



# NZ Hydrological Society Technical Workshop Field Day

58

Overall Potential Initial Risk Level: High

15

Overall Residual Risk Level: Moderate

5

<b>Org Unit</b>	Otago Regional Council -> Policy and Science -> Environmental Monitoring -> Monitoring
<b>Location</b>	Tucker Beach Recreation Reserve, Queenstown (-44.992350, 168.727047)
<b>Assessment Date</b>	10/04/2024
<b>Risk Assessment Category</b>	Event
<b>Description</b>	NZ Hydrological Society Technical Workshop Field Day
<b>Event/Activity Details</b>	<p>This event is the annual New Zealand Hydrological Society (NZHS) river flow comparative gauging regatta which is held in conjunction with the NZHS Technical Workshop. This event is where hydrology teams from around NZ come together to compare field techniques and equipment in a practical setting. This is a private event arranged through the NZHS and is open only to delegates registered for the NZHS Technical Workshop. The event will involve:</p> <ul style="list-style-type: none"><li>- Transport of delegates to and from Tucker Beach by chartered bus.</li><li>- Event hub near the river with a marquee for shelter and portable toilets.</li><li>- Catering from a food truck based at the main carpark.</li><li>- Practical measurements and demonstrations performed in or near the Shotover River.</li></ul> <p>It is expected there will be approximately 100 attendees including ORC staff</p>

**People Covered by this Plan**

**EVENT ORGANISERS:**

Nick Boyens - Otago Regional Council - 027 247 6351

Evan Baddock - NIWA - 027 581 1863

Amy Platt - Otago Regional Council - 027 264 7489

**FIRST AID COORDINATOR:**

Nick Boyens - Otago Regional Council - 027 247 6351

All ORC staff hold first aid qualifications.

**ORC H&S SUPPORT:**

Gina Watts - Otago Regional Council - 027 299 0654

Cohen Rudd-Lee - Otago Regional Council - 027 861 9400

**LANDOWNER CONTACT:**

Juliet Bruce - DOC Whakatipu-wai-Maori - 027 294 4099

**COMMERCIAL RIVER USERS:**

Malcolm Judd - Shotover Jet Operations - 027 801 7747

Brett - K Jet Operations - 021 128 7340

**Emergency Response Plans and other Considerations**

**EMERGENCY PROCEDURES:**

**EVACUATION ASSEMBLY POINT:**

Main Tucker Beach Reserve Carpark (Bus drop-off point). See site layout map above.

**EMERGENCY NUMBERS:**

For medical, fire or other serious event requiring urgent help call 111

**NEAREST EMERGENCY MEDICAL FACILITY:**

Lakes District Hospital, Lucas Place, Frankton, Queenstown

**EMERGENCY EQUIPMENT LOCATION:**

First Aid Kit: Otago Regional Council vehicles at event hub

Fire Extinguisher: Otago Regional Council vehicles at event hub

**TRANSPORT AND TRAFFIC MANAGEMENT:**

Only selected ORC vehicles that are required for set-up and management of the event hub will be allowed access through the locked gate to the reserve (see Nick Boyens for gate code). Vehicles not being actively used at the event hub must be parked in the main carpark. Vehicles in the reserve must stay to the formed tracks. All other vehicles will need to park in the main carpark. Buses will drop-off and pick-up from the main carpark.

**TOILETS AND WASTE MANAGEMENT:**

Two trailer mounted portable toilets will be available at the event hub. All rubbish will be collected and removed from site.

**SHELTER AND REFRESHMENTS**

The event hub will have one or two large tents set up for shade and shelter. Refreshments in the form of lunch and coffee will be available from the food truck located in the main car park. Water will be available at the event hub.

**LAND ACCESS ARRANGEMENTS:**

The Tucker Beach Recreation Reserve is administered by the Department of Conservation. Approval for access has been granted by the Whakatipu-wai-Maori office. Their letter of approval, and the conditions of that approval, are attached in Appendix 1. One of the conditions is that we notify the surrounding properties: this has been done through a letter drop on Wednesday 3rd April of the flyer attached in Appendix 2. Public access will not be hindered at any point.

