

Trip management plan: Rangitāiki River, Aniwhenua Falls Section, Grade 2

Total length of trip 4.5 km

Key

Escape options:

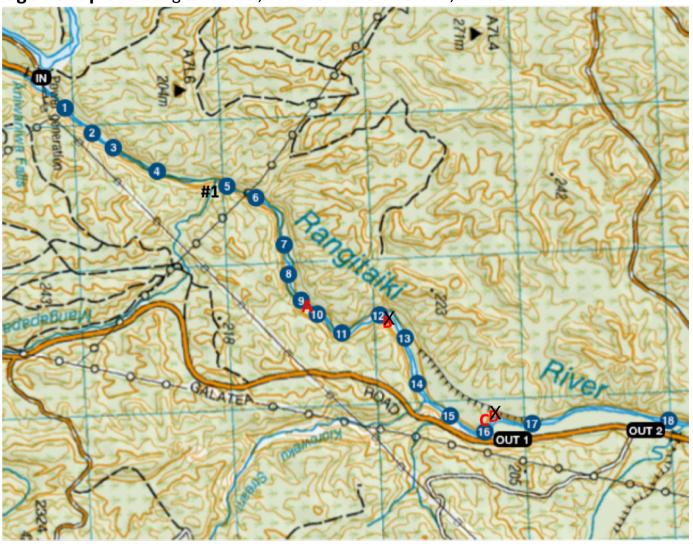
#1 Mangapapa Stream to forestry road

Major known hazards:

- A. Undercut Boulder in flow river right
- B. Tree trunk in rapid river right (controlled 2020-21 season. No longer a hazard)
- C. Live trees in flow river left (Hazard at high flow)
- D. New tree river left at end of rapid 16(No longer exists Checked 19.09.21)

Rapid locations:







Key Operational Information

Activity	Riverbug Tour suitable for novices.	Location	Aniwhenua Falls, Waiohau, Bay of Plenty
Communica- tion equip- ment and cov- erage	Cell phone, Satellite messaging device Limited Cell coverage (Put in and Take out 1)	Access per- mission in- formation	Pioneer Energy regulates access to the Aniwhenua Falls put in: Coordinates -38.294143, 176.791754 Vehicles may unload at the Falls' car park but must park on the upstream side of the access gate, which is locked at 3 pm. Contact: Maura Childs 077 277 2503 or Craig Childs 027 5541 465 Take out 1 is public access from roadside parking. Coordinates -38.265857, 176.820530 . Take out 2 is public access to the boat ramp at Mangamako Stream. Coordinates -38.255240, 176.819704
Specific operation policies	 Key operation policies for the activity: Operating flows: 20 – 100 m3/s (NIWA Rotorua: 07 347 1950) Participant screening: ≥ 125 cm tall, ≤ 120 kg, fit and able, can swim. Participant: Guide ratio: 7: 1 (solo guide trips), 8: 1 (multi guide trips). Ratios will be adjusted down relative to participants' ability to participate safely in the activity, taking into account factors such as: physical condition, special needs and language/comprehension difficulties. Other users: Communicate bookings with Motu Jet 0274 707 315 Guide positioning: Lead guide – leads from the front, may change order if advantageous, keep participants in view. Second guide – sweeps from behind, if advantageous, keep participants in view. Depart put in rafted together when appropriate relative to flows 	Encountering Jet boats or other river users	Jet boats rafters and kayak operators operate on this river section, along with private individuals and groups. Procedure is to communicate with other users to establish safe passage, with the policy of giving way to faster craft. Encountering Jet boats is the major operational procedure, key points are: Inform each other's operations when there are trips on the river. Avoid entering rapids when a jet boat is approaching Move the group to a safe place to let the jet boat through. Note: Jet boat practise is to stay river left going up river and river right going down river.



Equipment	Participant Equipment	Participant	Language/comprehension difficulties?
-4	Riverbug, wetsuit, booties, PFD, helmet, gloves, fins	Briefing	• Physical/medical problems? Medication? Glasses or contact lenses?
	Guide Equipment		Disclosure of risks
	Provided: Booties, Fins, Gloves		River signals: Help & OK, go/direction, stop, feet-up, attention/
	Required: Wetsuit/drysuit, Helmet, PFD with cows tail & whistle, river		emergency,
	knife, throw bag, cell phone,		 Safety technique: Whitewater swimming, self rescue, rafting-up, hazards
			Paddling technique: forwards, backwards, turning, hold-on, balance weight shift
			Other users: Stay out of the way of other craft, let faster craft through.
			 Location of emergency equipment, Emergency Response Card and how to use the communication devices. Procedure in case of inca- pacitated guide.
			Location of our Emergency Plan.
Previous rele- vant incidents	No known incidents	Escape op- tions	Mangapapa Stream (river right) via the forestry road to Galatea Road coordinates -38.284913, 176.811436 Due to the steep terrain and access, land-based evacuation would be difficult. Other options: Jet Boat or Heli-vac.
Specific emer-	Throw bag	Emergency	If have Cell coverage:
gency equip-	First aid kit	response &	• 111
ment required	pruning saw	assistance	Police Murupara 07 366 1170
•		contacts	• St John Murupara 07 308 4237
			Murupara Medical Centre 07 366 5555
			Kiwi Jet Tours, Melanie Roberts, 027 224 3464
			Pioneer Energy, Maura Childs 027 277 2503
		1	No Cell coverage: Satellite communications device



