

Fred Henne Territorial Park Beach Safety Survey Report

May 2014



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Executive Summary

Background

In July of 2013, the Government of Northwest Territories Department of Industry, Tourism and Investment (ITI) contracted the Lifesaving Society of Alberta and the Northwest Territories (the Lifesaving Society) to undertake a comprehensive aquatic safety audit and supervised facility feasibility study on the unsupervised waterfront beach and boat launch facilities at Fred Henne Territorial Park. These reports can be found at www.iti.gov.nt.ca.

The purpose of the Fred Henne Territorial Park Beach Safety Survey was to understand general beach use, attitudes towards personal safety, parental/guardian supervision and instituting supervision options (waterfront attendants, limited lifeguard service, and full lifeguard services). Two separate surveys were conducted (Phase 1 and Phase 2). The Phase 1 survey aimed to educate and inform the public on the new safety efforts that were being considered for Fred Henne Territorial Park and to measure the public perceptions of these changes. The Phase 2 survey was designed to seek feedback on various supervisory options proposed by the Lifesaving Society.

Methodology

The Fred Henne Territorial Park Beach Safety Survey was designed to target past and future park users from Yellowknife, although it was open to anyone. Phase 1 and Phase 2 of the survey were administered online. Phase 1 began on January 21, 2014 and was completed on February 13, 2014. Phase 2 was administered between March 13, 2014 and April 8, 2014.

Overall 408 surveys were completed. Of this total, 376 of these surveys were completed by Yellowknife residents. There were 28 respondents who participated in both phases of the survey.

Overall Survey Findings

The demographic composition of respondents was very similar during the two survey phases: the majority of respondents were between 25 and 44 ages (70% and 64% respectively). Two thirds of the respondents were female. People who use the beach at Fred Henne Territorial Park at least weekly comprised over 50% of the sample. Over half of the respondents indicated that they usually go to the beach with their children (70% and 55%) and spouse or significant other (62% and 54%).

Both surveys included general questions about attitudes towards beach safety. The responses indicate that the Yellowknife residents who responded tend to be educated and informed

about beach safety and personal responsibility. Top 2 Box scores (The "agree" and "strongly agree" selections) were high for all four questions about attitudes towards beach safety:

Statement		Top 2 Box Score	
		Phase 2	
Education as the most important component of beach safety	79%	77%	
Parents or guardians should review beach safety with their children in their care every time they visit the beach.	90%	93%	
When in the water, children should be within arms' reach of an adult or responsible guardian	60%	66%*	
Beach safety is primarily the responsibility of the individual or the parent/guardian	72%	84%	

^{*} This question was slightly modified for phase 2 and included the "under the age of 10" modifier.

Phase 2 also included a question about beach toys. The majority of respondents (57%) agreed or strongly agreed that "inflatable beach toys can pose a significant safety risk, as they are easily blown around by the wind."

Phase 1 of the survey sought feedback on the safety recommendations identified in the Fred Henne Territorial Park Beach Aquatic Safety Audit by the Lifesaving Society. The majority of respondents believed that the safety recommendations (primary signage, secondary signage, public education, public rescue equipment, emergency equipment and incident reporting and staff training) provide at least slight safety improvements at Fred Henne Territorial Park Beach.

Phase 1 of the survey did not include any questions about lifeguards because the Lifesaving Society's Supervised Facility Feasibility Study had not been completed. However, 25% of the respondents asked for lifeguards in the "Additional Comments" section of the survey. At the same time, 8% of the respondents explicitly asked not to have lifeguards and 67% did not mention lifeguards in their comments.

Phase 2 of the survey measured attitudes towards the various supervisory options proposed by the Lifesaving Society:

- After outlining the possible benefits and drawbacks of waterfront attendants, respondents were split between "considering it", "against it", and "undecided", as a viable supervision option;
- Limited lifeguard services were supported by 25% of the respondents, 42% were against the option, while 33% remained undecided; and
- Full lifeguard services were supported by 25% of the respondents, 51% were against the option, and 24% were unsure.

