

MEMORANDUM

To: Jamie Cox, Wairoa District Council

From: Jane Petch, Hamish Lowe and Angela Lane, Lowe Environmental Impact

Date: 7 August 2017

Subject: Task A3D5 Recreational Use Analysis – Interim Analysis of Open Water Use

This memorandum outlines the interim results of the Recreational Use Analysis of the Recreational Survey (Task A3I5) undertaken over Easter 2017. The interim results focus mainly on open water based recreation and were produced to present at the 5th Stakeholder meeting on 10th July 2017. A further detailed report has been produced to follow on from this memo. This includes an assessment of land based and closed water based activities and builds on the discussions presented in this memo regarding open water based activities.

BACKGROUND AND PURPOSE

The Wairoa wastewater treatment system requires a replacement consent by May 2019. The existing discharge of treated wastewater into the Wairoa River estuary is one of several discharge options that will need to be considered. Actual and potential relationships between any river or estuary discharge and recreational uses of the river and its margins will need to be taken into account when considering any future estuary discharge.

To determine details of the current use of the Wairoa River, Lowe Environmental Impact (LEI) prepared a survey form for Wairoa District Council to ascertain how the community participate in recreational activities, and in particular how they use the Wairoa River recreationally.

This memo has been produced to solely interpret the results from the recreational analysis survey (Task A3I5) only and is not intended to provide recommendations for future discharge options.

METHODOLOGY

The methodology used for selecting questions and participants is described in detail in a previous memo (Task A3I5 Wairoa River Recreational Use Survey dated 28 February 2017).

Essentially 100 households were randomly selected in an attempt to sample 10 % of the population of Wairoa residents. This involved a group of interviewers going door to door interviewing a member of each household. This was conducted in April 2017.

ANALYSIS

The information from the survey has been collated into a spreadsheet for analysis. There is a vast amount of information around recreational activities, but this analysis focuses on use of waterways.

Graphs were generated to provide the following information:

- The age of the sample population;
- The age of sample population that undertake outdoor recreation;



Wairoa Recreational Survey – Interim Analysis of Open Water Use

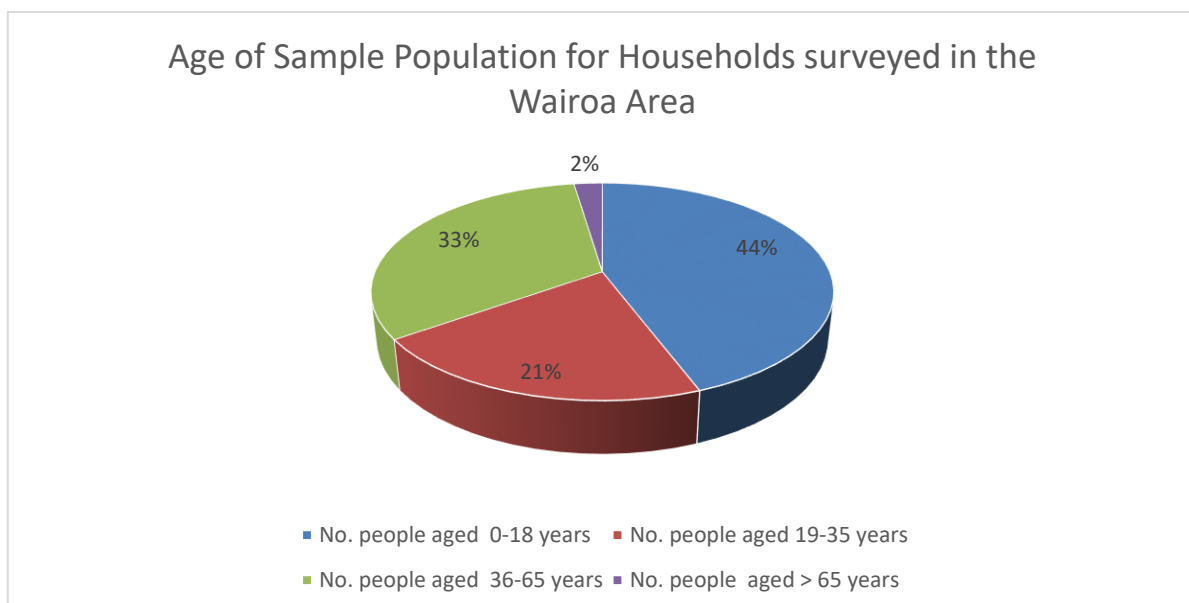
- The general types of outdoor activities;
- The activities undertaken by Wairoa residents at the various open water locations in the Wairoa area;
- The seasonal frequency of open water based activities in the Wairoa area by Wairoa residents; and
- The importance of health and safety in open water.

