

Version No:	8	Section No:
Issue Date:	03/10/23	Appendix No:
Portfolio:	Discrete Water Quality	Page: 0 of 33
Horizons Regional Council		
Hydrology Operations Manual		

Contact Recreation Guide

Run 6

Site Names and Coordinates

	Site Name	Northing (NZTM)	Easting (NZTM)
1	Tasman Sea at Ototoka Beach	5585459	1756626
2	Ototoka Stream at End of Beach Road	5590189	1757558
3	Kai iwi at Archers Bridge	5583357	1762226
4	Kai Iwi Beach	5583182	1762445
5	Mowhanau at Footbridge	5583186	1762575
6	Tasman Sea at Castlecliff Beach	5577122	1768875
7	Whanganui at Town Bridge	5577382	1775652
8	Whanganui at Cobham Pontoons	5577652	1775877
9	Whanganui at Mosquito Point	5585598	1780328
10	Tasman Sea at South Beach	5574469	1772084
11	Lake Wiritoa	5573230	1778578
12	Lake Pauri	5572557	1778924
13	Turakina at Mouth	5562590	1782074
14	Lake Dudding	5558703	1794384

Version 8	Created: 03/10/23	Updated by: Izzie Hodgson
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Job Hazard & Task Analysis

Field Site Location Guide – Contact Recreation Run 6

Hazard Identification – tick all that apply, write additional hazards identified:

The yellow highlighted hazards are known hazards at the time of compiling this document. This does not negate the need to assess for and potentially eliminate or isolate any hazards at each sample location at every visit

Hazard	Yes	Hazard	Yes	Hazard	Yes
Confined space	<input type="checkbox"/>	Suspended loads	<input type="checkbox"/>	Noise – plant and equipment	<input type="checkbox"/>
Difficult entry/exit	<input checked="" type="checkbox"/>	Falling objects	<input checked="" type="checkbox"/>	Communication – means of	<input checked="" type="checkbox"/>
Oxygen deficiency/excess	<input type="checkbox"/>	Working near cranes and crane runways	<input type="checkbox"/>	Remote area	<input checked="" type="checkbox"/>
Poisonous fumes/gas	<input type="checkbox"/>	Live rails-gantry cranes	<input type="checkbox"/>	Temperature extremes	<input checked="" type="checkbox"/>
Explosive gas	<input type="checkbox"/>	Trip hazards	<input checked="" type="checkbox"/>	Reduced visibility	<input checked="" type="checkbox"/>
Flammable materials	<input type="checkbox"/>	Slippery surfaces	<input checked="" type="checkbox"/>	Unauthorized persons	<input type="checkbox"/>
Combustible materials	<input type="checkbox"/>	Manual handling	<input type="checkbox"/>	High pressure water	<input type="checkbox"/>
Hazardous substances	<input type="checkbox"/>	Sharp materials	<input type="checkbox"/>	Vacuum	<input type="checkbox"/>
Drowning	<input checked="" type="checkbox"/>	Line of fire	<input type="checkbox"/>	Air emissions – dust, fumes	<input type="checkbox"/>
Engulfment	<input type="checkbox"/>	Pressurized fluids	<input type="checkbox"/>	General waste	<input type="checkbox"/>
UV Radiation	<input checked="" type="checkbox"/>	Pressurized air/gas	<input type="checkbox"/>	Hazardous waste	<input type="checkbox"/>
Electrical – low /high voltage	<input type="checkbox"/>	Traffic / vehicle movements	<input checked="" type="checkbox"/>	Hydrocarbon / chemical spill	<input type="checkbox"/>
Multiple electrical feeds	<input type="checkbox"/>	Machinery – mobile plant	<input type="checkbox"/>	Soil disturbance/erosion	<input type="checkbox"/>
Working at height	<input type="checkbox"/>	Moving parts	<input type="checkbox"/>	Habitat disruption	<input type="checkbox"/>
Ladders	<input type="checkbox"/>	Chemical reaction (Pyrophoric iron)	<input type="checkbox"/>	Lighting	<input type="checkbox"/>
Elevated work platforms	<input type="checkbox"/>	Transport of hazardous substances	<input type="checkbox"/>	Weather extremes	<input checked="" type="checkbox"/>
Potential for difficult rescue	<input checked="" type="checkbox"/>	Stock/Farm Animals	<input checked="" type="checkbox"/>		

Required PPE & Safety Equipment– tick all that apply, write additional PPE required:

The yellow highlighted PPE are known required PPE at the time of compiling this document. This does not negate the need to assess for the appropriate required PPE measures at each sample location per visit.

SAMPLING GLOVES	EAR PROTECTION	HARD HAT	SAFETY GLASSES / GOGGLES	WORK BOOTS / WADERS	PROTECTIVE GLOVES	PERSONAL FLOATATION DEVICE (PFD)
						
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
HI VIZ	SAFETY HARNESS	SUN BLOCK & HAND SANITISER	VHF RADIO	THROW BAG	PERSONAL LOCATOR BEACON	
						
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Known Hazard	Significant	Can it be Eliminated	Can it be Isolated	Method of control
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Field Site Location Guide – Contact Recreation Run 6

	Yes	No	Yes	No	Yes	No	
Drowning	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Staff should use a sample pole if access into the river/stream is unsafe. PFD's must be worn by staff. Always carry a personal locator beacon. It is always preferable to have someone else with you at all times when working around water [HMP 18]
UV Radiation	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Horizons provide sunscreen and hats. Staff are encouraged to make use of these. [HMP 17]
Difficult Entry/Exit	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Entry and exit into waterways poses many risks and should be treated with caution. Sampling must be done from stable level ground. Staff should use a sample pole if access into the river/stream is unsafe. PFD's must be worn by staff and staff must be trained for working around water. [HMP18]
Electrical-Low/High Voltage	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Many of the rural sampling sites require traversing across farm paddocks equipped with electric fences that contain stock. If unknown, treat every farm fence as electric and avoid direct contact. Contact the landowner for advice on whether or not the fence is live and discuss alternative routes or options for avoiding the fence if possible.
Potential for Difficult Rescue	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Sampling must always be done from stable level ground. Staff should use a sample pole if access into the river/stream is unsafe. PFD's must be worn by staff and staff must be trained for working around water. Vehicles must be driven a sensible distance from any river or pond edges. Always carry a throw bag when working around water and have a personal locator beacon on hand. It is always preferable to have someone else with you at all times when working around water [HMP18]
Trip Hazards	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Prior to sampling, staff must check area is clear of items that pose a risk. Trip Hazards should only be moved if safe to do so. Sampling only to commence if the sampler is satisfied that any slip, trip or fall hazards are isolated.
Slippery Surfaces	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Sampling must be done from stable level. Vehicles must be driven a sensible distance from any river or pond edges. [HMP 18]. Staff driving four wheel drive vehicles must have adequate training [HMP 9]
Traffic Vehicle Movements							The designated driver of a vehicle is responsible for ensuring the safety and operational requirements and recommendations are met. All staff working within the road reserve must wear high visibility clothing to AS/NZS 1906.4:2010. This clothing must be fluorescent red orange in colour unless the individual is the site STMS then the garment must be fluorescent lime yellow. [HMP 9] [HMP 16] [HMP 20].
Stock/Farm Animals	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Although generally docile, farm animals can still be hazardous. The risk should be isolated by finding alternative access routes to the sample location or contacting the owner for assistance.

