

# WSRT River Guardians Water Quality Monitoring

## Risk Assessment

		Pre-Mitigation				Post-Mitigation			
ACTIVITY	RISK	Risk Severity	Risk Likelihood	Risk Level	Mitigations/Warnings/Remedies	Risk Severity 2	Likelihood 2	Risk Level 2	Acceptable to Proceed
Working outdoors on uneven ground, slopes or when wet or icy.	Slips Trips and falls.	INTOLERABLE	POSSIBLE	HIGH	Appropriate footwear to be worn with good grip and ankle support. Familiar with Risk Assessment & H&S Volunteer Agreement	TOLERABLE	IMPROBABLE	LOW	Yes
Working near river	Falling in water/Drowning, unstable riverbank (common after/during heavy rain/surging flows)	INTOLERABLE	POSSIBLE	EXTREME	Ensure survey is completed from an agreed, stable, and safe location. Preferably a bridge or secure bank. Complete 'Dry Run' survey to identify safe sampling point.	INTOLERABLE	IMPROBABLE	MEDIUM	Yes
Use of stiles/bridges and walkways	Falls from climbing stiles/footpaths	UNDESIRABLE	POSSIBLE	HIGH	Ensure stiles walkways and temporary platforms are safe before use. Look out for manholes/chamber covers that are loose or missing. Use the dynamic risk assessment.	TOLERABLE	IMPROBABLE	LOW	Yes
Weather	Cold & wet conditions. Leading to exposure or hypothermia. Sun leading to heat stroke & sun burn.	TOLERABLE	POSSIBLE	MEDIUM	Ensure appropriate clothing and footwear is worn. Use sun block, sunglasses, hat, where appropriate Drink plenty of water and take regular breaks.	TOLERABLE	POSSIBLE	MEDIUM	Yes

Hazardous Plants	Giant Hogweed may cause blistering, found on flood banks. Hemlock Water Dropwort – Toxic if ingested..	UNDESIRABLE	POSSIBLE	HIGH	Knowledge of hazardous plant species to avoid contact. Wash hands/use hand gel after outdoor activity, especially before eating. Awareness of toxic plants and possible adverse reactions.	UNDESIRABLE	IMPROBABLE	MEDIUM	Yes
Hostile people landowners	Leading to physical assault/altercation.	UNDESIRABLE	IMPROBABLE	MEDIUM	Always obtain owners approval and make presence on site know. <b>Do not enter private land</b> if landowner is not in agreement. If unsure, do not proceed with sample.	UNDESIRABLE	IMPROBABLE	MEDIUM	Yes
Biosecurity	Spread of pathogens, pollutants & contaminants. Spread of nonnative invasive species. Animal or plant disease.	UNDESIRABLE	POSSIBLE	HIGH	Clean footwear to be worn, follow CHECK, CLEAN, DRY advice. invitation. Footwear cleaning equipment available Hand-wash available.	TOLERABLE	IMPROBABLE	LOW	Yes
Countryside Walking	Branches striking face leading to eye injury/scratches to face.	TOLERABLE	POSSIBLE	MEDIUM	If vegetation heavily overgrown, try and find an alternative safer route. Use the dynamic risk assessment.	ACCEPTABLE	IMPROBABLE	LOW	Yes
Livestock/ dog attack, crushing	Resulting in injury or fatality	INTOLERABLE	IMPROBABLE	HIGH	Take care when entering a field or livestock area. Seek advice of landowner manager about where livestock are present. If in doubt do not enter.	TOLERABLE	IMPROBABLE	MEDIUM	Yes
Leptospirosis (Weils Disease)	Bacteria may be present in any watercourse where infected animals have urinated. Potentially causing fatal flu like symptoms, vomiting, high temperature & muscle pains.	INTOLERABLE	POSSIBLE	EXTREME	Awareness of risk, cover up cuts, abrasions and open wounds with waterproof dressing. <b>Use PPE</b> (Gloves & Hand Sanitiser). Good hygiene practices, regular and through washing hands throughout day end particularly before eating drinking or smoking.	UNDESIRABLE	IMPROBABLE	MEDIUM	Yes

