



North Tyneside Council

RISK MANAGEMENT APPROACH TO FLOOD RESPONSE

Policy and guidance document

Date	December 2015
Revision date	December 2016
Plan owner	T Jones / G Wilson
Version number	2.0

A COPY OF THIS POLICY AND COMPLETED ANNEXES MUST BE KEPT ON THE PREMISES.

Table of contents

1.0	Background	3
2.0	Introduction.....	3
3.0	Complete your Flood risk assessment.....	4
4.0	Develop your action plan.....	4
5.0	Action plan – Trigger points	4
6.0	Responsible person duties	5
7.0	All Employees	5
8.0	Health and Safety.....	5
9.0	Evacuation of Buildings.....	5
10.0	Equipment and resources	5
11.0	Financial issues	5
	Annex: A – Example of a Flood Risk Assessment.....	6
	Annex: B – Example flood action plan	8
	VERY LOW Flood Risk	8
	LOW Flood Risk	9
	MEDIUM Risk Flood Risk	10
	HIGH Risk Flood Risk.....	11
	RECOVERY - Aftermath	12
	Annex: C - Action plan – Trigger points.....	13
	Annex: D - Staff Contact List	14
	Annex: E – Further advice and guidance for completion of document	14
	Annex: F - External Supplier - Resource Directory.....	15
	Annex: G - Examples of flood warnings and alerts.....	16
a.	Flood forecasting centre - warning	16
b.	Environment Agency - Flood Alert.....	17
	Annex: H – Distribution.....	18

Foreword

Each manager of a Council building is required to carry out a flood risk assessment and to produce a flood action plan for their building.

This document provides guidance to assist that process.

1.0 Background

Over recent years North Tyneside has suffered a number of flooding events, where emergency response was required to deal with flooding incidents. The Council's priorities during any flooding events are to support the emergency services and protect vulnerable people.

This policy document is designed to assist managers of Council buildings in preparing a flood risk assessment and action plan for their buildings or facility.

2.0 Introduction

All Council buildings are required to have a Flood Risk Assessment and Flood Action Plan, to assist building management to become more self sufficient when dealing with a flood event.

This responsibility applies to all premises owned by the Authority and/or occupied by the Authority, and to assist in carrying out these responsibilities the building manager will nominate a responsible person.

3.0 Complete your Flood risk assessment

The assessment at [Annex: A](#), is designed to assist the nominated responsible person to:

- Understand the flood risk to the facility
- Document risk areas within buildings which are prone to flooding.
- Identify flood prevention measures, equipment staff and materials required to mitigate the affects of any flooding event within their facilities.

4.0 Develop your action plan

Once the flood risk assessment has been completed, the next stage is to develop and complete an Action plan at [Annex: B](#), the flood risk assessment completed earlier will assist you in completing the action plan.

The action plan, which will be completed and activated by the nominated responsible person, will assist in:

- Planning for flooding emergencies
- Identifying appropriate actions/responses to be taken during a flood event, to protect known areas prone to flooding
- Identifying the trigger points for the activation of the action plan
- Recovery / aftermath

It is advised that the nominated responsible person seeks specialist advice on preparing flood defence measures.

5.0 Action plan – Trigger points

The risk matrix and key at [Annex: C](#), which is based on the Environment Agency Flood Guidance Statements [weather warnings received by Council], provides an assessment of likelihood against the impacts of a flooding event.

These assessments should be used when developing your Flood Action Plan, and should be considered as just part of the triggers for any actions/responses you will take in order to minimise the impact of any flood event, all actions/responses should be documented when developing your Flood Action plan at [Annex: B](#).

If you are not currently receiving the Flood Guidance Statements and other weather warnings, the nominated responsible person should contact the Council's resilience team, to request to be added to the weather warning email distribution list.

Refer to [Annexes: D,E,F & G](#), for additional quick reference material, designed to assist you during a flooding/emergency event.

[Annex: H](#) is a document distribution list, and this is designed to ensure that the nominated responsible person, has a list of the relevant people who need to be sent a copy of this completed document.