Key Emer-		
gency Proce-		
dures –		

Code GREEN: Minor, can complete trip or evacuate by foot

Participants treated and able to safely continue (Examples: Mild reaction to insect stings, minor asthma attack, dislocated finger contusions). Emergency strategy – refer to the Emergency Response Card. One Guide Trips:

- Send Code GREEN message to management or back-up person
- Continue the trip. Participant(s) who required treatment are monitored, keep them close to, and assisted by guide as necessary
- As soon as have Cell coverage, contact management/back-up person & arrange any further care as needed

Two Guide Trips:

In addition to the procedures for one guide trips, the 2nd guide will:

- 2nd guide assists with the emergency and group management
- 2nd guide accompanies participants in any escape route evacuation while lead guide continues trip with remaining participants if safe to do SO

Kev Emergency Procedures -

Code OR-ANGE:

Not life threatening, but requires evacuation

Options:

1. Jet boat or 2. Helicopter

plete. Emergency strategy – refer to the Emergency Response Card.. One guide trips:

- Send Code ORANGE alert (or call if have Cell coverage)
- Evacuate patients from emergency site. Evacuate rest of group if not safe to continue.

Participants treated are stable but not able to safely continue. (Exam-

ples: minor fractures, lacerations, mild hypothermia) The remaining

participants may continue trip if safe to do so once evacuation is com-

- If safe to do so: Continue to nearest escape route with remaining participants and evacuate group by foot, or complete the trip.
- Contact: management/back-up person as soon as have cell coverage

Two Guide Trips:

- 2nd guide assists with the emergency and group management
- If safe to do so, 2nd guide paddles to take-out to meet driver (if present) or pick up shuttle vehicle and informs management of situation and stays in contact. If not safe stays and assists lead guide at emergency site.

Key Emergency Procedures -

Code RED: life threatening, requires immediate evacuation

Options:

- 1. Helicopter or
- 2, Jet boat

Participants treated are in a serious condition. (Examples: severe anaphylactic shock, compound fractures, severe head trauma) The remaining participants should also be evacuated from emergency site if possible. Emergency strategy - refer to the Emergency Response Card.

One guide trips:

- Send Code RED alert (or call 111 if have Cell coverage)
- Heli-vac patients from emergency site (Jet boat evacuation if Heli not possible)
- Evacuate rest of group from the emergency site by Heli or Jet boat
- If evacuation of remaining participants not possible, continue to nearest escape route and evacuate group by foot.
- Contact: management/back-up person as soon as have cell coverage

Two Guide Trips:

- 2nd guide assists with the emergency and group management
- If safe to do so, 2nd guide paddles to take-out to meet driver (if present) or pick up shuttle vehicle, then informs management of situation and stavs in contact.
- If not safe to leave Emergency site stays and assists lead guide

Overdue trips

Trips are considered overdue when:

- Trips fail to check-in with shuttle driver at take-OUT 1 within 2.5 hours from departure from Aniwhenua Falls
- The guide fails to call in or send an OK message within 2.5 hours of departure from Aniwhenua Falls

Procedure for overdue trips

Trip with shuttle driver:

- Driver and management or back-up person communicate to assess situation and track the trips' progress.
- If trip as been stationary for over 45 minutes and no emergency activation has been received, call for Jet boat evacuation and alert emergency services
- Driver stays in contact with management or back-up persons
- Once plan is established, driver proceeds as directed

Trip without shuttle driver:

- Management or back-up person calls guides' cell phone
- Management or back-up person tracks trips progress
- If trip as been stationary for over 45 minutes and no emergency activation has been received, call for Jet boat evacuation and alert emergency services



Shuttle Driver	 Ensure that participants' change of clothes is in the vehicle Note the time that the trip departs from Aniwhenua Falls, and leave the put-in only once the group has safely navigated the first section. Drive to OUT 1 and wait until trip arrives Depart for OUT 2 only when group is safely through Rapid 16 Alert management or back-up persons if trip is overdue Provide assistance in emergencies Drive carefully and considerately 	Incapacitated solo guide	Procedures for incapacitated solo guides Location of First Aid, Emergency Response Card, and communication equipment Stop the trip in a safe place and assist the guide, provide First Aid. Stay together Notify Emergency services Cell Phone is unlocked Dial 111 and state emergency. Or if no cell coverage activate Satellite Messaging device by pressing the Emergency button. Keep group together and wait for emergency services.
Other infor- mation rele- vant to activi- ty	The trip can be shortened by taking out at Rapid 16, where the river returns to the road (OUT 1).		