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Known Hazard	Significant		Can it be Eliminated		Can it be Isolated		Method of control
	Yes	No	Yes	No	Yes	No	
							[HMP26]
Communications-Means of							Cell phone coverage is not available at all sites. Staff must be capable of communicating via VHF radio in an equipped vehicle. [HMP 24]
Remote Area	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Most council vehicles are fitted with the E-Road vehicle locator system. Many vehicles are also fitted with a radio operating on the Horizons digital radio network providing communication and tracking coverages across a majority of the region. [HMP 24]
Temperature/Weather Extremes	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	During the duration of a sampling run varying types and degrees of weather may be experienced. All sampling staff are to have access within their HRC vehicle to additional and appropriate clothing. Staff must have access to suitable PPE and spare clothing within their vehicle. [HMP 18]
Reduced Visibility	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	If you find you are driving in limited visibility slow your driving speed and turn your fog lights on and watch out for vehicles that aren't using their lights. When working in limited visibility if you cease to able to make out your surrounding environment stop work immediately. If working at night it is advisable to traverse the property in daylight first to map out an action plan outlining walking tracks, vehicle tracks, fence lines, stock positions, ponds, waterways, houses, and sheds as well as other significant items of interest. [HMP12]

EQUIPMENT REQUIRED

Sample Bottles	1 L Bottle	500 ml Bottle	100 ml bottle	50 ml tube	Red-top bacto bottle
Contact Recreation	3				15 (one for temperature reference)
Hilltop Sampler Numbers	<ul style="list-style-type: none"> • 15 sample numbers 				
Meters/Equipment	<ul style="list-style-type: none"> • Chilly Bin, Slicker pads • Camera • GPS • Field Sampling Sheets • Bottle ID stickers • Vivid and pens • Thermometer • <u>Lake Pauri Key</u> 				

METHOD

- For all sites take one sample in a red lid sterile bacto bottle:
 - At the site dip the entire bottle below the surface of the water and open it under water without disturbing the surface. This is to avoid collection of surface bacteria in the sample.
 - Tip out excess water to create a small gap of air at the top of the bottle.
 - Wipe the bottle off with a towel, attach the hilltop generated number and place this in the chilly bin.
 - Fill in field notes.
 - At lake sites there's an additional one litre bottle, adopt the same approach using the large one litre bottles. Label the bottle with the name of lake, the date, time and temperature, place this in the chilly bin.

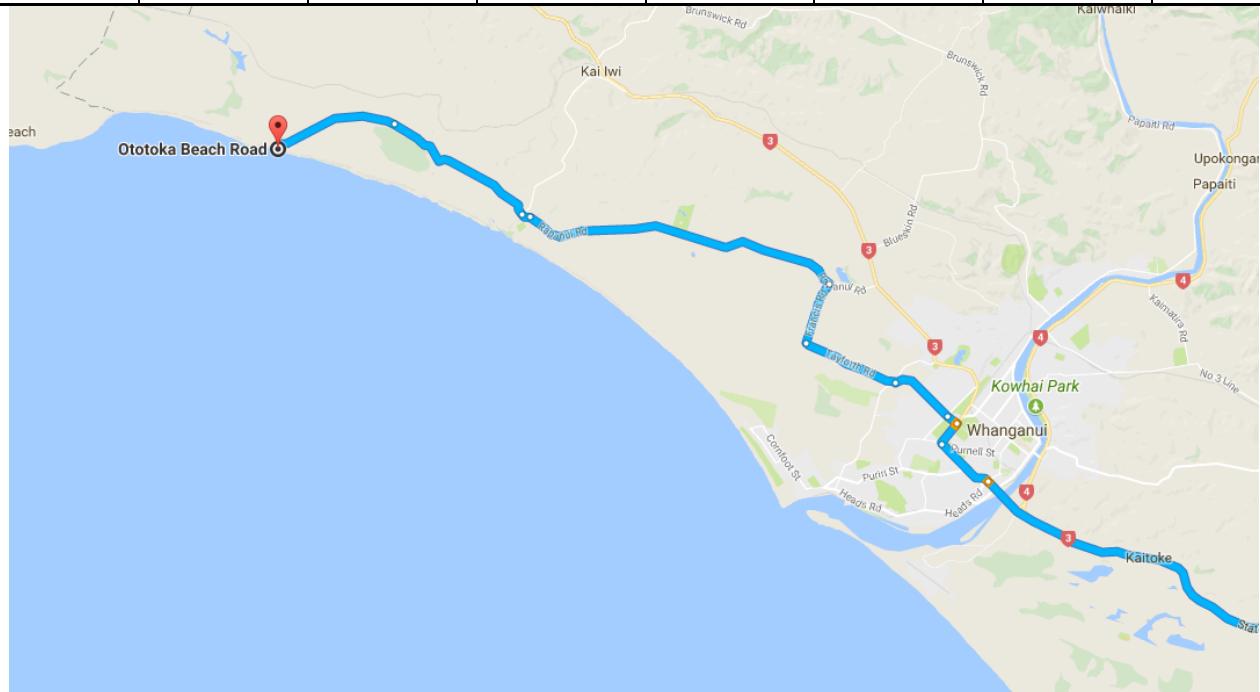
Tasman Sea at Ototoka Beach (1hour 30min from office)

POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to sampling on the day):

Drowning	UV Radiation	Slippery surfaces	Trip hazards
Difficult entry/exit	Potential for difficult rescue	Remote Area	Traffic / Vehicle Movements
Weather/Temperature Extremes			

REQUIRED PPE (in accordance with above hazards – this does not negate undertaking a hazard review prior to sampling on the day and/or using additional PPE if deemed necessary):

WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON	HI-VIS	VHF RADIO	SAMPLE POLE	



- Head northwest on State Highway 3 to Whanganui through Bulls
- Head through Whanganui following signs on SH3 and New Plymouth.
- As you leave Whanganui turn left onto Rapanui Rd (opposite a Caltex with signs to Kai Iwi Beach)
- Continue on this road onto Handley Rd after the town of Mowhanau (Kai Iwi). The road will turn into gravel.
- After a while turn left onto Ototoka Beach road and follow this road to the coast. A parking area is above the beach. Take the pathway down towards the beach.
- Take sample on the beach, 100m to the left (when facing ocean) of where the stream flows into the ocean.