Respondents were also asked to rank the four available supervisory options (unsupervised waterfront, waterfront attendants, limited lifeguard service and full lifeguard service) in order of preference. The average scores were very close: waterfront attendants received the highest score, barely ahead of limited lifeguard services, and full lifeguard service and unsupervised waterfront were tied for third preference.

These answers indicate that respondents were divided on the issue of supervisory options. However, 86% of them agreed or strongly agreed that the presence of a trained waterfront attendant or lifeguards does not reduce the responsibility of the individual or parent/guardian when it comes to beach safety.

Section 1: Background and Objectives

In July 2013 the Government of Northwest Territories Department of Industry, Tourism and Investment (ITI) contracted the Lifesaving Society to undertake a comprehensive aquatic safety audit and a supervised facility feasibility study on the unsupervised waterfront beach and boat launch facilities at Fred Henne Territorial Park.

The aquatic safety audit analyzed and provided recommendations to maximize the safety and customer service for guests of the Fred Henne Territorial Park beach. Recommendations are ranked as priority, primary, and secondary. The aquatic safety audit identifies what steps should be taken to minimize the risk of drowning or serious water-related injuries.

Previous advice from the Lifesaving Society indicated that providing a lifeguard service could require restrictions on beach access, introduction of new rules for beach usage and additional priority and primary recommendations that would need to be implemented before a supervised waterfront could be considered an option. ITI contracted the Lifesaving Society to perform a supervised feasibility study to identify the costs and steps that would be required to provide staffed supervisory services.

The objectives of the Fred Henne Beach Safety survey were to:

- Assist with improving aquatic safety at Fred Henne Territorial Park;
- Educate/inform the public on aquatic safety and measures being considered at Fred Henne Territorial Park;
- Seek public feedback on the aquatic safety actions, and specifically lifeguard supervision, being considered for Fred Henne Territorial Park;
- Provide a confidential area for the public to provide feedback on aquatic safety; and
- Seek general feedback on aquatic safety.

Section 2: Methodology

2.1 Phase 1

The survey instrument was designed to measure beach usage and attitudes towards water safety, and to seek public feedback on various safety recommendations by the Lifesaving Society. Although the survey was open to everyone, the survey targeted Yellowknife households, and non-Yellowknife residents were omitted from the analysis.

Full survey implementation began on January 21, 2014, and was completed on February 13, 2014. The survey was administered online through surveymonkey.com. Only one response per computer (IP Address) was allowed. For Phase 1, there were 332 surveys completed and of these 303 were completed by residents of Yellowknife. Survey completion rate among Yellowknife residents was 95%.

The survey was advertised through various media:

- GNWT website (http://www.gov.nt.ca/)
- GNWT ITI website (http://www.iti.gov.nt.ca/)
- NWT Parks website (http://www.nwtparks.ca/)
- NWT Parks Facebook page (https://www.facebook.com/NWTParks)
- CJCD Mix 100 radio advertisements ran from January 27 to February 13, 2014.
- Yellowknifer newspaper advertisements on February 2, 7 and 12
- NWT Parks newsletter email sent to Yellowknife residents that have camped at Fred Henne in 2013 (733 emails sent on January 22, 2014 and 688 follow-up emails sent on February 11, 2014)
- Facebook banner advertisement ran between January 31, 2014 and February 13, 2014. This advertisement was seen by 7,471 Yellowknife residents for an average of 36 times each.

Respondents had an opportunity to enter a draw for beach safety equipment after the completion of the survey.

2.1 Phase 2

The survey instrument was designed to understand how people in Yellowknife feel about various supervisory options at Fred Henne and beach safety in general. The survey targeted households in Yellowknife, although it was open to everyone. Non-Yellowknife residents were later omitted from the analysis.

