less than 1 year
- Between 1-4 years
- Between 5-9 years
- More than 10 years
- All my life

8. How often have you fished at this location?

- This my first time
- Between 2-5 times
- Between 6-10 times
- Between 11-20 times
- More than 20 times

9. Have you seen the new angel rings on the west coast?

Yes No **If Yes, do you think they are-**

- Essential
- Useful
- Not very useful

Why? _____

10. Can you suggest other dangerous sites without angel rings on the west coast -

11. Do you think that the angel rings	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
1 – Have clear instructions on how to use them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 – Are the best source of assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 – Are located in the most suitable sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Do you think that-	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
1 - Getting swept off the rocks while fishing is likely to result in my drowning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 - Rock fishing is no more risky than other water activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 –Drowning is a constant threat to my life when rock fishing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 - I am not concerned about the risks of rock fishing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 - Other fishers are at greater risk of drowning than me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 - I am a strong swimmer compared with most other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 – I avoid fishing in bad conditions to reduce the risk of drowning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 - Always wearing a life jacket makes rock fishing a lot safer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 - Turning my back to the waves when rock-fishing is very dangerous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 - My local knowledge of this site means I'm unlikely to get caught out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 - My experience of the sea will keep me safe when rock fishing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 - My swimming ability means I can get myself out of trouble	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. When rock fishing, do you –	Never	Sometimes	Often	Always
1 Wear a life jacket/buoyancy aid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Check weather forecast beforehand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Drink alcohol when fishing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Wear gumboots or waders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Turn your back on the sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Take a cell phone in case of emergencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Go down the rocks to retrieve snagged line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Do you believe that:	Agree	Disagree	Don't know
1 My knowledge of rock fishing safety has improved in the past 5 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 My practice of rock fishing safety has improved in the past 5 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 My attitudes towards rock fishing safety have improved in the past 5 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 My rock fishing mates seem more safety conscious in the past 5 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Other rock fishers around me seem more safety conscious in the past 5 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for taking part in the survey, please return this form to the Fishing Safety Advisor