Ototoka Stream at end of Beach Road (0 mins from previous site)

POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to sampling on the day):			
Drowning	UV Radiation	Slippery surfaces	Trip hazards
Difficult entry/exit	Potential for difficult rescue	Remote Area	Traffic / Vehicle Movements
Weather/Temperature Extremes			
REQUIRED PPE (in accordance with above hazards – this does not negate undertaking a hazard review prior to sampling on the day and/or using additional PPE if deemed necessary):			
WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON
			HI-VIS
			VHF RADIO
			SAMPLE POLE
			
<ul style="list-style-type: none"> • Take sample from the pool in front of the waterfall that is located on the path down to Ototoka beach • Sample pole maybe be needed- take care rocks maybe slippery 			

Field Site Location Guide – Contact Recreation Run 6



Kai Iwi Stream at Archers Bridge (15min from previous site)

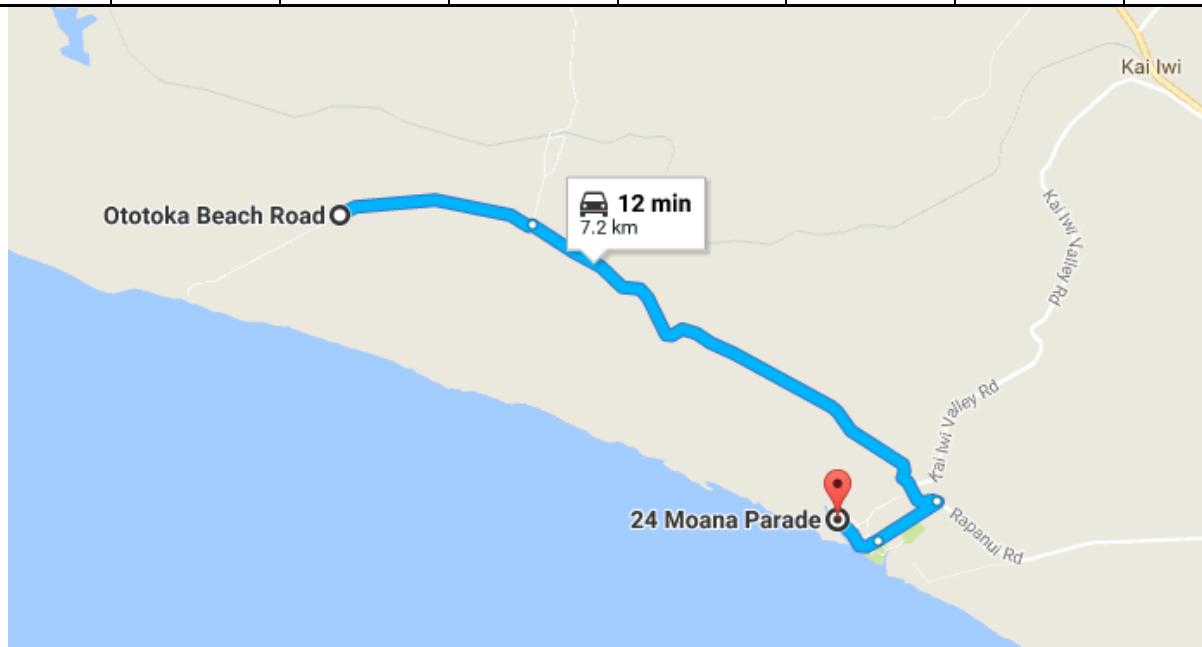
This site requires a cliff hazard photo. Refer to photos on other side as reference

POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to sampling on the day):

Drowning	UV Radiation	Slippery surfaces	Trip hazards
Difficult entry/exit	Potential for difficult rescue	Remote Area	Traffic / Vehicle Movements
Weather/Temperature Extremes			

REQUIRED PPE (in accordance with above hazards – this does not negate undertaking a hazard review prior to sampling on the day and/or using additional PPE if deemed necessary):

WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON	HI-VIS	VHF RADIO	SAMPLE POLE



- Head back on Ototoka Beach Road and turn right onto Handley Rd
- Turn right onto Mowhanau Drive just after you come down a hill. This will take you into Kai Iwi village.
- Continue for 600m, then continue onto Sunset Parade keep left as Broadview heights rd. splits off. The carpark is the end of the road.
- Walk down path till you approach Archers Bridge
- Before the bridge, walk along the bank upstream approximately 40m and take your sample here as indicated by the yellow dot below

Field Site Location Guide – Contact Recreation Run 6



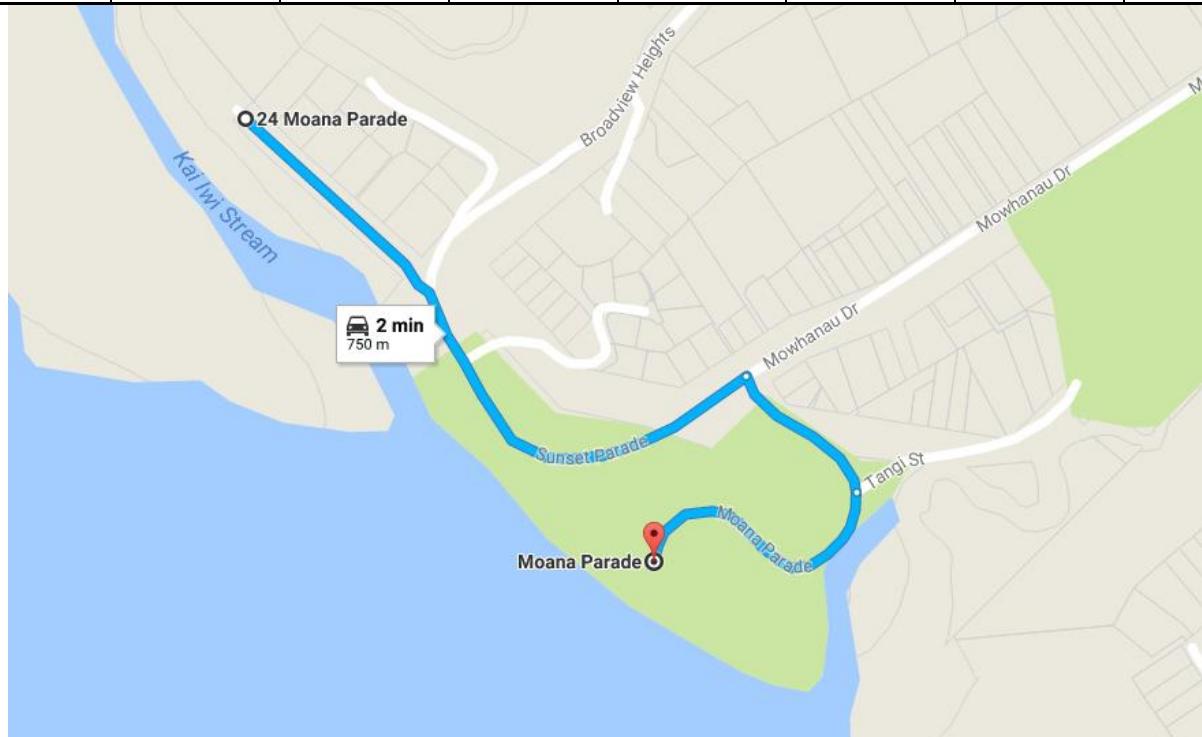
Tasman Sea at Kai Iwi Beach (3min from previous site)

POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to sampling on the day):

Drowning	UV Radiation	Slippery surfaces	Trip hazards
Difficult entry/exit	Potential for difficult rescue	Remote Area	Traffic / Vehicle Movements
Weather/Temperature Extremes			

REQUIRED PPE (in accordance with above hazards – this does not negate undertaking a hazard review prior to sampling on the day and/or using additional PPE if deemed necessary):

WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON	HI-VIS	VHF RADIO	SAMPLE POLE	