RESULTS

Age of Sample Population

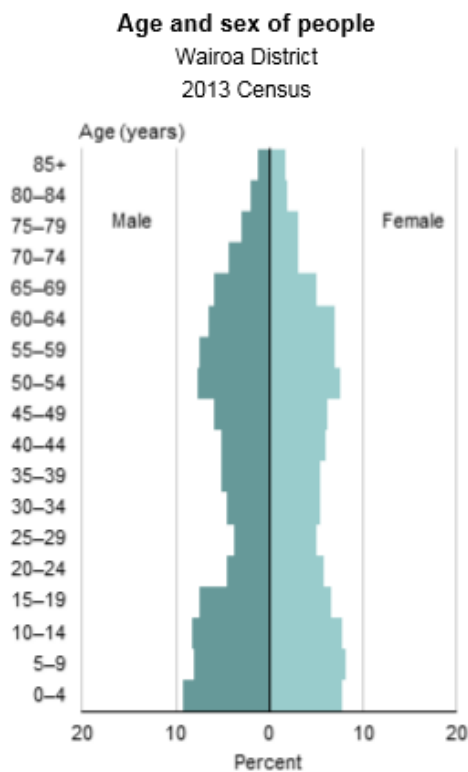
The following graph shows the sample demographic. The majority of people within houses in the community are children aged between 0-18 years. The next largest demographic would be adults 36-65 years old. A very small percentage are elderly over the age of 65 years old.

Based on the 2013 census the median age is 38.9 years old, 15.6% are over the age of 65 years and 24.6 % are under the age of 15. Therefore, this suggests that the sample may not be a typical representation for the group over the age 65 years. The 2013 census results shows that the age groups with the largest population are 0-4 year olds and 50-54 year olds, these age groups are covered in the most common groups in the surveyed population; 0 – 18 year olds at 44% and 36 – 65 year olds at 33% respectively.





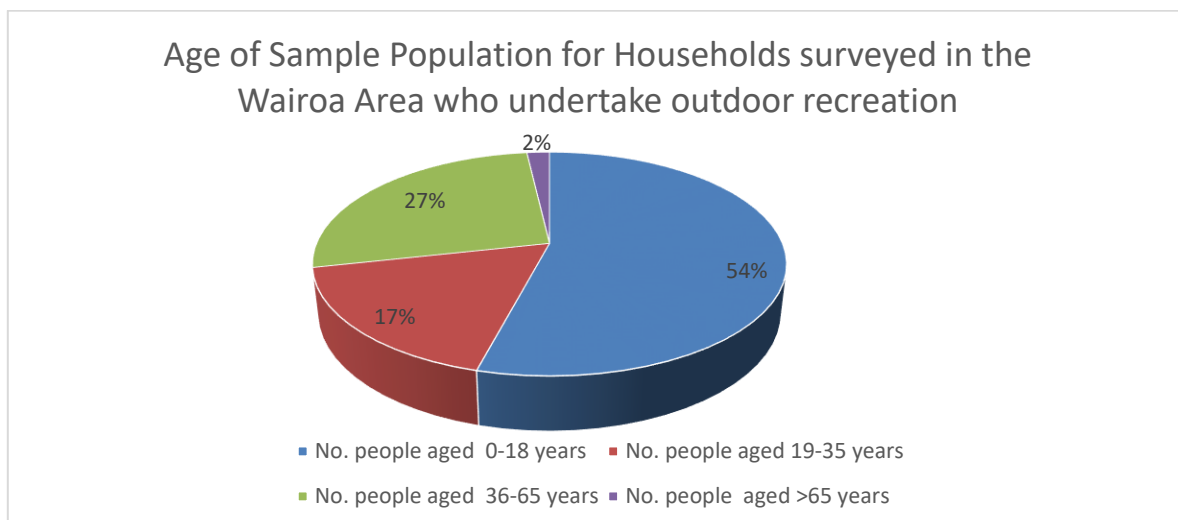
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Source: Statistics New Zealand

Age of Sample population who undertake outdoor activities

In the majority of households surveyed, children aged 0-18 years old are the largest group to undertake outdoor activities. A lesser proportion of young adults (19-35 years old) and adults aged 36-65 years old of the sample demographic participate in outdoor recreation.