**WILDLIFE MANAGEMENT:**

Tucker Beach is a nesting location for a variety of native birds. If birds are observed, ensure you do not get between them and the river, so they have a clear route back to their nest. If any birds are disturbed walk away from the site as quickly as possible.

**Is this plan acceptable to proceed?**

Yes

Assessor Name	Nick Boyens
Team Members/HSR Consulted With	Cohen Rudd-Lee
Approver	Cohen Rudd-Lee
Date	04/04/2024

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## Record Approval

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Approval Stage	Approved
Approver	Cohen Rudd-Lee
Date	04/04/2024

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# Hazards And Control Measures

HAZARD CATEGORY, RISK FACTORS	PERSONS AT RISK, POTENTIAL HARM	EXISTING ORGANISATIONAL CONTROL MEASURES	INITIAL RISK RATING	ADDITIONAL INDIVIDUAL CONTROL MEASURES REQUIRED	RESIDUAL RISK RATING
<p><b>Inadequate Hygiene and Welfare Facilities.</b></p> <p>Absence of/or inadequate personal hygiene and welfare facilities available at event location. i.e.:</p> <ul style="list-style-type: none"> <li>- Food/drink</li> <li>- Toilet/Handwashing facilities</li> <li>- Seating</li> <li>- Rubbish/waste collection</li> </ul>	<p><b>Employee, Conference delegate</b></p> <p>Illness from food poisoning or other infection</p>	<p>Arrangements to maintain cleanliness during the event.</p> <p>Consider locations of toilet facilities.</p> <p>Ensure event participants utilise rubbish, toilet and handwash facilities provided.</p> <p>Ensure handwashing/personal hygiene and waste facilities are adequate.</p> <p>Ensure sufficient food and refreshments available.</p> <p>Ensure suitable access (ambulatory and impaired)</p>	<p><b>6</b></p> <p>Moderate</p> <p>Likelihood: 2 - Unlikely</p> <p>Consequences/Severity: 3 - Moderate</p>		<p><b>2</b></p> <p>Low</p> <p>Likelihood: 1 - Rare</p> <p>Consequences/Severity: 2 - Minor</p>
<p><b>Fire - Flora and Fauna</b></p> <p>Driving of vehicles across or near dry vegetation</p> <p>Inappropriate disposal of cigarettes</p>	<p><b>Employee, Conference delegate</b></p> <p>Vegetation fire</p>	<p>Avoid dry vegetation when driving vehicles. Keep to formed tracks</p> <p>Park vehicles away from dry vegetation</p> <p>Dispose of cigarettes correctly</p>	<p><b>4</b></p> <p>Low</p> <p>Likelihood: 1 - Rare</p> <p>Consequences/Severity: 4 - Major</p>		<p><b>2</b></p> <p>Low</p> <p>Likelihood: 1 - Rare</p> <p>Consequences/Severity: 2 - Minor</p>