- Head back along Sunset Drive and turn right onto Tangi Street
- Drive down the hill towards rest area and continue on past toilets there is a parking and turning around area here that looks out over the beach.
- The sample site is located as indicated in the photo below

Field Site Location Guide – Contact Recreation Run 6



Mowhanau at Footbridge (2min from previous site)

This site requires a cliff hazard photo. Refer to photos on other side as reference

POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to sampling on the day):

Drowning	UV Radiation	Slippery surfaces	Trip hazards
Difficult entry/exit	Potential for difficult rescue	Remote Area	Traffic / Vehicle Movements
Weather/Temperature Extremes			

REQUIRED PPE (in accordance with above hazards – this does not negate undertaking a hazard review prior to sampling on the day and/or using additional PPE if deemed necessary):

WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON	HI-VIS	VHF RADIO	SAMPLE POLE



- From previous site double back past toilet block to footbridge you passed on the way in.
- Park where is safe and walk down across the footbridge
- The sample point is just upstream of bridge as shown below

Field Site Location Guide – Contact Recreation Run 6



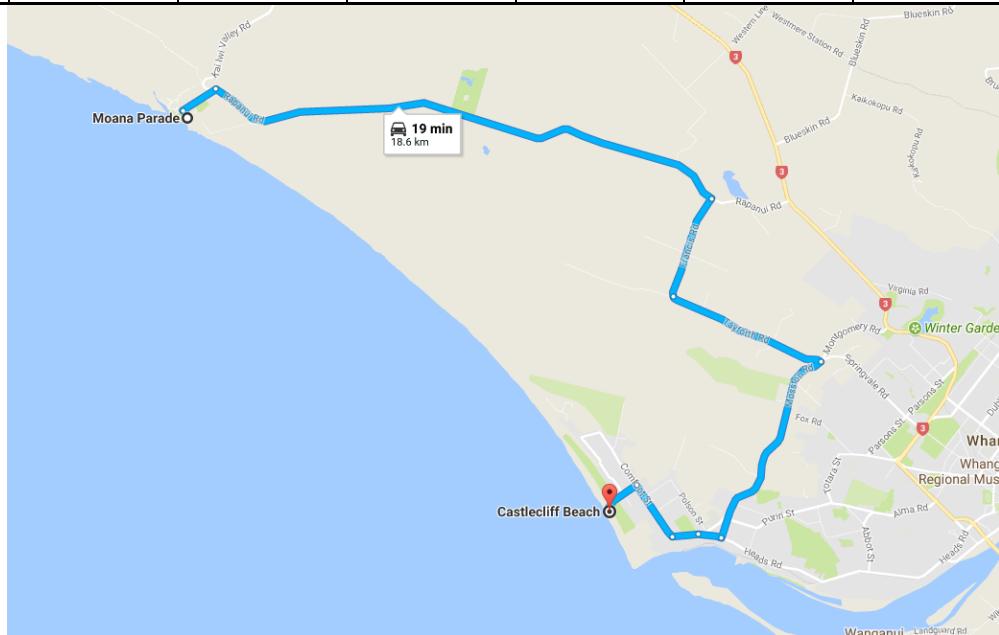
Tasman Sea at Castlecliff Beach (20min from previous site)

POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to sampling on the day):

Drowning	UV Radiation	Slippery surfaces	Trip hazards
Difficult entry/exit	Potential for difficult rescue	Remote Area	Traffic / Vehicle Movements
Weather/Temperature Extremes			

REQUIRED PPE (in accordance with above hazards – this does not negate undertaking a hazard review prior to sampling on the day and/or using additional PPE if deemed necessary):

WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON	HI-VIS	VHF RADIO	SAMPLE POLE	



- Head back out of Mowhanau and turn right onto Rapanui Road. When you reach the Westmere School turn right immediately after it onto Francis Road.
- Follow Francis Road until it turns sharply to the left, and turns into Tayforth Road. Stay on this road until you get to the end at a T Junction. Turn right onto Mosston Road.
- Follow Mosston Road until you get to the intersection with Heads Road. Turn right here onto Heads Road.
- Follow Head Road straight and as the road veers around to the right. Approximately 1 kilometre along this road turn left onto Rangiora Road. This is marked with a Castlecliff Beach sign.
- Follow Rangiora Road to the end and you will come out into a large car park overlooking Castlecliff beach. Drive past the lifeguard rooms and park in front of them.
- Your sample point is anywhere along the beach front here. Take care around large surf.



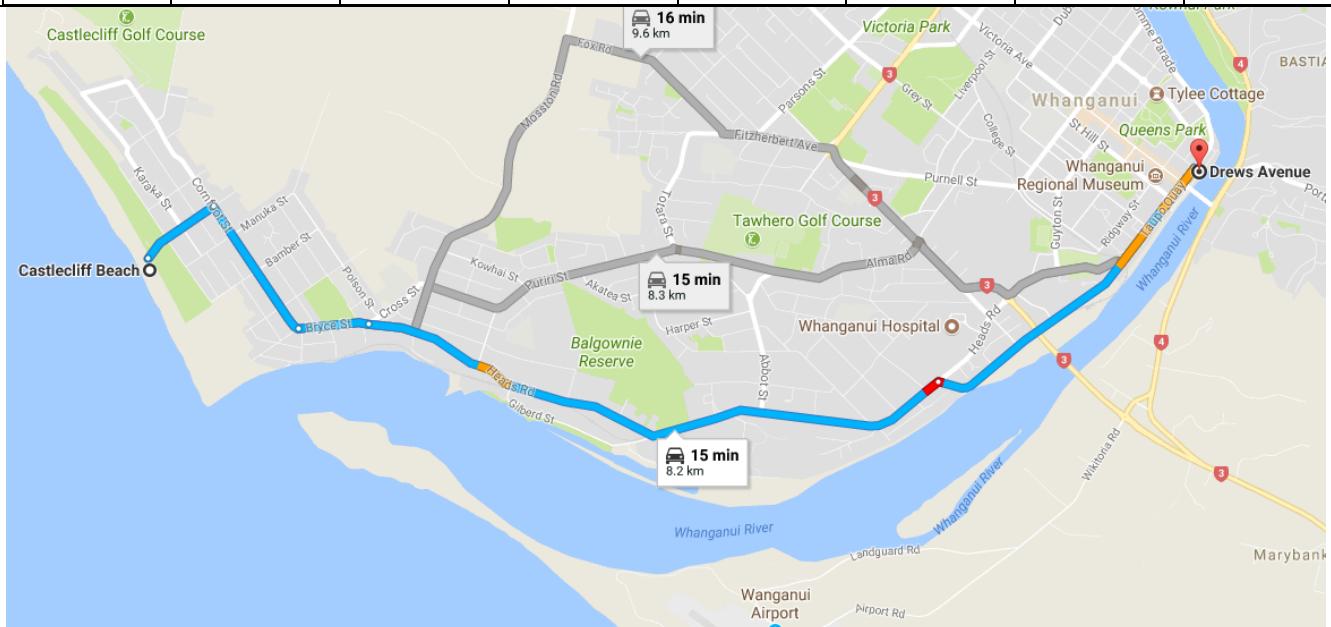
Whanganui at Town Bridge & Cobham Pontoons (15min from previous site)

POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to sampling on the day):

Drowning	UV Radiation	Slippery surfaces	Trip hazards
Difficult entry/exit	Potential for difficult rescue	Traffic / Vehicle Movements	Weather/Temperature Extremes

REQUIRED PPE (in accordance with above hazards – this does not negate undertaking a hazard review prior to sampling on the day and/or using additional PPE if deemed necessary):

WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON	HI-VIS	VHF RADIO	SAMPLE POLE



- Travel back out along Rangiora Road and turn right back onto Cornfoot Road. Follow this road all the way back into town (turns into Bryce St and then Heads Road).
- Turn right onto Taupo Quay and follow this road through town. (there is a turning bay)
- After you go through the set of lights at Victoria Ave (bridge), turn right at the i-Site onto Drews Ave.
- Park in the marked car parks where suitable. Take bottles for two sites and sample pole.
- Walk to the boardwalk and turn right. Walk under the town bridge and sample down the set of steps to the river. Be careful, these are slippery when river is low.
- From this site, turn back and walk along the boardwalk past the parked car. Walk past the jetty where the steam boats launch and sample at pontoon (pictured below).



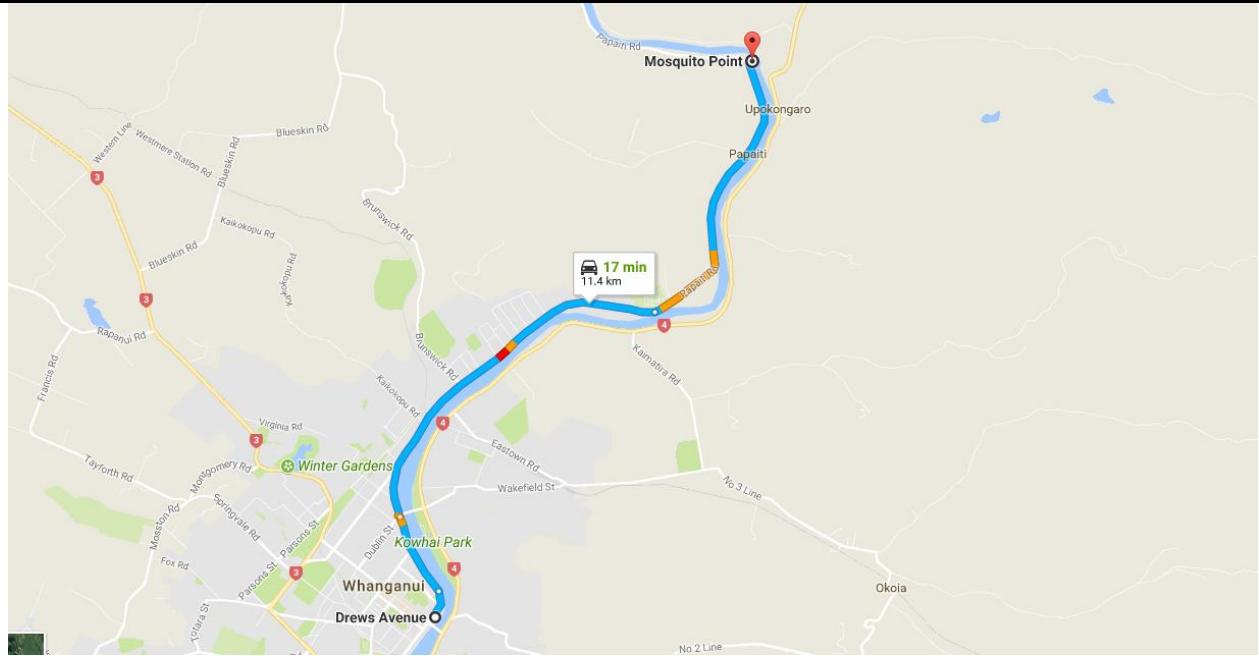
Whanganui at Mosquito Point (20min from previous site)

POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to sampling on the day):

Drowning	UV Radiation	Slippery surfaces	Trip hazards
Difficult entry/exit	Potential for difficult rescue	Remote Area	Traffic / Vehicle Movements
Weather/Temperature Extremes			

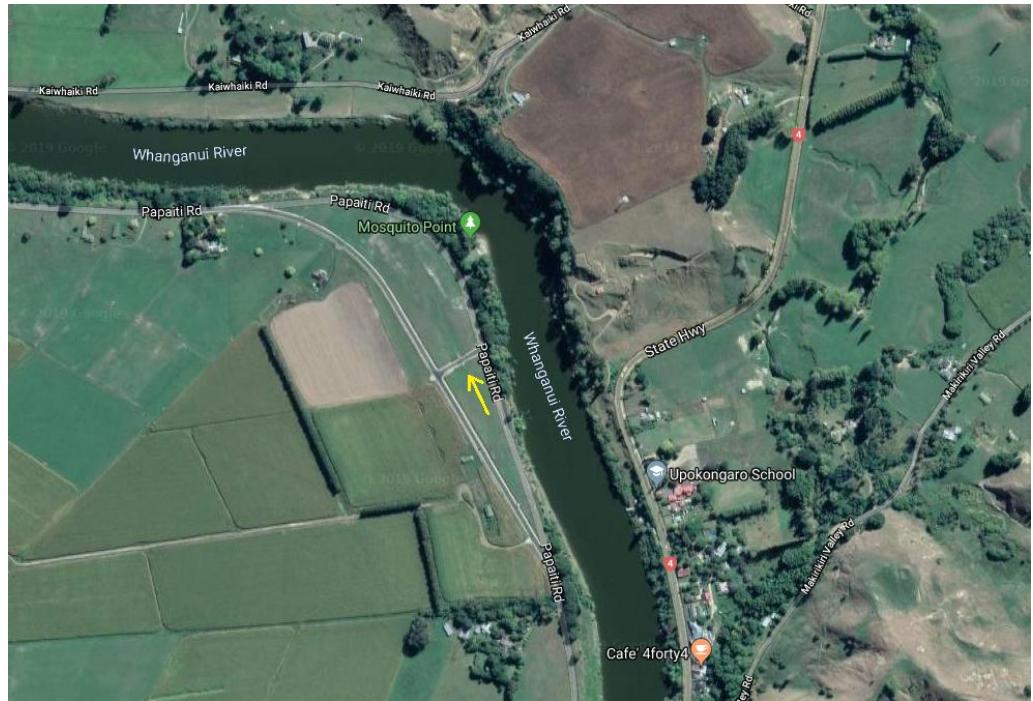
REQUIRED PPE (in accordance with above hazards – this does not negate undertaking a hazard review prior to sampling on the day and/or using additional PPE if deemed necessary):

WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON	HI-VIS	VHF RADIO	SAMPLE POLE



- Go back towards Taupo Quay and turn right on the Quay -continue on this road (straight through roundabout) for 15 minutes, out towards the north of Whanganui. The road will turn into Somme Parade and then Papaiti Rd
- Follow this road for ~4 km, you will drive past the new foot bridge, after this there will be a turn off on your right with a yellow sign post to Mosquito Point. Drive down the car park.
- Sample on the beach using a sample pole- the river gets deep quickly here.

