

**Coastal Monitoring Run Guide** 

# EAST COAST

STATE OF ENVIRONMENT (Monthly Sampling)

6 20/08/2024 Discrete Water Quality

## Horizons Regional Council

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#### Hydrology Operations Manual

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Hazar The yellow highlig negate the need to	hted haza	ards are known	hazards at the t	ime of o	compiling t		is <b>does not</b>
Hazard	Yes	Hazard		Yes	Hazard		Yes
Confined space		Suspended load	s		Noise – plant and equipment		
Difficult entry/exit	$\square$	Falling objects			Communi	cation – means of	
Oxygen deficiency/excess		Working near cra runways	anes and crane		Remote a	rea	
Poisonous fumes/gas		Live rails-gantry	cranes		Temperat	ure extremes	$\square$
Explosive gas		Trip hazards		$\boxtimes$	Reduced	visibility	$\square$
Flammable materials		Slippery surfaces	S	$\boxtimes$	Unauthori	zed persons	
Combustible materials		Manual handling			High pres	sure water	
Hazardous substances		Sharp materials			Vacuum		
Drowning	$\boxtimes$	Line of fire			Air emissi	ons – dust, fumes	
Engulfment	$\boxtimes$	Pressurized fluid	s		General w	General waste	
UV Radiation	$\boxtimes$	Pressurized air/g	jas		Hazardous waste		
Electrical – low /high voltage		Traffic / vehicle r	novements	$\boxtimes$	Hydrocarbon / chemical spill		
Multiple electrical feeds		Machinery – mobile plant			Soil distur	Soil disturbance/erosion	
Working at height		Moving parts			Habitat dis	Habitat disruption	
Ladders		Chemical reaction iron)	on (Pyrophoric		Lighting		
Elevated work platforms		Transport of haz substances	ardous		Weather extremes		$\boxtimes$
Potential for difficult rescue	$\boxtimes$	Stock/Farm Anin	nals				
Required I	PPE & Sa	afety Equipmer	nt- tick all that	apply,	write addi	tional PPE requi	red:
The yellow highligh negate the need							
-	AR	HARD HAT	SAFETY		DRK	PROTECTIVE	PERSONAL
GLOVES PRO	IECTIO N		GLASSES / GOGGLES		OTS / DERS	GLOVES	FLOATATIO N DEVICE (PFD)
					$\triangleleft$		
	FETY	SUN BLOCK & HAND SANITISER	VHF RADIO		THROW BAG	PERSONAL LOCATOR BEACON	

 $\boxtimes$ 

 $\boxtimes$ 

 $\boxtimes$ 

 $\square$ 

 $\boxtimes$ 

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Known Hazard	Signif	ficant		it be nated	Can it be Minimis ed		Method of control
	Yes	No	Yes	No	Yes	No	
Drowning	~			~	✓		Staff should use a sample pole if access into the river/stream is unsafe. PFD's must be worn by staff. 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 [HMP 18]
UV Radiation	~			•	~		Horizons provide sunscreen and hats. Staff are encouraged to make use of these. [HMP 17]
Engulfment	*			×	*		Rivers/streams are prone to flash flooding creating the potential for engulfment. Staff must be alert and aware at all times of how the waterways are behaving around them, especially in areas where water is dammed or has structures such as intakes and aquaducts. 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]
Difficult Entry/Exit	~			~	<b>v</b>		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]
Potential for Difficult Rescue	~			×			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	~			~	~		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

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				satisfied that any slip, trip or fall hazards are isolated.
Slippery Surfaces	~	✓	•	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].
Communications- Means of	~	~	<ul> <li>Image: A start of the start of</li></ul>	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	¥	~	~	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	×	<ul> <li>Image: A start of the start of</li></ul>	×	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	~	•	~	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 travers 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]

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#### **Site Information**

Hilltop Site Name	Easting/Long (NZTM)	Northing/Lat (NZTM)	Comments
Owahanga at Branscombe Bridge	1879374	5497034	Water Quality Samples (1x 1 Litre, 1x 500ml, 2x Digitubes, 1x TOT, 1x Bacto Bottle) and SmarTroll Reading
Owahanga at Owahanga Station	1879905	5496628	Water Quality Samples (1x 1 Litre, 1x 500ml, 2x Digitubes, 1x TOT, 1x Bacto Bottle) and SmarTroll Reading
Akitio Estuary at Coast Rd Bridge	1889715	5500127	Water Quality Samples (2x 1 Litre, 1x 500ml, 2x Digitubes, 1x TOT, 2x Bacto Bottle) and SmarTroll Reading
Akitio Beach at Surf Club	1888852	5498174	Water Quality Samples (2x 1 Litre, 1x 500ml, 2x Digitubes, 1x TOT, 2x Bacto Bottle) and SmarTroll Reading



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## **Equipment Required**

Comple	Four (4) sample bottle sets - refer to
Sample	
Bottles	http://tqm.horizons.govt.nz/Hydrology/SOPs/cd_om_15.4_Appendix_4_E
	LS%20Bottle%20Guide.xlsx
Sample	FOUR (Water Quality) ZERO (Periphyton)
number	
s	
Equipm	SmarTroll (calibrated) – including iPad
	, <b>o</b>
ent	Sampling pole
	Chilly bins and ice-packs
	Field sampling books
	Sample Labels
	•
	Alcohol gel
	Personal Locator Beacon
	<ul> <li>4WD Vehicle equipped with VHF Radio</li> </ul>
	Throw Bag
Additio	A sample pole is advised for sampling at the Akitio Estuary at Coast Rd
	Bridge.
nal	Dhuye.
Comme	
nts	