<p><b>Manual Moving and Handling</b></p> <p>Hazardous Manual Handling Heavy/Un-balanced/Awkward loads Incorrect technique. Personal factors Physical limitations.</p>	<p><b>Employee, Conference delegate</b></p> <p>Musculoskeletal harm, strain and sprains</p>	<p>Administrative - Task specific training Administrative – Equipment selection and use Administrative – Role specific training Administrative/Engineering – Correct use of mechanical aids Ensure workers are physically/medically capable of undertaking activities. Organisational/Workplace Policies and best practice guidance materials. PPE - Footwear PPE – Task Specific Provision of fit for purpose engineering controls, training and equipment. Provision of fit for purpose plant</p>	<p><b>6</b></p> <p>Moderate</p> <p>Likelihood: 2 - Unlikely</p> <p>Consequences/Severity: 3 - Moderate</p>	<p><b>2</b></p> <p>Low</p> <p>Likelihood: 1 - Rare</p> <p>Consequences/Severity: 2 - Minor</p>
<p><b>Emergency Event (Fire/Flood/Earthquake etc.)</b></p> <p>Access to emergency response equipment. Communications Breakdown. Environmental conditions. Location to emergency support/assistance. Medical Event.</p>	<p><b>Employee, Conference delegate</b></p> <p>Isolation at field site due to road closures Access to site by emergency services</p>	<p>Administrative - Emergency response planning. Administrative – First Aid Responder training Confirm Cellular coverage limitations for area Emergency response plan to outline and identify evacuation/escape and emergency equipment locations and use. (Fire extinguishers/blankets/1st aid kits, alarm points etc.) First Aid/Spill/Emergency response Kits Vehicle fleet use GPS monitoring</p>	<p><b>5</b></p> <p>Moderate</p> <p>Likelihood: 1 - Rare</p> <p>Consequences/Severity: 5 - Critical</p>	<p><b>3</b></p> <p>Low</p> <p>Likelihood: 1 - Rare</p> <p>Consequences/Severity: 3 - Moderate</p>

<p><b>Adverse environmental conditions</b></p> <p>Exposure to UV and heat  Exposure to natural disasters  Harsh weather conditions  Thermal conditions</p>	<p><b>Employee, Conference delegates</b></p> <p>Heat stroke  Hypothermia  Generally wet or cold  Dehydration</p>	<p>Administrative - Emergency response planning.  Administrative – First Aid Responder training  Administrative – Workplace Orientation  Dynamic risk assessment  Engineering - Cellular communications  First Aid/Emergency response Kit to be carried  First Aid/Spill/Emergency response Kits  Monitor hazards during the course of the activity to ensure controls remain effective.  Monitor weather and environmental conditions - pause activity if bad conditions arise  PPE - Protective clothing (wet weather, thermal, coveralls, UV protective)  PPE – Sunscreen  Provision of Shade/Shelter</p>	<p><b>6</b></p> <p>Moderate</p> <p>Likelihood: 2 - Unlikely</p> <p>Consequences/Severity: 3 - Moderate</p>	<p>Due to the need to have safe river levels for wading the event may be called off or modified if there is a chance of severe weather affecting river levels.</p>	<p><b>3</b></p> <p>Low</p> <p>Likelihood: 1 - Rare</p> <p>Consequences/Severity: 3 - Moderate</p>
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<p><b>Vehicles/Vessels - Driving/Operation</b></p> <p>Collision with other vehicles/objects. Driver distraction/impairment/fatigue Movements on/off or around vehicle Other road users</p> <p>Pedestrians/Foot traffic Poor road environment Towing Vehicles moving to and from site</p>	<p><b>Customer/member of public, Employee, Conference delegates</b></p> <p>Property damage Injury</p>	<p>Administrative - Driver 4x4 training Administrative – Equipment selection and use Administrative – Maintenance regimes Administrative – Organisational Induction Administrative – Safety plans, Safe Operating Procedures, Pre-start checks Organisational/Workplace policies Provision of fit for purpose vehicles Recommend speed limit around work site (5km/h) walking speed. Vehicle fleet use GPS monitoring</p>	<p><b>6</b></p> <p>Moderate</p> <p>Likelihood: 2 - Unlikely</p> <p>Consequences/Severity: 3 - Moderate</p>		<p><b>3</b></p> <p>Low</p> <p>Likelihood: 1 - Rare</p> <p>Consequences/Severity: 3 - Moderate</p>
<p><b>Slips, trips and falls (at the same level)</b></p> <p>Adverse working conditions (e.g. weather, housekeeping) Equipment (e.g. footwear) Slippery surfaces Tripping hazards Uneven surfaces/terrain</p>	<p><b>Employee, Conference delegates</b></p> <p>Injury due slip, trip or fall</p>	<p>Administrative – First Aid Responder training Administrative – Safety plans, Safe Operating Procedures, Pre-start checks First Aid/Spill/Emergency response Kits Monitor hazards during the course of the activity to ensure controls remain effective. PPE - Footwear</p>	<p><b>6</b></p> <p>Moderate</p> <p>Likelihood: 2 - Unlikely</p> <p>Consequences/Severity: 3 - Moderate</p>	<p>advise attendees to wear suitable covered footwear. Monitor hazards during the course of the activity to ensure controls remain effective.</p>	<p><b>3</b></p> <p>Low</p> <p>Likelihood: 1 - Rare</p> <p>Consequences/Severity: 3 - Moderate</p>