Field Site Location Guide – Contact Recreation Run 6



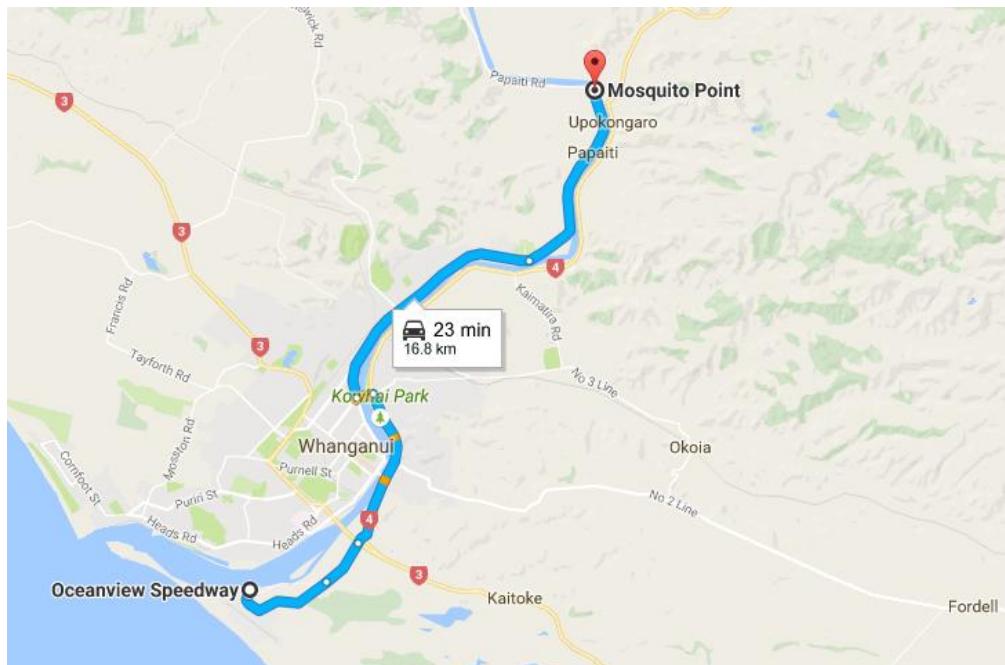
Tasman Sea at South Beach (25min from previous site)

POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to sampling on the day):

Drowning	UV Radiation	Slippery surfaces	Trip hazards
Difficult entry/exit	Potential for difficult rescue	Remote Area	Traffic / Vehicle Movements
Weather/Temperature Extremes			

REQUIRED PPE (in accordance with above hazards – this does not negate undertaking a hazard review prior to sampling on the day and/or using additional PPE if deemed necessary):

WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON	HI-VIS	VHF RADIO	SAMPLE POLE



- Head back to the town the way you came into Whanganui. Turn left at the first roundabout onto Dublin Street and cross the river here. Turn right at the next roundabout onto Anzac Parade. Follow this road.
- As you approach the State Highway follow the road to the right towards the airport (not left towards Palmerston North). At roundabout go straight through onto Wikitoria Road which then becomes Airport Road (there are also signs for the airport leading up to this).
- Drive past the airport, Airport Road will veer uphill to the right, turn to the left onto the gravel road next to the river. Following this road, you will come to an open area, keep following the road to the left. When this road reaches the dunes, park and walk down the dune path to the right. Do not drive onto the beach.
- Sample at the beach straight out from here.

Field Site Location Guide – Contact Recreation Run 6



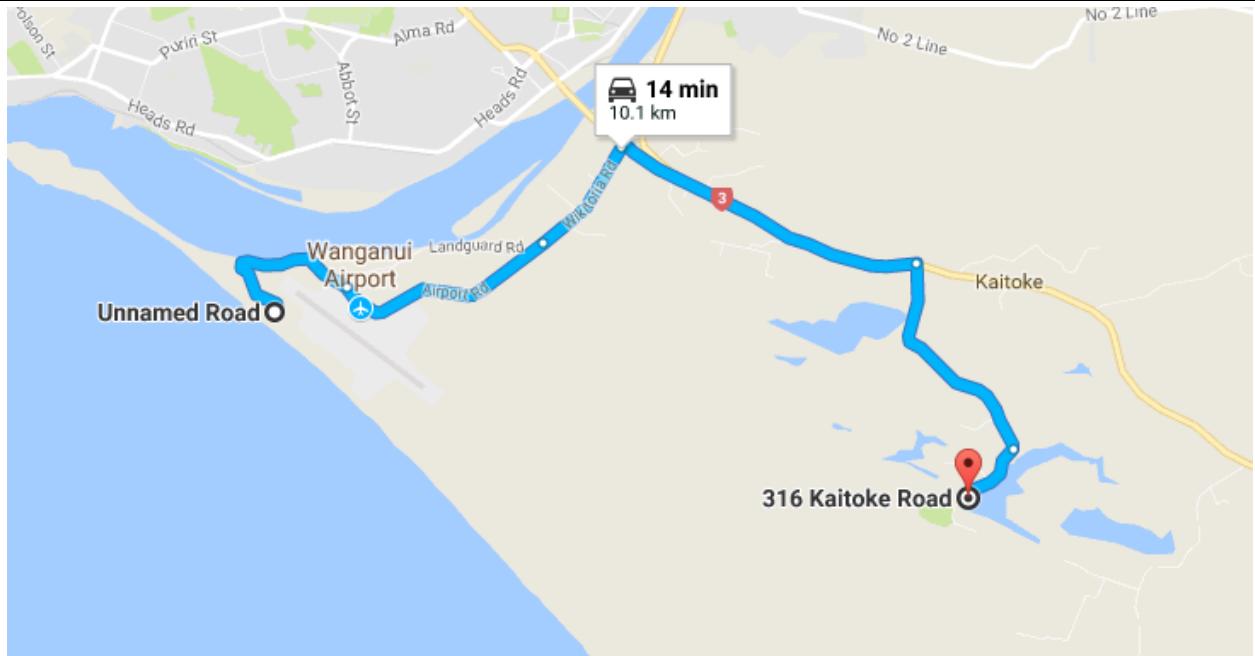
Lake Wiritoa (15min from previous site)

POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to sampling on the day):

Drowning	UV Radiation	Slippery surfaces	Trip hazards
Difficult entry/exit	Potential for difficult rescue	Remote Area	Traffic / Vehicle Movements
Weather/Temperature Extremes			