6.0 Responsible person duties

- Complete the Risk Assessment document
- Develop a Flood Action plan
- Ensure flood prevention equipment / resources are purchased and fitted in liaison with specialists.
- Staff are nominated who will take part in the response to a flooding incident.
- Take part in training with specialists on Flood prevention equipment / resources on a regular basis, document any training taken place.
- Maintain and test flood prevention equipment / resources.
- Review all documentation annually.

7.0 All Employees

On induction, all new employees will be briefed by the responsible person, of the actions to be taken on flood prevention, and briefed on the action plan and its contents.

8.0 Health and Safety

It is the Line Managers responsibility to ensure that appropriate risk assessments and control measures are in place prior to any work being undertaken by staff in flood water, or in areas that have been flooded by flood water during clean up operations etc.

Due to the dynamic and unpredictable nature of emergency flooding incidents it is only possible to give generic control measures and guidance. Site specific measures will need to be determined and monitored on a continual basis during the emergency incident.

Further and more detailed advice, guidance i.e Flood Response H&S Risk Assessment Considerations and Guidance document, and support is available from the Health and Safety Team to assist managers in the compilation of more detailed risk assessments or the selection of the appropriate work methods and equipment, including PPE.

9.0 Evacuation of Buildings

The nominated responsible person must ensure that they evacuate customers / vulnerable people in advance of a flooding event to a safe area.

10.0 Equipment and resources

To assist the nominated responsible person an External Supplier - Resource Directory is at: [Annex: F](#) this list may be useful when identifying what equipment is required in liaison with specialists, when completing the risk assessment.

11.0 Financial issues

Any purchases of equipment/materials are the responsibility of the nominated responsible person, in liaison with specialist partners.

Annex: A – Example of a Flood Risk Assessment

Building name:	<i>Woodlawn</i>	Date of Risk Assessment:	<i>September 23</i>
Risk Assessment review date:	<i>September 2023</i>	Completed by:	<i>Wayne Henderson</i>

	WHERE ARE THE RISK AREAS/	IMPACT ON BUILDING	Materials & Equipment	Staff required and Action(s) needed	Where are items stored	Specialist survey required?	Responsible to:	Target date(s)
1.	<i>Underground plant room</i>	<i>If excessive flood water breaches the door thresh, this may cause a catastrophic boiler failure which in turn could lead to a building closure.</i>	<i>Flood stop barrier x 1</i>	<i>The Caretaker is to install the Flood stop barrier when directed. The caretaker is to test the sump pump monthly</i>	<i>The flood stop barrier is stored in entrance to the plant room</i>	<i>no</i>	<i>H/T</i>	
2.	<i>External doors</i>	<i>If excessive flood water breaches the door threshes, this will cause damage to internal finishes.</i>	<i>Sand bags</i>	<i>The Caretaker is to place sand bags in areas when instructed</i>	<i>The sand bags are stored in the external storage area</i>	<i>no</i>	<i>H/T</i>	
3.	<i>External paths and hardstanding areas generally</i>	<i>excessive flood water may cause bottlenecks when children are entering and leaving the building, which may lead to accidents</i>	<i>none</i>	<i>The Facilities manager is to arrange annual cleaning of all drainage, gulleys, roof outlets, guttering and rainwater pipes. The caretaker is to ensure that all gulleys are freely</i>	<i>N/A</i>	<i>no</i>	<i>H/T</i>	<i>On going Last cleaned August 22</i>

				<i>running at least on a monthly basis.</i>				
4.	<i>Playing field overrunning into car park / pedestrian entrances</i>	<i>Excessive flood water may cause damage to both the school building and to the neighbouring residential properties</i>	<i>Red and white water barriers</i>	<i>Caretaker is to position red and white flood barriers across all entrances to site and weigh down with sandbags when instructed by HT or the field is waterlogged and the weather forecast is for severe rain.</i>	<i>N/A</i>	<i>no</i>	<i>H/T</i>	

- [Annex: A](#) - To be completed by nominated responsible person in liaison with specialist partners.
- This section on completion also informs the Flood Action Plan at [Annex: B](#).