Full survey implementation began on March 13, 2014, and was completed on April 8, 2014. The survey was administered online through surveymonkey.com. Only one response per computer (IP Address) was allowed. For Phase 2, there were 76 surveys completed, and of these 73 of these surveys were by residents of Yellowknife. Survey completion rate among Yellowknife residents was 87% and 35% of the Yellowknife residents indicated that they participated in Phase 1 of the survey.

The survey was advertised through various media:

- GNWT website (http://www.gov.nt.ca/)
- GNWT ITI website (http://www.iti.gov.nt.ca/)
- NWT Parks website (http://www.nwtparks.ca/)
- NWT Parks Facebook Page (https://www.facebook.com/NWTParks)
- Newspaper Advertisements were posted on March 24, 26, and April 7
- NWT Parks Newsletter email invitation sent to Yellowknife residents that have camped at Fred Henne in 2013 (679 emails sent on March 13, 2014)

Respondents had an opportunity to enter a draw for beach safety equipment after the completion of the survey.

Section 3: Phase 1 Survey Questions and Results

*n = sample size, number of respondents

3.1 Demographics

Are you a resident of Yellowknife? (Q1, n=354)

	Frequency	Percent
Yes	319	90%
No	35	10%
Total	354	100%

How old are you? (Q2, n=319)

Age	Frequency	Percent
15-24	22	7%
25-34	116	36%
35-44	105	33%
45-54	55	17%
55-64	18	6%
64+	3	1%
Total	319	100%

Are you a male or female? (Q3, n=319)

Sex	Frequency	Percent
Male	87	27%
Female	232	73%
Total	319	100%

3.2 Beach Usage

During the 2013 park season how often did you use the beach at Fred Henne Territorial Park? (Q4, n=319)

	Frequency	Percent
Daily	16	5%
Weekly	148	46%
Monthly	67	21%
Seldom	65	20%
Never	23	7%
Total	319	100%

Typically who do you go to the beach with? Mark all that apply! (Q5&Q6)

	Frequency
Alone	7
Child/children	227
Spouse or significant other	198
Other family members	125
Friends	213
Other	17

Please tell us about the children you go to the beach with. How old are they and how would you rate their swimming skills? (Q7)

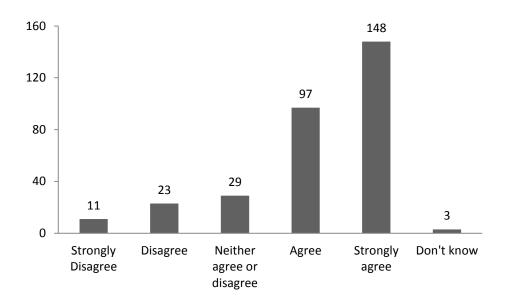
Age	Cannot Swim	Poor	Fair	Average	Good	Excellent
0 to 3	104	10	5	0	0	0
4 to 6	38	37	20	19	4	1
7 to 10	8	24	39	40	22	5
11 to 14	2	4	12	35	29	7
15 to 18	0	2	3	12	7	6

How would you rate your own swimming skills (Q8, n=295)

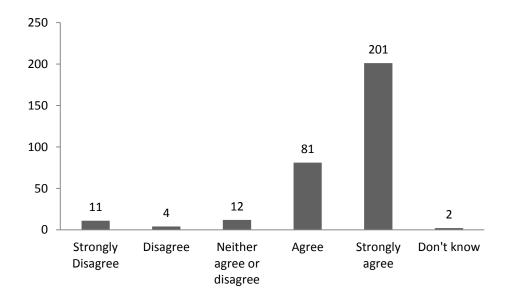
Swimming Skill	Frequency	Percent
Excellent	64	22%
Good	96	33%
Average	84	28%
Fair	31	11%
Poor	13	4%
I cannot swim	7	2%
Total	295	100%

Please indicate your agreement with the following statements:

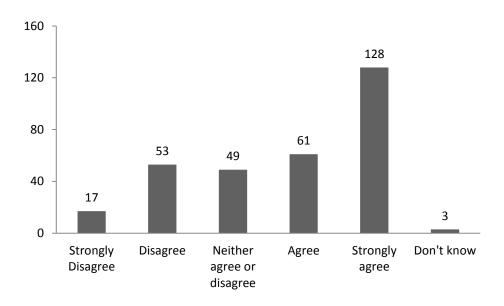
Education is the most important component of beach safety (Q9a, n=311)



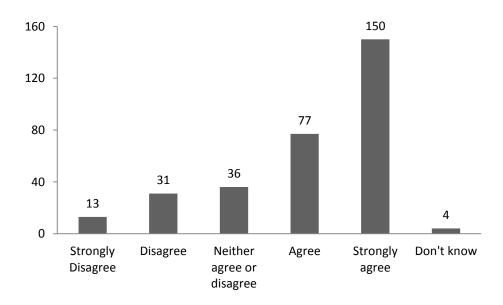
Parents or guardians should review beach safety with children in their care every time they visit the beach (Q9b, n=311)



When in the water, children should always be within an arms' reach of an adult or responsible guardian (Q9c, n=311)



Beach safety is primarily the responsibility of the individual or the parent/guardian (Q9d, n=311)

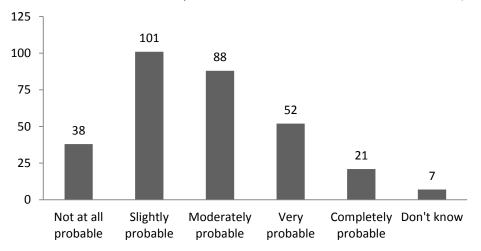


3.3 Safety Recommendations

Layer of Protection 2: Primary Signage

For the 2014 park season, ITI will implement all of the recommendations identified by the Lifesaving Society's audit that will move the beach up in the levels of safety. The first recommendation is to install primary signage alerting people to the new policies regarding beach rules, the location of hazards, the availability of safety equipment, and emergency procedures.

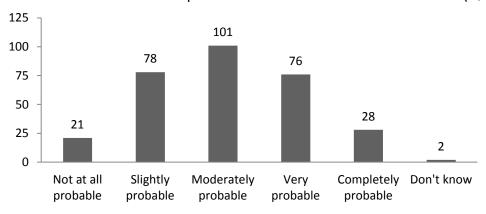
In your opinion, what is the probability that these changes provide significant safety improvement over the current level of protection at Fred Henne Territorial Park? (Q10, n=307)



Layer of Protection 3: Secondary Signage

ITI will determine the optimum size of the swimming area, and designate "no-swim" location and "no-boat" locations at areas where there is a risk of contact between swimmers and boats. ITI will place secondary signage at areas of concern and identify all known hazards (holes, dropoffs, etc.).

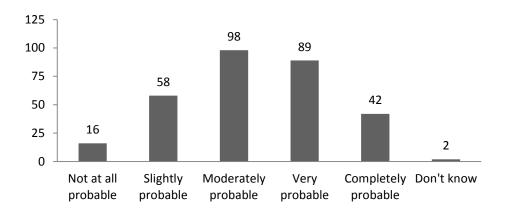
In your opinion, what is the probability that these changes provide significant safety improvement over the current level of protection at Fred Henne Territorial Park? (Q11, n=306)



Layer of Protection 4: Public Education

ITI will maintain a lifejacket loaner station and provide education on the dangers of using inflatable rafts/toys at the beach, in addition to providing information on the importance of supervising children around water. ITI will develop a public education program on site and online.

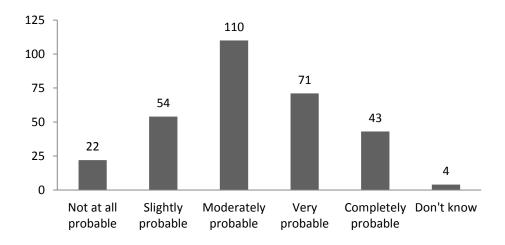
In your opinion, what is the probability that these changes provide significant safety improvement over the current level of protection at Fred Henne Territorial Park? (Q12, n=305)



Layer of Protection 5: Public Rescue Equipment

ITI will ensure safety equipment is available (reaching pole and buoyant throwing assist) at the Fred Henne Territorial Park beachfront for use by the public in case of an emergency.