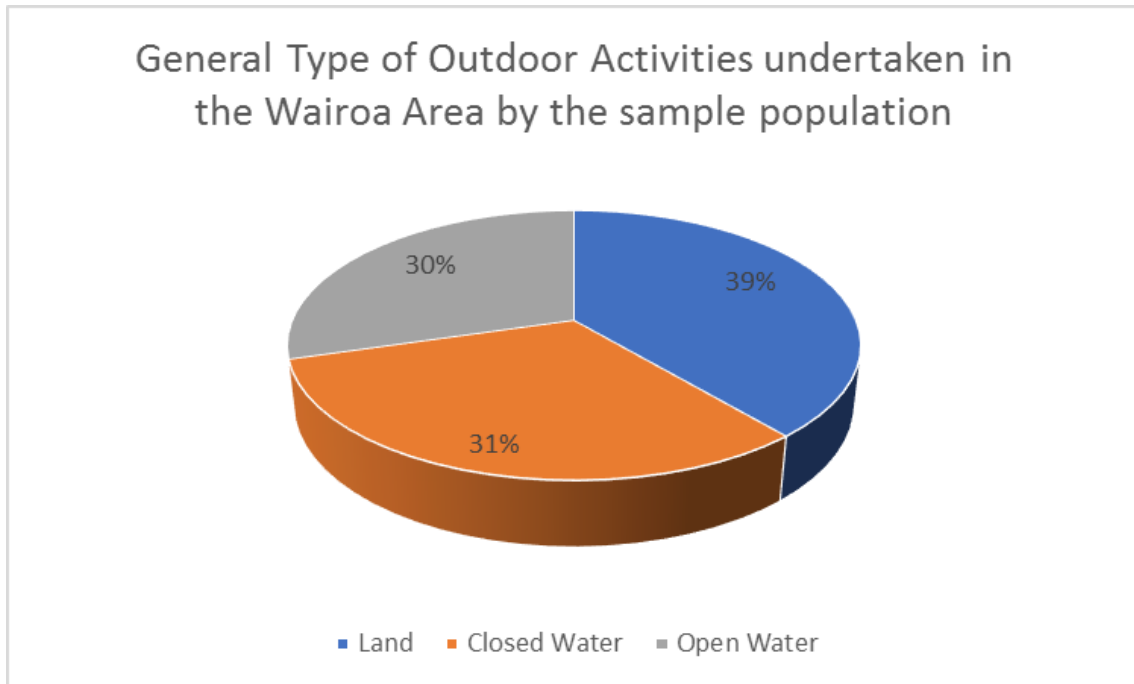




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General Types of Outdoor Activities

Residents were asked what type of recreational activities they undertake. The following graph shows the grouping of activities (land based, closed water based and open water based). The results show a very even split between all three of these activity types.