Annex: B – Example flood action plan

VERY LOW Flood Risk

Building name:	Woodlawn	Date of plan:	September 22
Plan review date:	September 23	Completed by:	Wayne Henderson

ACTUAL OR FORECAST IMPACT	TRIGGER / INFORMATION SOURCE	RESPONSE NEEDED	IDENTIFIED FLOOD RISK AREA ACTIONS	
			RISK AREA	ACTIONS
<p>Minimal disruption Generally no impact, however there may still be</p> <ul style="list-style-type: none"> Isolated and minor flooding of low-lying land and roads Isolated instances of spray/wave overtopping on coastal promenades Little or no disruption to travel although wet road surfaces could lead to difficult driving conditions 	<p>Flood Forecasting Centre (Met Office) Flood Guidance Statement – GREEN: Surface Water, River, Groundwater Flood Alert – Environment Agency Weather forecasts for the locality. Local information such as actual flood events. Local observations and knowledge of previous flooding events.</p>	<p>The nominated responsible person:- G Wilson/W Henderson to monitor the weather. Caretkaer instructed to arrange to check all equipment, preparedness deployment. all in for</p>	Underground plant room	No action
			External doors to foundation area	No action
			External paths and hardstanding areas generally	Ensure gulleys and drainage generally is clear and freely running
			School playing field	No action

LOW Flood Risk

ACTUAL OR FORECAST IMPACT	TRIGGER / INFORMATION SOURCE	RESPONSE NEEDED	IDENTIFIED FLOOD RISK AREA ACTIONS	
			RISK AREA	ACTIONS
<p>Minor disruption</p> <ul style="list-style-type: none"> Localised flooding of land and roads – risk of aquaplaning Localised flooding could affect individual properties Individual properties in coastal locations affected by spray and/or wave overtopping Localised disruption to key sites identified in flood plans (e.g. railways, utilities) Local disruption to travel – longer journey times 	<p>Flood Forecasting Centre (Met Office) Flood Guidance Statement –</p> <p>YELLOW: Surface Water, River, Groundwater</p> <p>Flood Warning – Environment Agency</p> <p>Weather forecasts for the locality.</p> <p>Local information such as actual flood events.</p> <p>Local observations and knowledge of previous flooding events.</p>	<p><u>The nominated responsible person to:-</u></p> <p><i>Monitor the weather.</i></p> <p><i>Arrange to check equipment, in preparedness for deployment.</i></p> <p><i>Place staff on standby.</i></p> <p><i>Consider fitting flood prevention equipment, to identified building flood risk areas.</i></p> <p><i>Consider the need for additional staff if required.</i></p> <p><i>Allocate staff as necessary to setup flood preventative measures.</i></p>	<i>Underground plant room</i>	<i>Consider installing the Flood stop barrier</i>
			<i>External doors</i>	<i>Consider fitting sand bags</i>
			<i>External paths and hardstanding areas generally</i>	<i>Consider fitting sand bags</i>
			<i>School playing field</i>	<i>Ensure gulleys and drainage generally is clear and freely running</i>

MEDIUM Risk Flood Risk

ACTUAL OR FORECAST IMPACT	TRIGGER / INFORMATION SOURCE	RESPONSE NEEDED	IDENTIFIED FLOOD RISK AREA ACTIONS	
			RISK AREA	ACTIONS
<p>Significant disruption</p> <ul style="list-style-type: none"> • Flooding affecting properties and parts of communities • Damage to buildings/structures is possible • Possible danger to life due to fast flowing/deep water/ wave overtopping/ wave inundation • Disruption to key sites identified in flood plans (e.g. railways, utilities, hospitals) • Disruption to travel is expected. A number of roads are likely to be closed 	<p>Flood Forecasting Centre (Met Office) Flood Guidance Statement – AMBER: Surface Water, River, Groundwater</p> <p>Severe Flood Warning – Environment Agency</p> <p>Weather forecasts for the locality.</p> <p>Local information such as actual flood events.</p> <p>Local observations and knowledge of previous flooding events.</p>	<p><u>The nominated responsible person</u> <i>Activate the Flood Action Plan.</i></p> <p><i>Allocate staff as necessary to setup flood preventative measures.</i></p> <p><i>Call out additional staff if required.</i></p> <p><i>Arrange to fit flood prevention equipment.</i></p> <p><u>Headteacher</u> <i>To give early warning of possible closure to parents and CYPL capital team in advance of a flooding event.</i></p>	<i>Underground plant room</i>	<i>Install the Flood stop barrier. Ensure the sump pump is fully operational</i>
			<i>External doors</i>	<i>Install the sandbags. Move furniture, fittings and equipment away from the vulnerable areas.</i>
			<i>External paths and hardstanding areas generally</i>	<i>Ensure gulleys and drainage generally is clear and freely running</i>
			<i>School playing field</i>	<i>Monitor flood water level. Consider informing LA to gain access to pumping water away</i>

