

Document Owner: Manager Customer Planning

Flooding Incident Response Maintenance Procedure

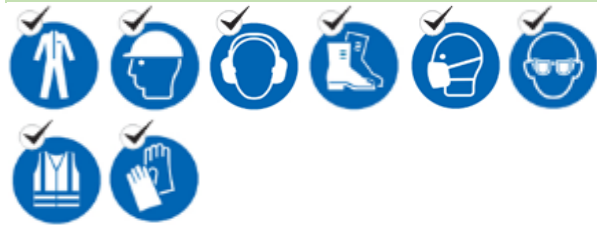
Procedures for responding to a flooding incident.

Health & Safety and Operational Information

Hazard Indicators



Personal Protection



Health and Safety Information

- Health and Safety documentation.
- Generic Traffic Management Plans or site-specific Traffic Management plan.
- Hazardous Waste
- Confined Space Entry
- Harness and rope for flooded areas
- Procedure for working in deep water

Operation's & Maintenance Documentation

- Corridor Access Requests (CAR) and WIP Permits (site specific or generic/global)
- Service plans (B4uDig)
- Design drawings
- Site plans
- Notification Calling Cards

Customer Information (Confidential)

- Vulnerable customers (DHB supplied list)
- Priority customers (WWL)

Priority Customer Categories

- Schools and Childcare
- Commercial premises
- Hospitals
- Retirement Homes/Villages
- Correction Facilities
- Military Installations
- Oil and Gas Refinery
- Known properties susceptible to flooding

Emergency Procedure / Escalation

Emergency

- In event of service strike to utility/energy source (e.g., fuel, Gas, Power, Water etc.) report immediately to team leader
- Make "Site Safe" and isolate risks to people or property with resources at hand

Escalate if extra resources required or problems occur!

- Escalate to Team Leader or incident response team and inform of the issues faced and/or expected resources required if necessary.

Additional Documentation

- Flood response manuals such as retention dams, penstock operational manuals, etc
- Vulnerable areas often referred as hot spots and the associated contingency plans/processes to mitigate the event, such as pump set up, etc.

Required Skills, Competencies (Qualifications and/or Certifications)

Competent persons only

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Standard Operating Procedure

Required Equipment

Equipment and Information	Details
Vehicle	Ensure vehicle is fit for purpose – able to negotiate flooded streets and significant ponding
Fully Equipped Vehicle	Ensure vehicle, plant, equipment, and materials appropriate to the day's work schedule is available
Vulnerable & Priority List	Vulnerable and priority Customers Lists.
Specialist Equipment	Sandbags, pumps, and associated equipment. Harness and rope PPE gear specific to working in deep or moving water

Prepare to do the work

Action	Action Details
Right of Access	Some flooding responses may require access into private property or other restricted areas of access and may need specific entry requirements or needs to be covered under a 3 rd party H&S policy or induction process. Do not expect there to be a right of access without complying with formalities when accessing private property.
Traffic	Plan around traffic delays, possible flooded and/or closed roads, detours, or limited access
Pre-Start Process	Complete the Daily Pre-Start - Planning Reactive Maintenance
Compliance	Traffic Management Plan - Where required, TMP to be in place prior to work starting. TMP to be accessible on site. Limitations on the day may restrict Traffic Management to a static mobile operation using resources available at that time.
Identify source and nature of the flood waters	Identify the source of the flood waters if not immediately apparent. Utilise the iPad embedded GIS to locate all network manholes, inlets and outlets, valves, hydrants, and pipework. Trace flow restrictions / blockages downstream to open free flowing network and upstream to determine location source of flood waters. If source is located from the potable water network turn off supply source and implement the appropriate SOP to deal with the issue. If the network or catchment is overwhelmed, then consider best option to make safe.
Wastewater overflow initial site assessment	If flood waters are sourced from the wastewater network assess the situation and determine if an overflow has occurred and the potential cause of the issue. If there has been an overflow caused by the blockage or by a network surcharge implement the Wastewater Overflow SOP. If issue is from a wastewater blockage undertake the tasks as per Manual Blockage Clearance SOP. If the situation meets the criteria for a wastewater overflow immediately inform your supervisor and then commence repair and service restoration operations.
Identify extent of actual flooding and potential flooding	If the source of the flooding can be identified prioritise actions or remedial works to clear or minimise or actions to minimise property damage. If the network or catchment is overwhelmed, then consider best option to make safe. If properties are flooded, or have the potential to be flooded prioritise, minimise of damage to the property. If properties are flooded, or have the potential to be flooded report to Team Leader or incident response team to prioritise escalation and possible evacuation.
Update Customer Hub	Update Hub via telephone on the extent of the flooding encountered.

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Perform the work

Action	Trade	Action Details
Maintenance	Serviceperson	Undertake all tasks required in the Pre-Start - Planning for Reactive Maintenance.
Health and Safety	Serviceperson	Protect members of the public.
Photograph	Serviceperson	Photograph site and all flooded properties etc. if practicable prior to commencing mitigation works
Maintenance	Serviceperson	If flooding source is from potable water network immediately act to turn off supply source and implement the appropriate SOP to deal with the issue.
Maintenance	Serviceperson	Clear intakes / outlets, if possible, to restore flow paths Implement Intake Clearance SOP
Maintenance	Serviceperson	Install flow diversions to either redirect flow or reduce impact to property whether flooded or threatened with flooding
Maintenance	Serviceperson	If required install dams / barriers and sandbags etc to prevent further flooding to properties as required
Maintenance	Serviceperson	On successful mitigation, commence site clean-up. Remove debris from site and affected areas, ensure all installed dams / barriers and sandbags are removed
Maintenance	Serviceperson	A visual inspection of the site must be carried out to ensure site is safe and free draining
Report	Serviceperson	On completion of the response, complete the Survey 123 Flooding report form.
Maintenance	Serviceperson	Perform reinstatement of spillways etc as required.
Additional Works	Serviceperson	If additional maintenance is uncovered or extra remediation is required, raise a reactive work order to ensure this work is logged for completion. Generate child work order for the work to be undertaken.
Closure	Serviceperson	Carry out work order closure procedures as per Reactive Maintenance - Generic Maintenance Procedures