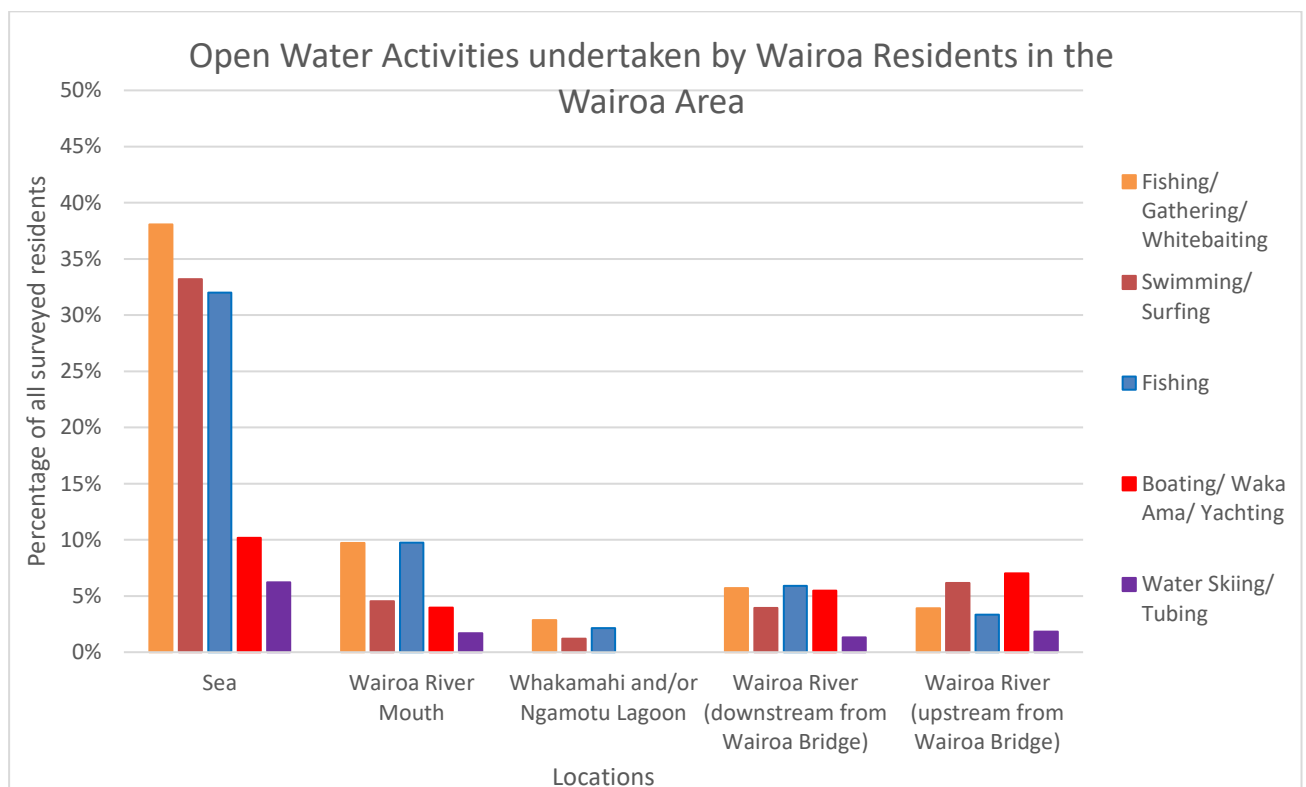


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Open water based activities at the various selected open water locations

With a focus on open water, the following graph presents the location of open water activities and the activity undertaken.

The sea is shown to be the most popular location with close to 40% of participants indicating they do some activity in the sea or around the sea. The Wairoa River mouth was the next favoured location, with about 10% of the residents surveyed reporting they partake in open water based activities around the river mouth. The other two Wairoa River locations, being downstream of the bridge and the upstream of the bridge, were utilised by <10% of the residents surveyed. The Whakamahi and/or Ngamotu Lagoon is the least utilised open water location.



The data has been grouped by the percentage of people from surveyed households that undertake the selected activities at the various chosen locations. From each location, the following activities are shown to be the most favoured:

- **Sea:** fishing/gathering/whitebaiting followed closely by swimming and surfing;
- **Wairoa River Mouth:** fishing and fishing/gathering/whitebaiting categories;
- **Wakamahi/Ngamotu Lagoon:** fishing category followed by fishing/gathering/whitebaiting;
- **Wairoa River downstream of the Wairoa Bridge:** fishing/gathering/whitebaiting and fishing followed closely by boating/Waka Ama/Yachting and;
- **Wairoa River upstream of the Wairoa Bridge:** boating/Waka Ama/Yachting category are reported to be the favoured activity followed by the swimming and surfing.