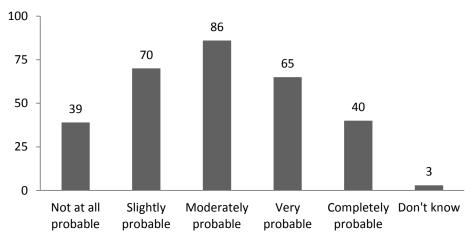
In your opinion, what is the probability that these changes provide significant safety improvement over the current level of protection at Fred Henne Territorial Park? (Q13, n=304)



Layer of Protection 6: Emergency Equipment & Incident Response

ITI will expand its emergency procedure manual. Additionally, ITI will install an emergency contact list at the beachfront and investigate installation of a direct dial phone at the beach that can be used in the event of an emergency.

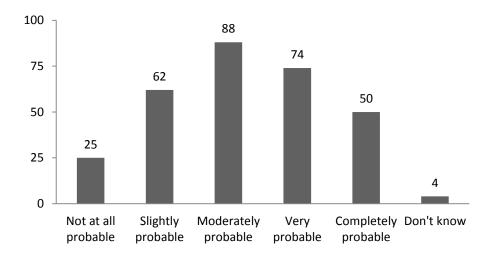
In your opinion, what is the probability that these changes provide significant safety improvement over the current level of protection at Fred Henne Territorial Park? (Q14, n=303)



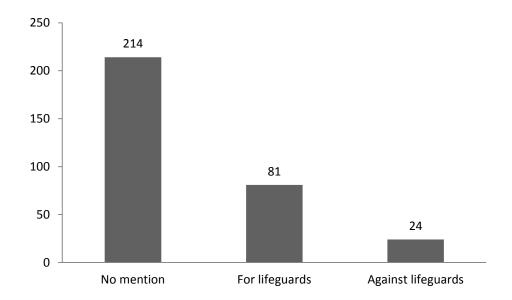
Layer of Protection 7: Staff Training

ITI will train all park staff (Park Officers, contractors, ITI staff) in basic waterfront and local emergency procedures.

In your opinion, what is the probability that these changes provide significant safety improvement over the current level of protection at Fred Henne Territorial Park? (Q15, n=303)



Unprompted attitudes toward lifeguards at Fred Henne Beach based on "Additional Comments". (n=319)



Section 4: Phase 2 Survey Questions and Results

4.1 Demographics

Are you a resident of Yellowknife? (Q1, n=89)

	Frequency	Percent
Yes	84	94%
No	5	6%
Total	89	100%

How old are you? (Q2, n=84)

Age	Frequency	Percent
15-24	6	7%
25-34	22	26%
35-44	32	38%
45-54	15	18%
55-64	8	10%
64+	1	1%
Total	84	100%

Are you a male or female? (Q3, n=84)

Sex	Frequency	Percent
Male	25	30%
Female	59	70%
Total	84	100%

Did you participate in the first phase of the Fred Henne Beach Safety Survey? (Q11, n=80)

	Frequency	Percent
Yes	28	35%
No	46	58%
Don't Know	6	8%
Total	80	100%

What is your main source of information about the Government of Northwest Territories current efforts to improve beach safety at Fred Henne Beach? (Q10, n=80)

	Frequency	Percent
Local media (newspaper, radio)	52	65%
Social media	15	19%
ITI website	6	8%
Word of mouth	4	5%
Other	3	4%
Total	80	100%

How would you rate your knowledge about the beach safety recommendations provided by the LSS in the Fred Henne Beach Aquatic Safety Audit Report? (Q12, n=79)