<p><b>Vehicles/Vessels - Working on or around</b></p> <p>Collision/accident Interaction with vehicle accessories (entanglement, entrapment)</p>	<p><b>Employee, Jet boat operator and their clients, Conference delegates</b></p> <p>Jet boat entering field work area Jet boat coming into contact with lines suspended across the river Jet boat hitting people in the river</p>	<p>Administrative – Equipment selection and use Administrative – Safety plans, Safe Operating Procedures, Pre-start checks PPE – Hi vis clothing</p>	<p><b>8</b></p> <p>Moderate</p> <p>Likelihood: 2 - Unlikely</p> <p>Consequences/Severity: 4 - Major</p>	<p>Selection of field site to be between operational areas for the two jet boat companies using the river Notification of Shotover Jet, K-Jet, and the QLDC Harbourmaster of the event occurring at this location Placement of highly visible orange road works style "People working/Survey" signs at the upstream and downstream extents of the field area Staff in water to wear hi-vis clothing Staff are to monitor the ropes across the river at all times and be prepared to cut quickly if a boat enters the field work area</p>	<p><b>4</b></p> <p>Low</p> <p>Likelihood: 1 - Rare</p> <p>Consequences/Severity: 4 - Major</p>
<p><b>Outdoor Environment - Water Hazards</b></p> <p>Undertaking activities in or around a body of water. Inundation by upstream waters (i.e. flash flooding or fast flowing) Sudden change in conditions (local or 'upstream' factors introducing a safety risk.) Undertaking activities in or around a body of water. Wet/Slippery/uneven footing.</p>	<p><b>Employee, Conference delegates</b></p> <p>Drowning Getting wet and cold Isolation on far bank of river</p>	<p>Administrative - Task specific training Administrative – Equipment selection and use Administrative – Role specific training Administrative – Safety plans, Safe Operating Procedures, Pre-start checks Organisational/Workplace Policies and best practice guidance materials. PPE - Footwear PPE - Protective clothing (wet</p>	<p><b>15</b></p> <p>High</p> <p>Likelihood: 3 - Moderate</p> <p>Consequences/Severity: 5 - Critical</p>	<p>ORC staff to review rain levels and water flow prior to event and Nick Boyens to decide if entering water will be safe during the event.</p> <p>As delegates are from various agencies from across New Zealand it will be expected that they will operate as according to their own in-house safe operating procedures for</p>	<p><b>5</b></p> <p>Moderate</p> <p>Likelihood: 1 - Rare</p> <p>Consequences/Severity: 5 - Critical</p>

weather, thermal, coveralls, UV protective)  
Provision of fit for purpose training and equipment.

working in this environment. Overall explanation of the hazards and procedures will be given at the start of the event.  
All attendees entering the water should:

- be trained in water safety and follow their organisations SOP or guidelines for working in this environment. If they are unfamiliar with any task or environmental condition, they should chat with an ORC staff member.
- have a good understanding of the equipment they are using (experience using the equipment or detailed explanation/ demonstration from the equipment owner or supplier).
- assign a buddy that will stay with them while for the duration of time in the water.

# Images



Field day site layout



Field site operational areas