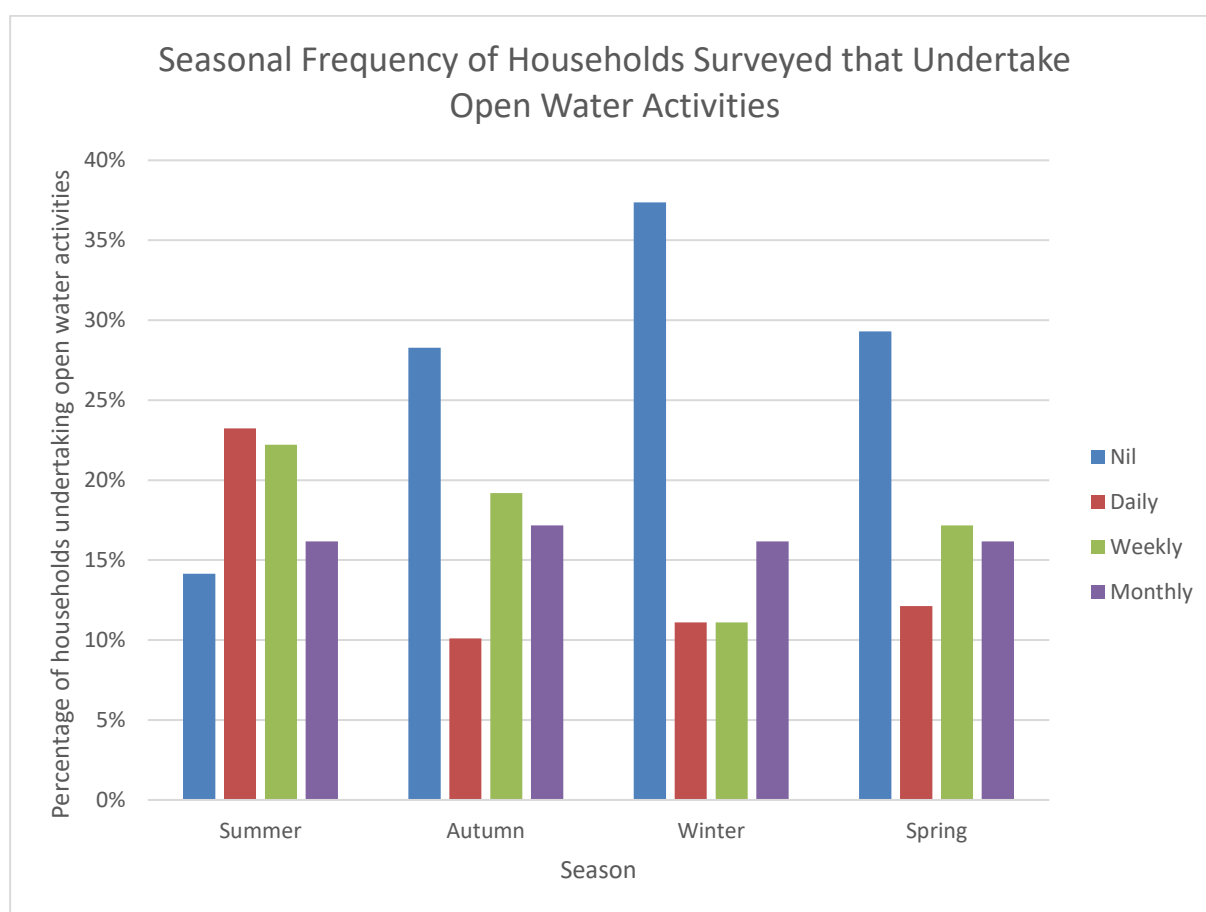
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Boating/Waka Ama/yachting options were popular at all river locations. This is further demonstrated from the results which asked the participants what clubs or groups they belonged to, with many answering that they belong to Waka Ama or are members of the Yacht Club.

Water skiing and tubing was the least favoured activity in all locations.

Seasonal frequency of open water based activities in the Wairoa area

The following graph is an indication of the frequency within each season that the surveyed households participate in open water based activities. The percentage of households is the number of surveyed participants that answered “yes” to this question to the proportion of total households surveyed (99 households in total).

