



SAFETY & RISK MANAGEMENT PLAN

This Report is the safety and risk management plan for South Island Rowing Inc. trading as Ruataniwha Rowing. Its aim is to formalize the operation of events using the facilities at Lake Ruataniwha, TWIZEL. Nothing in this plan takes away from the responsibilities of organizations or individuals for complying with the Laws, Rules and Regulations set by Statute and Statutory Authorities to ensure safety and risk minimization to participants, spectators and officials.

PO Box 291, Twizel, New Zealand

1 INDEX

1	INDEX	2
2	DOCUMENT HISTORY	4
3	INTRODUCTION	5
4	BACKGROUND	5
5	AUTHORITIES	6
6	HAZARD IDENTIFICATION	6
6.1	Water Based Hazards	6
6.2	Land Based Hazards	7
7	APPLICATION	7
7.1	Application Area	7
7.2	Safety Officer	8
8	SAFETY EQUIPMENT	8
8.1	Motor Boats.....	8
	General	9
	Umpire Boats.....	9
	Safety/Rescue Boats	10
	Barges	10
	Jet Ski	10
	Boat Operation.....	11
8.2	On Shore Facilities	11
8.2.1	Rowing Control Building.....	11
8.2.2	2000 Meter Start Tower	12
8.2.3	Communication	12
8.2.4	First Aid	12
8.2.5	Police:	12
8.2.6	Fire.....	13
8.2.7	Water:	13
8.2.8	Doctor	13
9	GENERAL REQUIREMENTS	13
9.1	On Water Activities	13
	Boats.....	13
	Lane Wires & Buoys	14
9.2	ON SHORE ACTIVITIES.....	14



PO Box 291
Twizel
NEW ZEALAND

9.2.1	Shore Based Equipment.....	14
9.2.2	Amenities	14
9.2.3	Safety Equipment	15
9.2.4	Records.....	15
10	OPERATION	15
10.1	Coaching	15
10.2	Flags	15
10.2.1	Flag Signals	15

2 DOCUMENT HISTORY

Issue	Prepared By	Change	Approved By	Date
1	P Bell	Initial	NA	October 2003
2	P Bell	Meeting Changes	SIRI	15 November 2003
3	P Bell	Revision		October 2007
4	P Bell	Update with Regulatory changes	Draft only	
5	P Bell	Interim update		February 2015

3 INTRODUCTION

South Island Rowing Inc. (SIR) is an eventing organization that owns and operates land based facilities on its property on the shores of Lake Ruataniwha and in the water of Lake Ruataniwha, Twizel. Although the prime activities relate to Rowing, there are several other types of events that involve SIR members and utilize the SIR facilities.

As an eventing organization SIR must have a Safety and Risk Management Plan to cover the activities on the facilities it manages. This safety and risk management plan is intended to detail and promote the safe and responsible operation of the SOUTH ISLAND ROWING facilities at Lake Ruataniwha, Twizel.

Included in the plan are the operating requirements for the SIR equipment deployed for safety as well as the operational aspects for safety both on and off the Lake. The prime focus is operational safety associated with the activities on the areas of land and water occupied by South Island Rowing. In particular, the overall safety of all athletes, support personnel and spectators during events organized by or on behalf of South Island Rowing on Lake Ruataniwha.

It also should be noted that there are limitations placed on the activities in the general vicinity of the SIR facilities outside those times as well. While the Law applies at all times, this plan is specifically aimed at the SIR activities and it is recommended that its contents be applied to all users of the SIR facilities.

4 BACKGROUND

All water sports contain elements of danger and participants recognize this as a basic fact. However, there are various ways that the risk factors can be minimized. The safety of the participants has always been a concern of Rowing Administrations and in recent years the need for safety has been reinforced. References to the safety aspects have been included in the Rules associated with running regattas.

However, there have been some significant changes to the general attitude to safety and this has given rise to increasing legislative and legal directives. One of these is the requirement to have a Safety and Risk Management plan.

Of significance has been the successful prosecution of Organizations and Individuals on charges of Criminal Nuisance. It is clear that there are responsibilities for eventing organizations and their members who need to minimize their exposure to any such charges. This then leads to the requirement to have a fully operational safety plan that is widely publicized and fully understood by all participants and to a lesser extent, spectators.

Lake Ruataniwha is a snow-fed hydro lake. It is situated in the “high Country” of the South Island of New Zealand. The weather is extreme with snow and sub-zero temperatures in the winter (frosts of -10°C and in the summer sunny conditions with temperatures reaching 40°C. Wind is a predominant factor and this causes the Lake to become rough very quickly. It is against this background that the safety management plan has been developed.