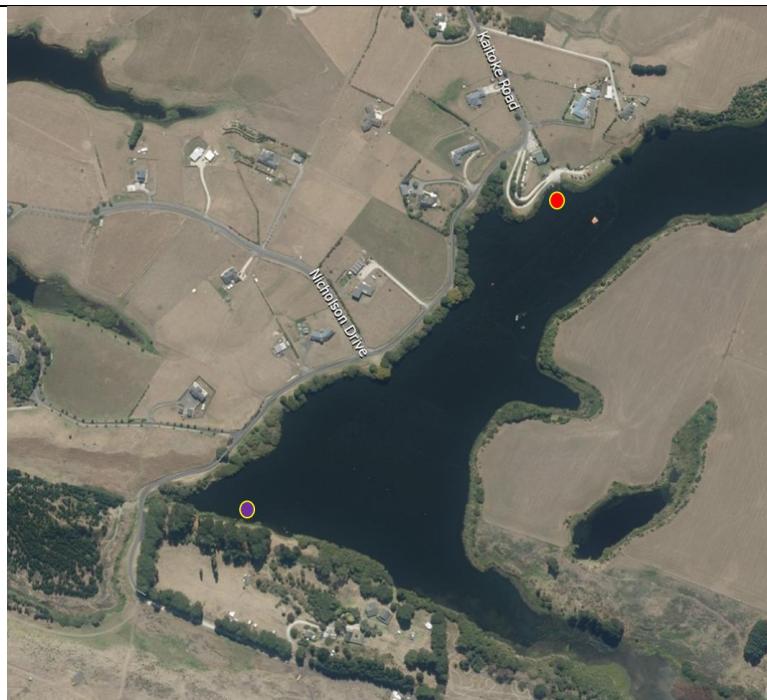
REQUIRED PPE (in accordance with above hazards – this does not negate undertaking a hazard review prior to sampling on the day and/or using additional PPE if deemed necessary):

WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON	HI-VIS	VHF RADIO	SAMPLE POLE



- Head back to the roundabout with the State Highway and turn right towards Palmerston North and drive for 2.8km then turn right onto Kaitoke Road (sign for Lake Wiritoa).
- There will be a bend in the road with a sign for Lake Wiritoa. Sample here at the water skiing grounds if not being used (red dot). Drive down the gravel driveway to the boat ramp at the bottom.
- Sample 1x bacto bottle and 1x 1L bottle
- If being used continue down Kaitoke road.
- Follow the right side of the lake and park outside gate where you see the sign for Lake Wiritoa
- Walk to lake and sample near rope swing (purple dot).
- Sample 1x bacto bottle and 1x 1L bottle

Field Site Location Guide – Contact Recreation Run 6



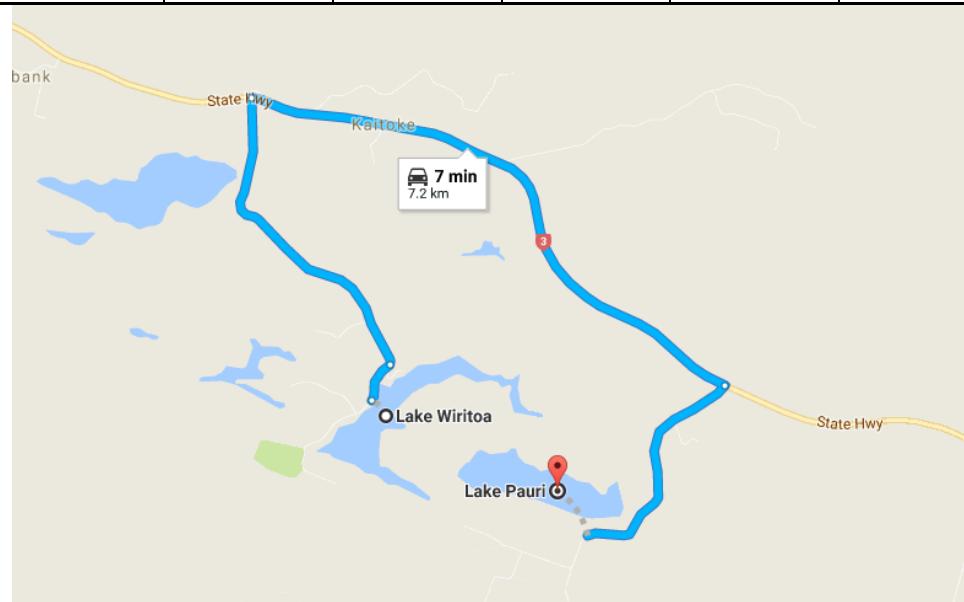
Lake Pauri (11min from previous site)

POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to sampling on the day):

Drowning	UV Radiation	Slippery surfaces	Trip hazards
Difficult entry/exit	Potential for difficult rescue	Remote Area	Traffic / Vehicle Movements
Weather/Temperature Extremes			

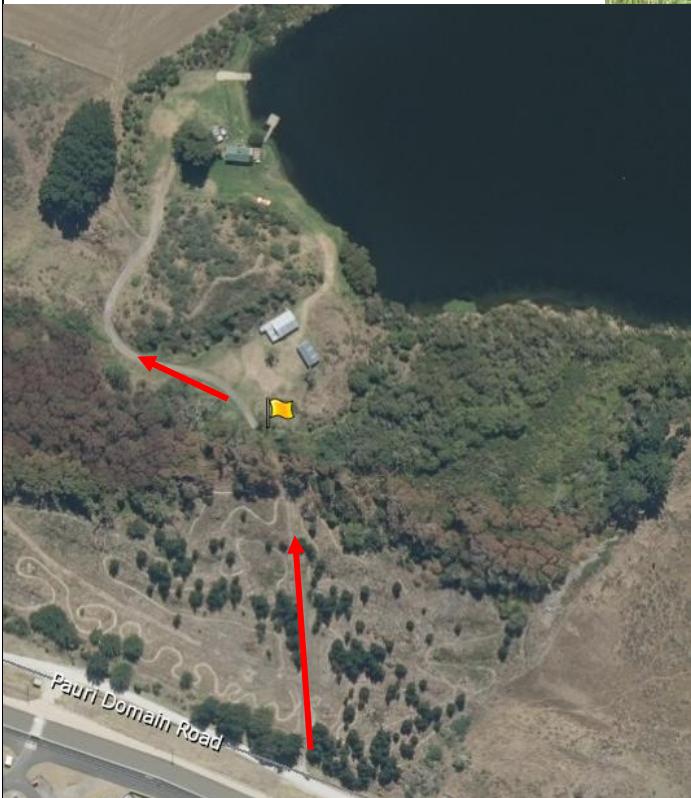
REQUIRED PPE (in accordance with above hazards – this does not negate undertaking a hazard review prior to sampling on the day and/or using additional PPE if deemed necessary):

WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON	HI-VIS	VHF RADIO	SAMPLE POLE	



- Head back to the State Highway and turn right continue for 3.5km then turn right onto Pauri Road.
- Continue 1.4km down Pauri Road to the lake. Signposted for the prison
- Follow the road until you get to the prison. Drive alongside the prison until the road turns to gravel. There will be an access drive/gate with a big painting of a spider 20 m in.
- Open the gate (key needed) and follow to the sign that says private property and park here in front of the buildings. Walk down to the lake and sample from the jetty.
- This is a private lake used for sailing but owners are familiar with our regular sampling, so no need to see anyone.
- Sample 1x bacto bottle and 1x 1L bottle
- On the way back please take pictures of the storm water drain (either side of the path) The drain can be located on the road side of the boat shed- the path passes over the stream