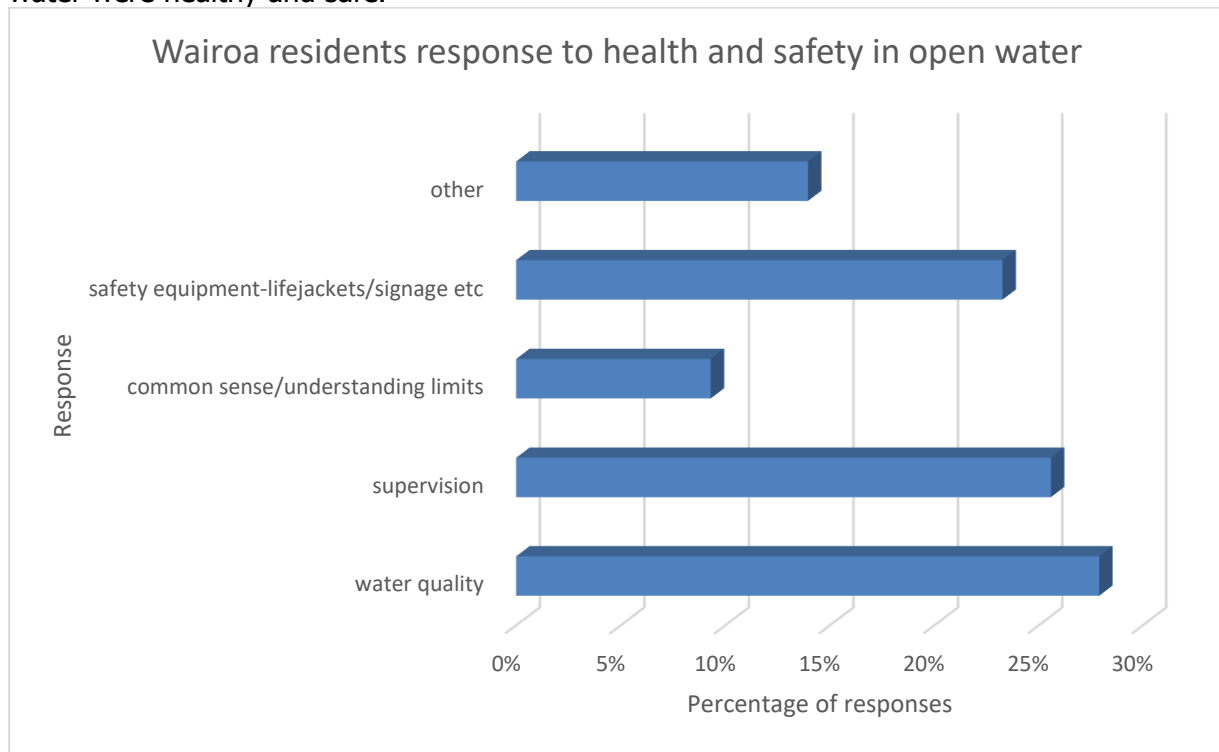


The data shows that 23 % of the households surveyed participate in open water based activities on a daily basis in Summer. On a daily basis, many do not participate in Autumn, Winter or Spring in open water based activities. However, more than 10 % of respondents partake in these activities on a daily basis all year round. In Autumn and Spring 19 % and 17 % respectively do some water based activity on a weekly basis. Over 15 % of households undertake a water based activity, monthly, all year round.

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Importance of Health and Safety for Open Water Based Activities

Participants were asked what they felt was important to ensure recreational activities in open water were healthy and safe.



The survey response showed that water quality at 28% of all surveyed households was the most common response followed closely by supervision (26%) and then use of safety equipment (23%).

Conclusion

The main demographic that undertake open water based outdoor recreational activities in the Wairoa area are children aged between 0-18 years old.

Approximately one third of all surveyed residents said that they do some form of open water based recreational activity.

It can be concluded that the most popular open water location for recreational activities was the sea with almost 40% of the residents surveyed suggesting this. Of the surveyed participants, 10% or less use the Wairoa River at the three locations selected.

Popular activities in the Wairoa River included Boating, Waka Ama and Yachting, Fishing and Fishing/Gathering/Whitebaiting and also Swimming.

It is most common in the summer for the Wairoa residents surveyed to undertake open water based activities on a daily basis. Most households surveyed did not undertake water based activities in winter. However, over 15% of all residents surveyed would undertake some form of water based outdoor recreation all year round.



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Water quality, supervision and use of safety equipment, were what the surveyed residents believed were the most important factors to ensure health and safety during open water based activities.