#### Contact details can be found here.



#### SITE LOCATION MAP – Owahanga at Branscombe Bridge



POSSIBLE SITE HAZARDS (this does not negate undertaking a hazard review prior to									
sampling on the day): These should link back to first page									
Drowr	ning	U	V Radiation		Slippery surfaces	Trip hazards			
Difficult entry/exit		Potential for difficult rescue			/eather/Temperature Extremes	Traffic / Vehicle Movements			
Engulfr	ment	Commu	nication- means of	f	Remote Area	Reduced Visibility			
	<b>REQUIRED PPE</b> (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								
WORK BOOTS / PFD & SUNSCREEN & PERSONAL LOCATOR BAG VHF RADIO SANITISER		HI-VIS							
<ul> <li>DIRECTIONS:</li> <li>From Palmerston North head out east over Saddle Road towards Dannevirke.</li> </ul>									

almerston North head out east over Saddie Koad towards Dannevirke. 

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- Head into Dannevirke and turn right onto Miller Street just before the BP station on the left (this is the last petrol station for a while so check your fuel).
- Stay on Miller Street, this turns into Weber Road. Stay on Weber Road.
- After Weber turn right onto Route 52. This is well signposted. Follow Route 52 for approximately 11km and then turn left onto River Road at Waione.
- Stay on River Road the rest of the way until you reach Akitio which has an obvious rusted steel A-Frame welcome sign into the town. Just after you pass this welcome sign you will come to a bridge over the Akitio River. At the fork in town head right.
- Continue on Coast Road the road will turn to a gravel road, for approx. 12km. Eventually you will come to Branscombe Bridge.
- Park on the Left hand side of the road before you cross the bridge. (you can pull in and turn around and park on the edge of the driveway)
- Climb over the fence and head down the bank to the bridge.



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#### SITE LOCATION MAP – Owahanga at Owahanga Station



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Drowning		L	UV Radiation			pery surfaces	Trip hazards
Difficult entry/exit		Potential for difficult rescue			Weather/Temperature Extremes		Traffic / Vehicle Movements
Engulfment		Communication- means of			Remote Area		Reduced Visibility
			above hazards - day and/or usin				
WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEACON	-	THROW BAG VHF R		HI-VIS
DIRECTIONS:							
<ul> <li>Turn back the way you came on Coast Road and carry on over the next bridge.</li> </ul>							

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- Once you get to the next gravel section enter the station yards on your left (Rautus Yards)
- Through the double gates. Make sure you close the gates as there is usually stock (Bulls) in this paddock even if you can't initially see them.
- If it is wet you will need to park on the stock truck gravel turnaround as the paddock gets very boggy.
- From the Gravel turnaround head towards the tree line and enter the paddock on the right. Follow the fence line on your left until you reach the second gate.
- Follow the path down to the sampling site this is a very narrow slippery track.

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#### SITE LOCATION MAP – Akitio Beach at Surf Club



POSSIBLE SI		S (this does	not negate und	lerta	aking a ha	azard reviev	v prior to
sampling on the	e day) <b>: These</b>	should lin	k back to first	t pa	ige		
Drown	ning	UV R	adiation		Slippery s	urfaces	Trip hazards
Difficult entry/exit		Potential for difficult rescue		V	Veather/Tei Extrer	Traffic / Vehicle Movements	
Engulf	ment	Communication- means of			Remote	Reduced Visibility	
<b>REQUIRED PI</b>	PE (in accorda	ance with abo	ove hazards –	this	does not	negate und	dertaking a
hazard review p	prior to sampli	ng on the da	y and/or using	ado	ditional PF	PE if deeme	ed necessary):
WORK BOOTS / WADERS	PFD	SUNSCREEN & HAND SANITISER	PERSONAL LOCATOR BEAC	ON	THROW BAG	VHF RADIO	HI-VIS
DIRECTIONS:							
	ck towards Ak ards the toile	•	ming down the ation.	e hill	l above Al	kitio beach	township turn

• Park up opposite the fire station and head out onto the beach to sample.

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#### SITE LOCATION MAP – Akitio River Estuary at Coast Road Bridge



<b>POSSIBLE SITE HAZARDS (</b> this does not negate undertaking a hazard review prior
to sampling on the day): These should link back to first page

Drowning	UV Radiation	Slippery surfaces	Trip hazards			
Difficult entry/exit	Potential for difficult rescue	Weather/Temperature Extremes	Traffic / Vehicle Movements			
Engulfment	Communication- means of	Remote Area	Reduced Visibility			

**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	THROW BAG	VHF RADIO	HI-VIS
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#### **DIRECTIONS:**

- Turn Back towards Akitio and continue back
- On the true left of the river immediately downstream of the bridge there is a track going down to the river. Park at the top of this and walk down the track to do your first sampling site.





Return to the office.