HIGH Risk Flood Risk

ACTUAL OR FORECAST IMPACT	TRIGGER / INFORMATION SOURCE	RESPONSE NEEDED	IDENTIFIED FLOOD RISK AREA ACTIONS	
			RISK AREA	ACTIONS
<p>Severe disruption</p> <ul style="list-style-type: none"> Widespread flooding affecting significant numbers of properties and whole communities Collapse of buildings/structures is possible Danger to life due to fast flowing/ deep water/ wave overtopping/ wave inundation Widespread disruption or loss of infrastructure identified in flood plans (e.g. railways, utilities, hospitals) Large scale evacuation of properties may be required Severe disruption to travel. Risk of motorists becoming stranded 	<p>Flood Forecasting Centre (Met Office) Flood Guidance Statement –</p> <p>RED: Surface Water, River, Groundwater</p> <p>Severe Flood Warning – Environment Agency</p> <p>Environment Agency to Category 1 responders.</p> <p>Meteorological Office warnings issued to Category 1 responders.</p> <p>Reports received by responding personnel or members of the public.</p> <p>Weather forecasts for the locality.</p> <p>Local information such as actual flood events.</p> <p>Local observations and knowledge of previous flooding events.</p>	<p><u>The nominated responsible person</u> Activate the Flood Action Plan.</p> <p>Allocate staff as necessary to setup flood preventative measures.</p> <p>Call out additional staff if required.</p> <p>Arrange to fit flood prevention equipment.</p> <p>Monitor the situation.</p> <p><u>Headteacher</u> To advise parents and CYPL Capital Team of school closure.</p>	Underground plant room	Install the Flood stop barrier. Ensure the sump pump is fully operational.
			External doors	Install the sandbags. Move furniture, fittings and equipment away from the vulnerable areas.
			External paths and hardstanding areas generally	Ensure gulleys and drainage generally is clear and freely running.
			School playing field	Monitor flood water level. Consider pumping water.

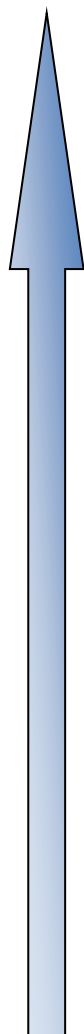
RECOVERY - Aftermath

ACTUAL OR FORECAST IMPACT	TRIGGER / INFORMATION SOURCE	RESPONSE NEEDED	IDENTIFIED FLOOD RISK AREA ACTIONS	
			RISK AREA	ACTIONS
Flood water receding or receded.	<p>Warnings no longer in force</p> <p>Weather forecasts for the locality.</p> <p>Local observations and knowledge of previous flooding events.</p> <p>Local information such as impact reports of flood events from the public and responding organisations. Confirmation from the Environment Agency and Met Office that no further flooding is expected.</p>	<p>The nominated responsible person</p> <p><i>On cessation of flooding</i></p> <ul style="list-style-type: none"> <i>• Liaise with the Health & Safety Team for advice and guidance on any issues encountered caused by the flooding.</i> <i>• Arrange safety checks on boiler plant and equipment.</i> <i>• Arrange reinstatement of plant & equipment, fittings and fixtures soon as it is safe to do so.</i> <i>• Arrange hire of dehumidifiers to dry out carpets and soft furnishings if they are deemed re-usable.</i> <i>• Liaise with CYPL Capital Team with regard to post incident reporting arrangements.</i> <i>• Update the Risk Assessment and Flood Action Plan as appropriate.</i> <p>Financial issues</p> <ul style="list-style-type: none"> <i>• Advise the Risk and Insurance Team of any balance of risk insurance claim.</i> 	<u>All areas affected</u>	<i>Remove flood stop barriers and sand bags.</i>