5 AUTHORITIES

The operating authority stems from the Rules and Regulations of the Maritime Safety Authority. In particular the Maritime Rule Part 91 – Navigation Safety Rules, the associated amendments and circulars apply.

A second document by Environment Canterbury “**Environment Canterbury Navigation Safety Bylaws 2010**”, also covers many aspects of safety associated with waterways in Canterbury and specifically covers Lake Ruataniwha. A copy with the latest amendments is available from Environment Canterbury www.ecan.govt.nz

The Health, Safety and Employment Act also has implications for running any activity on these facilities and this has special significance for volunteers and paid officials. These documents take precedence over all others on matters of Safety. It should be noted that everyone has a fundamental duty of care not only for the individual but for those who may be in your presence.

The Safety and Risk Management Plan embodies the principles given in the above documents and indicates areas of specific focus while on SIR owned land and on Lake Ruataniwha.

It is recognized that many organizations such as the New Zealand Rowing Association have their own Rules, Regulations, Safety Codes and possibly dispensations for their own specific sporting code. They may apply them to their specific events and where there is no conflict with the previously mentioned documents their application belongs to that organization.

However, there is no mandate to enforce any rules that are in conflict with the prime documents.

6 HAZARD IDENTIFICATION

The following table indicates some of the hazards that could be experienced at Lake Ruataniwha. This is not intended to be a complete list but includes some of the common ones that have been observed.

6.1 WATER BASED HAZARDS

Haz	Eliminate	Isolate	Minimise
The Island at the 500 meter		See Rowed Code Stay clear	Orange marker buoys show hazard
Rocks at the sides of the start		See Rowed Code Stay clear	Lanes marked for the corr
Wave reduction mechanism at the		See Rowed Code Stay clear	Stay well clear of the barriers
Shallow water between land and		See Rowed Code Stay clear	Single file over this section.
Shallow bar at the 1000 meter mark		See Rowed Code Stay clear	Be careful when entering the circuit

Cold Temperatures		Stay off the water until it is warm	Use warm clothing / dress appropriately.
Variable wind and wave conditions		Stop activity when conditions are deemed hazardous.	Constantly observe conditions and control event accordingly
Poor visibility due to fog or low cloud.		Stop activity when visibility reduces below 500 meters.	Constantly observe conditions and control event accordingly

6.2 LAND BASED HAZARDS

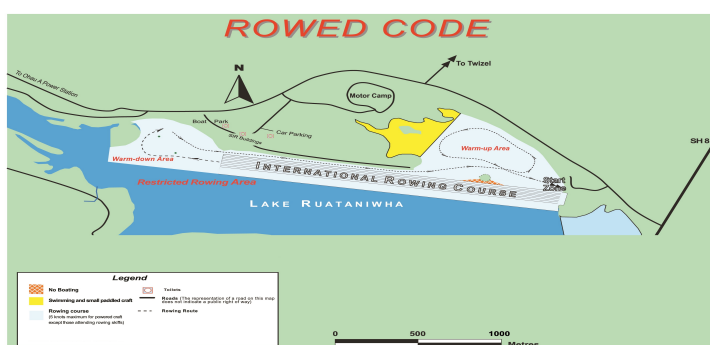
Hazard	Eliminate	Isolate	Minimise
Road Traffic along the banks.	Close some roads		Signpost and enforce speed limit.
Slippery gravel to launch area			Signpost potential hazard
Slips, Trips & Falls			Select a path that is less hazardous
SIR Mobile Equipment	Remove from site	Rope off from access	Ensure such equipment is left inaccessible state
SIR Fixed assets			Warning signage appropriately located
Flying debris.			Ensure all items not in use are securely tied down.

7 APPLICATION

This plan applies to the land area bounded by the lake and the boundary fence which is owned by SIR. On the water, it applies to the section of water the width of the lake that starts approximately 50 meter east of the 2000 meter start line and approximately 500 meters west of the rowing course finish line.

Note: There are some sign around the course that depict the areas and the operating rules. Each code will have their own operating rules and for convenience, those applying to rowing are displayed.

7.1 APPLICATION AREA



7.2 SAFETY OFFICER

The Organizer of any event on Lake Ruataniwha that uses the Ruataniwha Rowing equipment and facilities shall appoint a Safety Officer. This person will be responsible for all aspects of safety for that event.