	Frequency	Percent
I do not know anything about this	12	15%
I don't know enough about this to fully understand it	10	13%
I'm not sure whether or not I know enough about this	20	25%
I know enough about this, however, I want to know more about	15	19%
I know a lot about this	22	28%
Total	79	100%

4.2 Beach Usage

During the 2013 park season how often did you use the beach at Fred Henne Territorial Park? (Q4, n=84)

	Frequency	Percent
Daily	3	4%
Weekly	40	48%
Monthly	20	24%
Seldom	15	18%
Never	6	7%
Total	84	100%

Typically who do you go to the beach with? Mark all that apply! (Q5&Q6)

	Frequency
Alone	3
Child/children	46
Spouse or significant other	49
Other family members	27
Friends	59
Other	4

Please tell us about the children you go to the beach with. How old are they and how would you rate their swimming skills? (Q7)

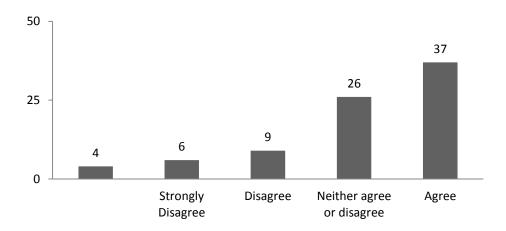
	Cannot					
Age	Swim	Poor	Fair	Average	Good	Excellent
0 to 3	17	3	1	0	1	0
4 to 6	5	8	4	1	4	0
7 to 10	0	4	13	10	5	1
11 to 14	0	1	3	8	10	3
15 to 18	0	1	0	3	1	1

How would you rate your own swimming skills (Q8, n=77)

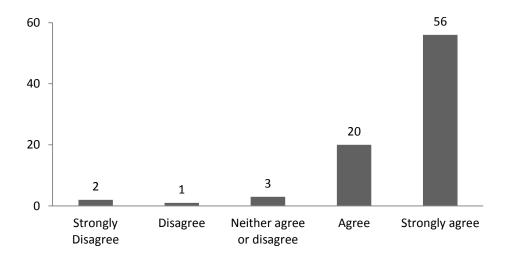
Swimming Skill	Frequency	Percent
Excellent	16	21%
Good	23	30%
Average	20	26%
Fair	10	13%
Poor	7	9%
I cannot swim	1	1%
Total	77	100%

Please indicate your agreement with the following statements:

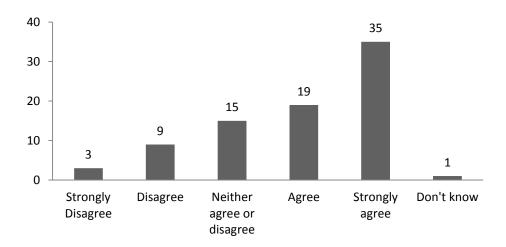
Education is the most important component of beach safety. (Q9a, n=82)



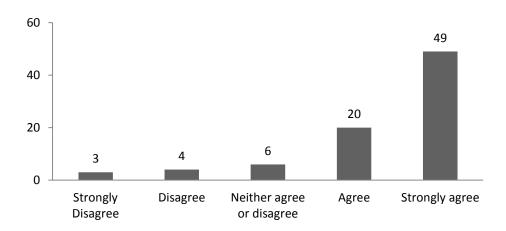
Parents or guardians should review beach safety with children in their care every time they visit the beach. (Q9b, n=82)



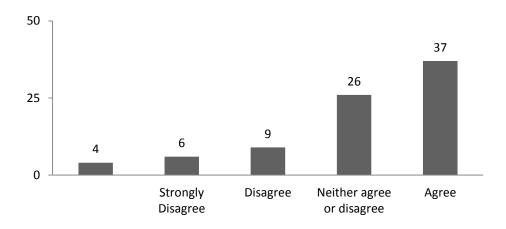
When in the water, children under the age of 10 should be always be within arm's reach of an adult or responsible guardian. (Q9c, n=82)



Beach safety is primarily the responsibility of the individual or the parent/guardian. (Q9d, n=82)



Inflatable beach toys can pose a significant safety risk, as they are easily blown around by the wind. (Q9e, n=82)



4.3 Supervision Options

The first supervisory option would involve staffing the beach with waterfront attendants.