Field Site Location Guide – Contact Recreation Run 6



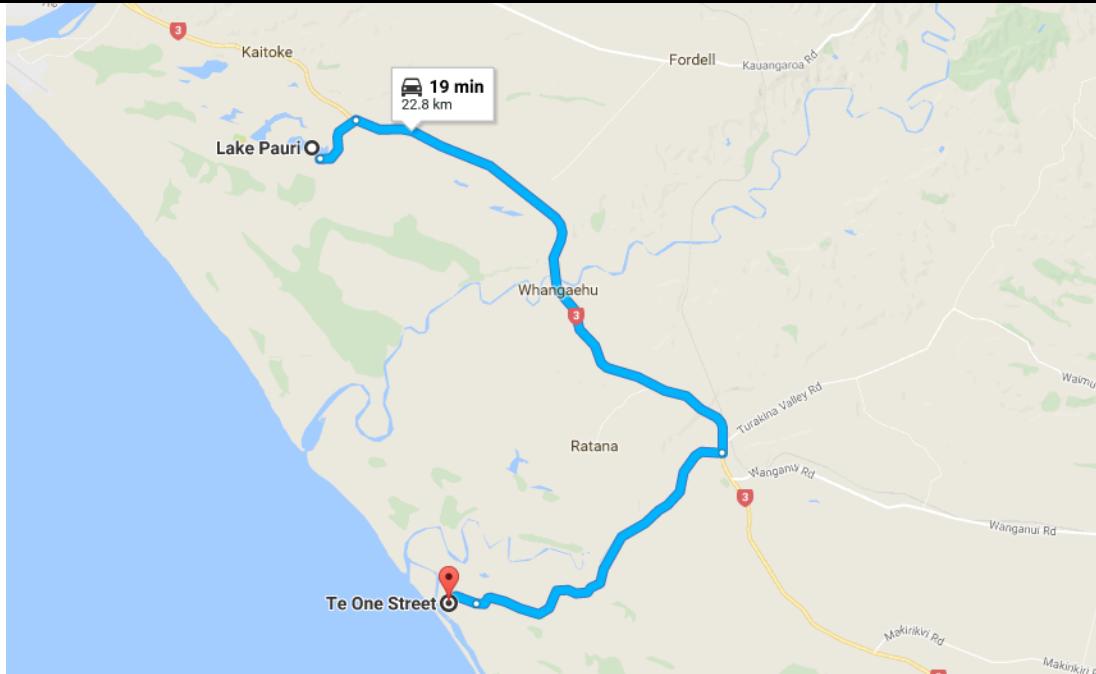
Turakina at Mouth (20min from previous site)

POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to sampling on the day):

Drowning	UV Radiation	Slippery surfaces	Trip hazards
Difficult entry/exit	Potential for difficult rescue	Remote Area	Traffic / Vehicle Movements
Weather/Temperature Extremes			

REQUIRED PPE (in accordance with above hazards – this does not negate undertaking a hazard review prior to sampling on the day and/or using additional PPE if deemed necessary):

WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON	HI-VIS	VHF RADIO	SAMPLE POLE



- Drive back out to the SH road and turn right, drive 12.8km.
- Just as you come into Turakina turn right onto Turakina Beach Road, continue about 8km
- Follow the road through Koitiata round the sharp left onto Te One Street. Between the parks is a road for beach access, Park outside the access road where safe.
- Walk down to the beach and then up the coast until you reach the river, sample here.
- The river moves around a lot so please use common sense to find sample locations.

Field Site Location Guide – Contact Recreation Run 6



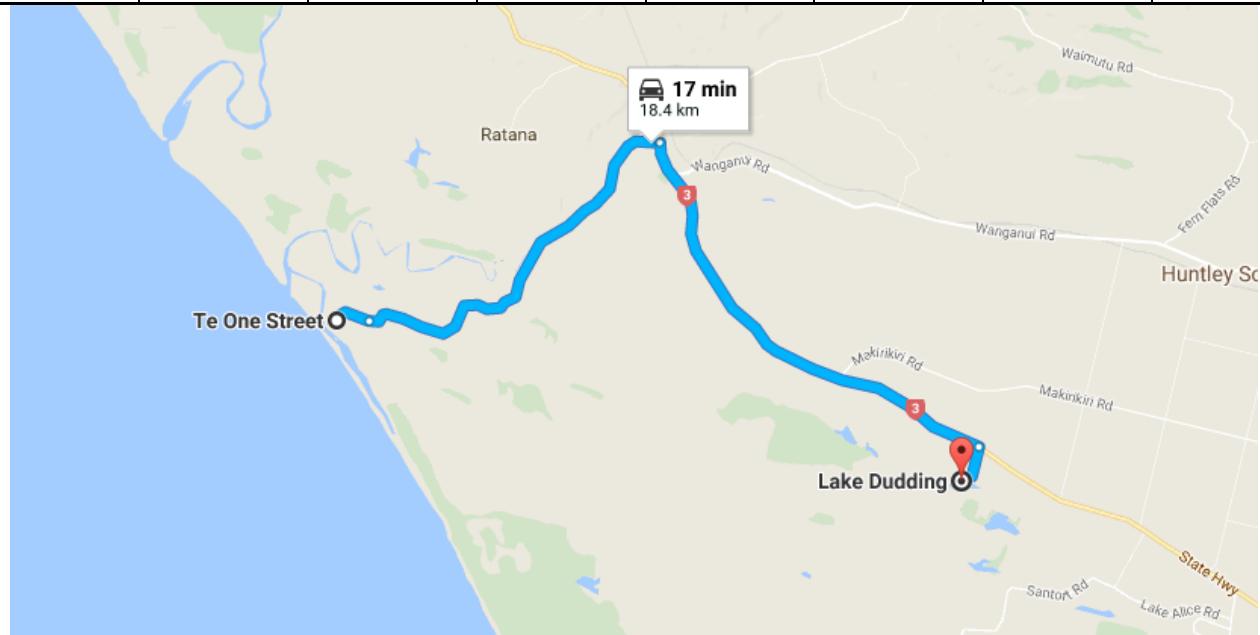
Lake Dudding (20min from previous site)

POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to sampling on the day):

Drowning	UV Radiation	Slippery surfaces	Trip hazards
Difficult entry/exit	Potential for difficult rescue	Remote Area	Traffic / Vehicle Movements
Weather/Temperature Extremes			

REQUIRED PPE (in accordance with above hazards – this does not negate undertaking a hazard review prior to sampling on the day and/or using additional PPE if deemed necessary):

WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON	HI-VIS	VHF RADIO	SAMPLE POLE	



- Head back out of Koitiata towards the SH.
- Turn right along State Highway 3 through Turakina
- Travel 9.2km along SH3. Dudding Lake is well sign posted and is located on your right.
- Follow the right hand bend and after the Hall turn left down to the boat ramp and park here. Sample 1 x 1 L and 1 x bacto bottles 20 m to the right of the boat ramp on the corner. Watch your footing as the bottom is muddy and uneven.
- Please also take a photo of the lake gauge

Field Site Location Guide – Contact Recreation Run 6



Finish up (40 mins to HRC)

Going to HRC



1. Join SH3 from Lake Dudding and head towards Palmerston.
2. Follow SH3 (turns into Rangitikei Line) into Palmerston North.
3. At the Walding St and Rangitikei Line lights, turn left here onto Grey St.
4. Continue straight for 400m then turn right onto Victoria Avenue. Straight after this, turn left into HRC.