All events must be advertised in the local newspaper to ensure that activities on the lake are well known. Lake closure can be arranged through ECAN.

The Safety Officer is responsible for ensuring that all safety equipment is in good working order before the event. This also includes the provision of appropriate facilities for the "Health and Safety" of all participants and spectators.

The Safety Officer is to ensure that all participants are advised of the Safety features deployed, the limitation of the operation and the aspects of which they are expected to have knowledge and training. (This traditionally takes the form of a pre-event briefing).

The Safety Officer is to ensure that all Officials have adequate training in Safety principles and the safety apparatus available for the event. This also includes ensuring that the Officials are capable to implementing safety procedures in a timely manner relative to the specific roles on which they are engaged.

The Safety Officer is to record all reports of damaged, broken or mal-functioning safety equipment and facilities to the Ruataniwha Rowing Course Manager for remedial action. The Safety Officer is to record all such reports and the details held in a register in the Regatta Control building for subsequent audit as required.

The Safety Officer is to keep a record of every safety incident giving details of the nature of the incident, who was involved, what happened, what was done and the names and addresses of any witnesses. This information is to be maintained in a register in the regatta Control Building and be available for audit as required.

8 SAFETY EQUIPMENT

Ruataniwha Rowing maintains various items of safety equipment to use during events on Lake Ruataniwha. Responsibility for the maintenance, security and records of this equipment lies with the Course Manager.

All personnel using SOUTH ISLAND ROWING safety boats must wear a life jacket while out on the water. An exception to this must have extenuating circumstances and be agreed to by the Safety Officer. A hazard plan must be made and implemented in all such circumstances.

This section identifies the equipment and recommends the quantities that should be deployed.

8.1 MOTOR BOATS

There are three types of motor boats owned and deployed by SOUTH ISLAND ROWING:

- Umpire/Safety Boats (Currently Stabicraft and named after the lakes)
- Safety/rescue boats (Currently labelled as "Safety" or "Rescue")
- Motorised Barges

Each of these boat types is intended for their own specific use and there are general conditions that apply to all and some specific conditions that apply to only one category.

GENERAL

- All boats will have their asset number (Name) recorded clearly on them. This will be used to identify all aspects that relate to that specific craft including costs and maintenance history.
- Each boat is to have a record of its maintenance history. The Course Manager is responsible for all maintenance and ensuring any boat that is to be used for any event is in full working condition.
- Included in the maintenance plan for every boat is the requirement for a fully documented annual inspection and testing of each boat. This should be completed before January every year.
- All boat drivers must be approved by the Course Manager. (See responsibilities of the boat drivers).
- Every boat must display the number of persons it is to carry for normal operations. There is no mandate to exceed this number for normal operations.
- Every boat will carry both safety and operational equipment. This is intended for safety use only and should be so deployed.

UMPIRE BOATS

The Umpire Boats are specifically designed to provide for effective umpiring. Their characteristics have been optimised for that purpose. In that sense, they are designed for a crew of two and their use is intended for that purpose.

It is recommended that every Umpire boat carry the following equipment types and quantities:

- | | |
|--|------|
| • Safety lines. | [2] |
| • First Aid Kit. | [1] |
| • Life Jackets (to NZS 5823:2001) | [2] |
| • Approved buoyancy aids or Personal flotation devices (PFD's) | [10] |
| • Tool Kit. | [1] |
| • Thermal Blanket. | [2] |
| • Loud hailer. (as appropriate) | [1] |
| • Radio Telephone (as appropriate) | [1] |

SAFETY/RESCUE BOATS

The rescue boats are designed to reach anywhere on the course within two minutes and shall be deployed so this can be achieved. These boats are specifically for the Safety/Rescue tasks and it is essential that those using these

boats should be fully trained in rescue techniques, be completely familiar with the safety features and facilities and be trained in first aid principles.

The recommended equipment list for these rescue boats includes the following

- Safety lines. [2]
- First Aid Kit. [1]
- Life Jackets (to NZS 5823:2001) [2]
- Approved Buoyancy Aids or Personal Flotation Devices (PFD's) [10]
- Tool Kit. [1]
- Thermal Blanket. [2]
- Loud hailer. (as appropriate) [1]
- Radio Telephone (as appropriate) [1]

BARGES

Barges have been designed for specific purposes and their use is generally restricted for those purposes. In particular, the work barge, is specifically designed for work on the course and it is optimised for that purpose. While it could be used as a floating platform, its purpose is solely as a work barge and its use should be for that purpose.