Working Alone	Becoming lost/disorientated out on site, losing phone signal. Not knowing route back home/car	UNDESIRABLE	POSSIBLE	HIGH	Survey with friend/family, let someone know location (what3words or GPS location) and when you plan on returning. Check site location on map beforehand. Bring charged mobile.	UNDESIRABLE	IMPROBABLE	MEDIUM	Yes
Working near bridges or overhead structures	Head injury and concussion when completing surveys/sampling at bridges & structures.	UNDESIRABLE	IMPROBABLE	MEDIUM	Look for alternative sites If no alternative, some form of safety hat to be worn.	TOLERABLE	IMPROBABLE	MEDIUM	Yes
Ticks	Tick bite leading to Lyme Disease.	UNDESIRABLE	POSSIBLE	HIGH	Avoid walking through tall grass, wear long sleeved/legged protective clothing. Regularly check skin for ticks. Brush down clothing and exposed skin.	UNDESIRABLE	IMPROBABLE	MEDIUM	Yes
Extreme Weather	Lightning, Risk of severe injury.	INTOLERABLE	POSSIBLE	EXTREME	ROSPA 30-30 Rule. If lightning to thunder time is less than 30 seconds, seek shelter. No sampling in extreme weather conditions (River Guardians discretion, if unsure check with WSRT staff)	UNDESIRABLE	IMPROBABLE	MEDIUM	Yes if no Extreme Weather
Entrapment	Weirs, debris dams, riparian vegetation, tree roots, large substrate.	UNDESIRABLE	POSSIBLE	HIGH	Keep safe 2m distance from waters edge/riparian/bank vegetation when not collecting water sample. Let emergency contacts know time and location of sampling and expected time of return.	UNDESIRABLE	IMPROBABLE	MEDIUM	YES
Ingesting contaminated water (human sewage/chemicals/bacteria).	Diarrhoea, stomach pain, illness, nausea from E. coli, Salmonella A various other harmful bacteria	INTOLERABLE	POSSIBLE	EXTREME	Wear PPE (gloves), regularly use hand sanitiser after surveying. Avoid contact with face/eyes during and directly after surveying. Thoroughly wash hands as soon as possible after survey. Facemask	INTOLERABLE	IMPROBABLE	HIGH	YES if safe

					& Eye protection worn if at highly contaminated site.				
Contact with Biohazardous reagent powder.	Inhalation or exposure to Hanna Phosphate Reagent Powder. Skin/Eye damage, toxic if inhaled.	UNDESIRABLE	POSSIBLE	HIGH	Always wear PPE (waterproof/disposable gloves) when handling/using Phosphate checker. Keep skin/mouth/eyes away from reagent. Keep reagent powder out of strong wind. Wash hands thoroughly after use.	UNDESIRABLE	IMPROBABLE	MEDIUM	YES

# RISK RATING KEY

LOW	MEDIUM	HIGH	EXTREME
ACCEPTABLE	ALARM <small>(action or remediality practicable)</small>	GENERALLY UNACCEPTABLE	INTOLERABLE
GO TO PROCEED	TAKE MITIGATION EFFORTS	SEEK SUPPORT	PLACE ON HOLD

# SEVERITY

	ACCEPTABLE	TOLERABLE	UNDESIRABLE	INTOLERABLE
	LITTLE TO NO EFFECT	EFFECTS ARE FELT, BUT NOT CRITICAL TO OUTCOME	SERIOUS IMPACT TO THE COURSE OF ACTION AND OUTCOME	COULD RESULT IN DISASTER
IMPROBABLE <small>RISK IS UNLIKELY TO OCCUR</small>	LOW	MEDIUM	MEDIUM	HIGH
POSSIBLE <small>RISK WILL LIKELY OCCUR</small>	LOW	MEDIUM	HIGH	EXTREME
PROBABLE <small>RISK WILL OCCUR</small>	MEDIUM	HIGH	HIGH	EXTREME