Safety Management

Map key reference	Significant Hazard	Management Strategy
Α	Undercut Boulder in flow river right in rapid 9 (high flow)	Direct participants away from hazard
В	Tree trunk river right in rapid 12 entrance (Cut at riverbank level – Don 02.10.20) Note: No longer a major hazard.	Direct participants away from hazard
С	Live trees in the flow river left rapid 16 @ high flow (Trimmed – Don 02.10.20)	Direct Participants away from hazard
D	New tree hazard (25.04.21) Note: Hazard no longer exists (19.09.21 pre season hazard check)	Provide cover river left upstream from hazard and direct Participants away from hazard
	Rapids / Access Description and Details	Management Strategy



IN	Viewing area for Aniwhenua Falls, with parking and toilets. The put in is a short walk down natural rock steps river left below Aniwhenua Falls. Some mossy patches, could be slippery when wet	On-land safety briefing in shady area. Care walking over rocks, pfds and helmets worn and adjusted, provide assistance, put fins and gloves on at river level, participants on water stay close to put in until everyone is on the water, complete briefing and skills practice
1	Small waves and a constant, moderate flow	Truck-and-trailer
2	Small waves	Truck-and-trailer, can eddy out below rapid river left for practice or to gather group
3	Steeper rapid with nice wave middle right on entry	Truck-and-trailer
4	Small waves. There is a small tree hanging in the water from riverbank river right at rapid entrance, easy to avoid	Truck-and-trailer
5	Short rapid, nice waves river left	Truck-and-trailer, can eddy out river left opposite waves if keen for clients to try surfing
6	Short rapid with swirly currents by the cliffs river left	Truck-and-trailer
7	Short rapid	Truck-and-trailer
8	Short, dog leg rapid with cave on river left.	Possibility to take a break on the grassy peninsula river right before the rapid, truck-and-trailer
9 A	Medium length, straight rapid with nice waves. There is an undercut boulder in the flow river right halfway through rapid (Hazard A). The cushion wave does reflect the current away from the undercut. (Checked by Don Allardice on 02.10.19.)	Truck-and-trailer
10	Short rapid with a boulder with small crevasse underwater on the upstream side, river right at rapid entrance. There is little force pushing onto the boulder due to low current speed and cushion wave. Checked by Don Allardice on 02.10.19.	Truck-and-trailer
11	Short rapid leading into long pool	Truck-and-trailer
		!



	Natural Emergencies / Disaters	
OUT 2	Boat ramp river left or Mangamako Stream	Take out at boat ramp or Mangamako Stream
18	Short bouncy rapid, take out eddy river right	Direct Participants to take-out eddy
17	Short rapid, small waves	Truck-and-trailer
16 C & D	Medium length rapid with small waves and a right hand curve at end if rapid. There are tree hazards in the flow on river left riverbank, and a pour-over river right below rapid entrance. Hazard C reduced by trimming the willows. Hazard D (new, discovered 25.04.21). Hazard D no longer exists (Pre season hazard check 19.09.21)	Truck and trailer, direct participants away from hazards. Cover hazard D from river left (new procedure 25.04.21). Cover at hazard D no longer necessary as no longer exists (19.09.21)
OUT 1	Upper take out for the section. A short walk up a track to the roadside parking.	Truck and trailer, eddy out river right at OUT 1
15	Moderate current with small ripples. Some trees growing in the flow on river left riverbank below rapid entrance, easy to avoid	Truck-and-trailer, direct participants away from trees
14	Short rapid with main flow river right. Some small tree branches hanging in the water from right riverbank, easy to avoid.	Truck-and-trailer, direct participants away from branches
13	Short rapid. Current splits left and right of shallows and protruding rocks at centre of river. There are small trees growing in the flow on river right in right channel at rapid entrance. Easy to avoid	Truck-and-trailer
12 B	Long s-bend rapid. The entry flows over a shallow shelf 2/3 of river width from river left. The flow on river right has a log hazard (Hazard A) at rapid entrance. Checked by Don Allardice on 02.10.19. Hazard B controlled by Don Allardice (no longer a major hazard)	Direct participants away from hazard



	Major Earthquake		*Prior to trip: Do not run trip until section is scouted for new hazards and cleared as safe to do so. *During trip: Bring group together and form a raft and stay clear of possible falling debris if on gorge. I case of rising water from dam breach evacuate to high ground only if safe to do so, otherwise stay rafted up together until able to safely evacuate from river.
	Forest Fire		*Prior to trip: Do not run trip if known forest fire could put group in danger (smoke, heat, flames, flying embers) *During trip: Continue trip to take out point only if safe to do so. If not safe to continue, seek shelter from danger (smoke, heat, flames, flying embers) and activate Satellite Messenger emergency signal and wait for rescue.
	Flash Flood during trip		*Evacuate to safety of high ground as soon as possible, if not possible bring group together and raft-up for stability until possible to evacuate from river.
Approved by: Don Allardice Date: 06.07.		Date: 06.07.2022	Review due: July 2023, or: if hazards change, trends emerge, there's a reportable incident