As a consequence of their specific roles, their normal complement of safety equipment is significantly reduced.

This may include the following:

- Safety lines. [2]
- A first aid kit. [1]
- Tool Kit. [1]
- Life Jackets (to NZS 5823:2001) [2]
- Approved Buoyancy Aids or Personal Flotation Devices (PFD's) [10]

JET SKI

The Jet Ski has been deployed for the specific purpose of being able to get to any boat having difficulties quickly. It is not designed to transport people or equipment on the lake.

As a consequence of its specific role, the normal complement of safety equipment is significantly different.

This may include the following:

- Safety lines. [1]
- A first aid kit. [1]
- Tool Kit. [0]
- Life Jackets (to NZS 5823:2001) [0]
- Approved Buoyancy Aids or Personal Flotation Devices (PFD's) [1]

BOAT OPERATION

- The boat driver is fully responsible for the boat, the equipment associated with the boat and the operation of the boat.
- The boat driver should check that all the safety equipment is in full operating condition before taking charge of the boat. It is recommended that time be allowed to accomplish this.
- The regular occupants of all boats are to wear approved life jackets when involved with events on Lake Ruataniwha.
- The Boat Driver is to report any deficiencies, failures or breakages to his boat or the associated equipment to the Safety Officer.
- The boats are intended only for activities sanctioned by SOUTH ISLAND ROWING and are generally **NOT** available for coaching and “ad hoc” activities.

8.2 ON SHORE FACILITIES

There is some strategically placed safety equipment on shore for use for those rare incidents that occasionally occur. There are two main points where such equipment is located: at the Regatta Control Building and at the 2000 meter start tower.

8.2.1 ROWING CONTROL BUILDING

At the Regatta Control Building are the following Types of safety or safety related equipment which should be available for use during an event. The suggested types and quantities include:

- Safety lines. [4]
- First Aid Kit. [1]
- Life Jackets (to NZS 5823:2001) [2]
- Approved buoyancy aids or Personal flotation devices (PFD's) [10]
- Tool Kit. [1]
- Thermal Blanket. [4]
- Loud hailer. (as appropriate) [1]
- Radio Telephone Base Station [1]
- Drinking water
- Hot water

8.2.2 2000 METER START TOWER

Safety equipment items should be located at the start tower and be available for use during SIR sanctioned events. This may include the following types and quantities:

- Safety lines. [4]

- First Aid Kit. [1]
- Approved buoyancy aids or Personal flotation devices (PFD's) [10]
- Tool Kit. [1]
- Thermal Blanket. [2]
- Loud hailer. (as appropriate) [1]
- Radio Telephone (as appropriate) [1]
- Drinking water

8.2.3 COMMUNICATION

All telephone communications are centralised at the Regatta Control Building. From this point access to the “111” network can be obtained. This is only available during the operational hours of an event.

It may be possible to find some alternative access to a standard telephone line but this is not normally available.

Cellular telephone coverage is generally available throughout the areas occupied by SIR. However, such devices are not supplied by SIR and service is not guaranteed.

8.2.4 FIRST AID

During events, a First Aid Room located at the Regatta Control Building is available. It is sited on the south west corner of the building on the ground floor.

This room is usually occupied by the local First Aid Personnel.

8.2.5 POLICE:

While for major events there is likely to be additional Police presence at the event and this is usually requested. For all other events there is unlikely to be a police presence.

The closest Police Station is in Tasman St, Twizel opposite the shopping centre in Market Place.

Emergency access is available via the ‘111’ network.

8.2.6 FIRE

Twizel operates a Volunteer Fire Brigade. The fire Station is in Mackenzie Drive adjacent to the Golf Course.

Emergency access is available via the ‘111’ network.

8.2.7 WATER:

Apart from the Lake itself, there is only limited access to water. Please note that potable water is available from designated taps. The lake water is not considered as suitable for drinking.

Hot and Cold Water is available from the rear of the MacRae building. Cold water is available for the taps adjacent to the public toilets east of the MacRae Building.

Taps supplying drinking water are also located at the toilet blocks near the Control Complex and in the "Boat Park".

8.2.8 DOCTOR

The doctor's surgery is in Twizel itself. The hours of attendance do vary and appointments may be necessary.

For emergencies dial "111" or contact St Johns in the first instance.