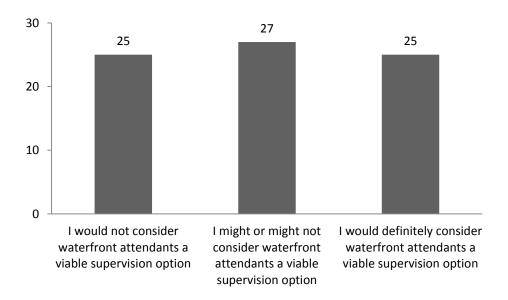
Possible benefits:

- 1. During standard operation hours, waterfront attendants could enforce rules, provide public education and monitor beach use.
- 2. A safety level of 8 (supervised waterfront) would be achieved during supervised times.
- 3. Waterfront attendants would be fully trained and certified to respond to incidents in restricted swim areas up to 1.2 meters.
- 4. Recruitment for this option would be more successful.

Possible drawbacks:

- 1. Waterfront attendants cannot provide deep water rescue and are not allowed to respond to incidents outside the designated swimming area.
- 2. During standard operation hours, children under the age of 10 are not allowed in the water, unless they are within an arm's reach of an adult or responsible guardian.
- 3. During standard operation hours, children under the age of 13 without an adult or responsible guardian are asked to leave the beach.
- 4. Outside of standard operating hours, the beach would operate as an unsupervised waterfront.

Given the possible benefits and drawbacks of having waterfront attendants, would you consider waterfront attendants a viable supervision option at Fred Henne Beach? (Q14, n=77)



The second supervisory option would involve limited lifeguard service.

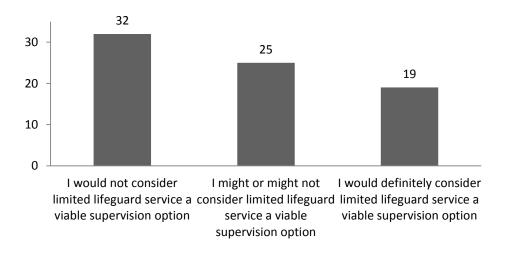
Possible Benefits:

- 1. During peak and high risk times, fully trained lifeguards would be on duty at Fred Henne Beach. These lifeguards would have all the necessary waterfront and aquatic emergency care training to provide effective safety and supervision.
- 2. Lifeguards can provide deep-water rescue
- 3. During peak and high risk times, lifeguards could enforce rules and monitor beach use.
- 4. A safety level of 8 (supervised waterfront) would be achieved during supervised times.

Possible Drawbacks:

- 1. Beach attendance is limited by a strict lifeguard to guest ratio (1:40). Limits on guest numbers would be strictly enforced during times of lifeguard supervision and additional guests would not be admitted when the beach is operating at full capacity. With 4 lifeguards on duty, the maximum capacity is limited to 160 guests.
- 2. Lifeguards are not allowed to respond to incidents outside the designated swimming area.
- 3. When lifeguards are on duty, children under the age of 10 are not allowed in the water, unless they are within an arm's reach of an adult or responsible guardian.
- 4. When lifeguards are on duty, children under the age of 13 without an adult or responsible guardian are asked to leave the beach.
- 5. The potential candidate pool to staff these positions is limited. Recruitment would be an ongoing issue.
- 6. When lifeguards are not on duty or not available due to staff shortage, the beach would operate as an unsupervised waterfront.

Given the possible benefits and drawbacks of having limited lifeguard service, would you consider limited lifeguard service a viable supervision option at Fred Henne Beach? (Q15, n=76)



The third supervisory option would involve full lifeguard service.