9 GENERAL REQUIREMENTS

There are a number of requirements that need to be met to ensure the safe operation of the SIR facilities. This includes the maintenance and record keeping aspects which need to be followed. All the maintenance activities including the record keeping are the responsibility of the Course Manager.

9.1 ON WATER ACTIVITIES

There are a number of areas where the Course Manager is to ensure that the water borne facilities are correctly maintained. They fall into two distinct groups.

BOATS

Every Boat of SIR must have an associated maintenance log that details all work carried out on each boat. The log should have a complete history and be available for both external and internal audit purposes.

Every boat should undergo a full maintenance inspection where all defects are repaired prior to the start of the new rowing season. This is typically just before Christmas each year.

Also, every boat should undergo an inspection just after the conclusion of the major regattas prior to them being placed in storage for the winter. The purpose of this inspection is to identify any major repairs or maintenance activities required or decisions to be made prior to the SIR Annual General Meeting.

Periodic inspection of the non-mechanical equipment also needs to be completed. While this could be done in conjunction with the maintenance inspections they need not be. Further, it may be that they are required more frequently but at least annually.

LANE WIRES & BUOYS

All lane wires should undergo an annual inspection where repairs are to be made to set the course up for the major regattas. This will include buoy inspection and replacement as required.

At the completion of the regatta season, the course is to be set to its minimum buoy configuration for the following winter months.

The outside lane wire and associated marker buoys are to be carefully inspected and maintained because they identify the outside of the course and the speed limitations as identified by the ECAN Bylaw.

9.2 ON SHORE ACTIVITIES

The on shore activities are required to ensure that the risk to health and safety are minimised here too. It also includes the maintenance records of all the equipment as well as the health and safety activities carried out. Again, these records must be available for both internal and external audit purposes.

9.2.1 SHORE BASED EQUIPMENT

An annual inspection of all shore based equipment is required. It is appropriate this be done in conjunction with the boat inspections and all results should be recorded.

For operational items, their full functionality as required in an operating environment should also be tested and the results recorded.

Similarly, a further inspection is required after the regatta season to identify any major work or purchases prior to the annual general meeting.

9.2.2 AMENITIES

The amenities including toilets and showers should undergo an annual inspection for both their condition and also their operation. Particular attention needs to be given to the toilets and their associated cleaning.

The Kitchen also requires compliance testing and certification to ensure that SIR meets all the health requirements.

As with all other equipment, the Annual inspection and the post regatta season inspections should be completed. The post Regatta season inspection is required for reporting on any needs to the Annual General Meeting.

Attention needs to be given to the Lake signage to ensure it is visible, accurate and will last until the next inspection.

9.2.3 SAFETY EQUIPMENT

All safety equipment is to have an annual inspection to ensure it is fit for service. This includes the testing of the Life Jackets to NZS 5823, the testing of the buoyancy aids, throw lines and ensuring the first aid kits are replenished.

It is important that there is no out of date pharmaceuticals in the kit.

9.2.4 RECORDS

A full set of records should be held at the Control Building. A soft copy of the records should be stored off site to minimise any chance of a problem.

10 OPERATION

Every Club, School, College and Organized group of participants (often referred to as Clubs) should have a Safety Person or responsible representative who is expected to understand all the safety requirements. This should include MSA Rule 91 and the Environment Canterbury Bylaws and ensure the adherence to the relevant sections.

Implementation to these safety requirements on behalf of South Island Rowing Inc will be the duty of the Safety Officer so appointed for every event. Observance of the SIR Safety and Risk Management requirements is mandatory. The Safety Officer will monitor their observance and advise any breaches in writing to the club, college or school committee or officer responsible.

10.1 COACHING

Coaching and training is a Club responsibility. This is generally not permitted during an event. Outside the event times, coaching is the responsibility of the coach who is expected to comply with all the applicable Laws, Rules and Regulations.

It is recommended that all non-motorised crews undertaking training should be accompanied with a suitably equipped motor boat. (These are not normally provided by SIR).

All crews being trained are expected to be suitably equipped for the purpose and all such equipment should be in good working conditions according to the Rules of operation of their sporting code.

10.2 FLAGS

SIR has deployed the use of flags to indicate the status of the lake for aquatic activities. The flag is flown from the flag pole outside the Control Building and is used throughout the event.

10.2.1 FLAG SIGNALS

The following flag signals apply and the meaning of the colours are as shown.

Green:	Regatta is on.
Yellow:	Regatta is temporarily postponed.
Red	Course Closed
Blue	Regatta is abandoned