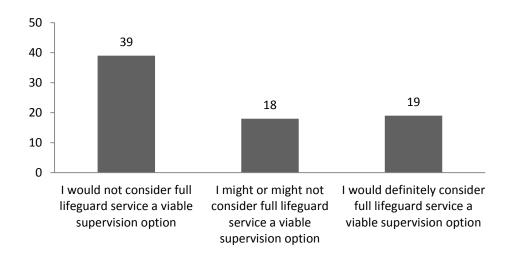
Possible Benefits:

- 1. During standard operation hours, fully trained lifeguards would be on duty at Fred Henne Beach. These lifeguards would have all the necessary waterfront and aquatic emergency care training to provide effective safety and supervision.
- 2. Lifeguards can provide deep-water rescue
- 3. During standard operation hours, lifeguards could enforce rules and monitor beach use.
- 4. A safety level of 8 (supervised waterfront) would be achieved during standard operation hours.

Possible Drawbacks:

- 1. When lifeguards are not on duty or not available due to staff shortage, beach access would be prohibited.
- 2. Beach attendance is limited by a strict lifeguard to guest ratio (1:40). Limits on guest numbers would be strictly enforced during times of lifeguard supervision and additional guests would not be admitted when the beach is operating at full capacity. With 4 lifeguards on duty, the maximum capacity is limited to 160 guests.
- 3. Lifeguards are not allowed to respond to incidents outside the designated swimming area.
- 4. Children under the age of 10 are not allowed in the water, unless they are within an arm's reach of an adult or responsible guardian.
- 5. Children under the age of 13 without an adult or responsible guardian are asked to leave the beach.
- 6. The potential candidate pool to staff these positions is limited. Recruitment would be an ongoing issue.

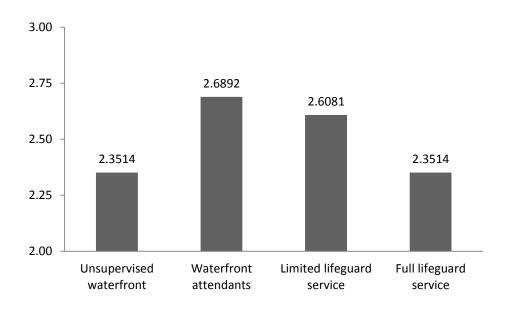
Given the possible benefits and drawbacks of having full lifeguard service, would you consider limited lifeguard service a viable supervision option at Fred Henne Beach? (Q16, n=76)



Given your current knowledge of beach supervision options, please rank the following options in order of preference. 1 represents the most desirable option, while 4 is the least desirable. (Q17, n=74)

	1 (most preferred)	2	3	4 least preferred)
Unsupervised waterfront	26	8	6	34
Waterfront attendants	17	25	24	8
Limited lifeguard service	9	32	28	5
Full lifeguard service	22	9	16	27

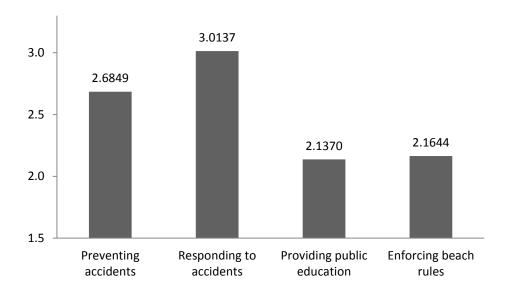
Mean preference scores (Q17, n=74, higher score indicates higher preference)



Please rank the main responsibilities of beach supervisors (waterfront attendants and lifeguards). 1 represents the most important responsibility, while 4 is the least important. (Q18, n=73)

	1 (most important)	2	3	4 (least important)
Preventing accidents	15	31	16	11
Responding to accidents	30	22	13	8
Providing public education	16	5	25	27
Enforcing beach rules	12	15	19	27

Mean importance scores (Q18, n=73, higher score indicates higher importance)



Please indicate your level of agreement with the following statement:

When it comes to beach safety, the presence of a trained waterfront attendant or lifeguard reduces the responsibility of the individual or the parent/guardian. (Q19, n=73)