Annex: C - Action plan – Trigger points

**OR ON RECEIPT OF A FLOOD GUIDANCE STATEMENT WEATHER WARNING
RELATING TO A FLOODING EVENT**

Click on the matching risk colour below:



FLOOD FORECASTING CENTRE (FFC), FLOOD GUIDANCE STATEMENT (FGS)				
FLOOD RISK MATRIX.				
(River, tidal/coastal and surface-water flooding)				
Likelihood	<u>Very low</u> Minimal disruption	<u>Low</u> Minor disruption	<u>Medium</u> Significant disruption	<u>High</u> Severe disruption
	<u>Very low</u> Minimal disruption	<u>Low</u> Minor disruption	<u>Medium</u> Significant disruption	<u>Medium</u> Significant disruption
	<u>Very low</u> Minimal disruption	<u>Very low</u> Minimal disruption	<u>Low</u> Minor disruption	<u>Medium</u> Significant disruption
	<u>Very low</u> Minimal disruption	<u>Very low</u> Minimal disruption	<u>Low</u> Minor disruption	<u>Low</u> Minor disruption
Potential impacts				



ALSO NOTE FOR ACTIVATION AND RESPONSE LEVELS ACTION PLAN – [ANNEX: B](#)

- Environment agency – flood warnings
- Local information such as actual flood events.
- Local observations and knowledge of previous flooding events.

Annex: D - Staff Contact List

Skill/Role	Name	Job Title	Contact Details	Date of training completed
<i>Nominated person with responsibility to carry out the Risk Assessment and prepare the Flood Action Plan</i>	<i>Mr W Henderson</i> <i>Mrs G Wilson</i>	<i>Facilities Manager</i> <i>Headteacher</i>	<i>07793143115</i>	<i>N/A</i>
<i>Installation of flood defences</i>	<i>Mr. K Jones</i>	<i>Caretaker</i>	<i>07904597708</i>	<i>N/A</i>
<i>Person with overall responsibility for the safety of the building, and the building users, employees and visitors</i>	<i>Mr w Henderson</i> <i>Mrs G Wilson</i>	<i>Headteacher</i> <i>Headteacher</i>	<i>07986380270</i>	<i>N/A</i>

Annex: E – Further advice and guidance for completion of document

Name/Service area	Role	Office	Mobile
Jonathan Hutchinson	Resilience Team	0191 643 6441	
Lindsey Horwood	Resilience Team	0191 643 7282	
Health and Safety Team		0191 643 5008	
CYPL Capital Team		0191 643 8111	

Annex: F - External Supplier - Resource Directory



EQUIPMENT / RESOURCE	COMPANY	CONTACT INFORMATION	EMAIL/WEBSITE
Air vent covers			
Dehumidifiers			
FLOODSTOP	Simon Phelps (Owner) Fluvial Innovations Ltd 2-3 Harwell Road, Nuffield Industrial Estate, Poole, Dorset. BH17 0GE.	(0)7909576127 / 01202 678580	info@fluvial-innovations.co.uk www.fluvial-innovations.co.uk
Hire companies			
Plastic skirting's			
PPE			
Pumps			

Annex: G - Examples of flood warnings and alerts

a. Flood forecasting centre - warning


Front cover of warning

THIS EXAMPLE SHOWS A GREEN 'VERY LOW' FOR THE NORTH EAST

FLOODFORECASTINGCENTRE
a working partnership between  

Flood Guidance Statement 16:00hrs 16 October 2012

Our assessment of daily flood risk for England and Wales is below.



16:00 - 23:59hrs Tuesday 16 October 2012	00:00 - 23:59hrs Wednesday 17 October 2012	00:00 - 23:59hrs Thursday 18 October 2012	00:00 - 23:59hrs Friday 19 October 2012	00:00 - 23:59hrs Saturday 20 October 2012
--	--	---	---	---

Headline

There is now a MEDIUM risk of coastal flooding along the west and south coast of Wales and along the coast of Cornwall, Devon and Somerset, where significant disruption is possible. All other areas coloured yellow on the map there is a LOW risk of coastal flooding.

There is also a LOW risk of river and surface water flooding in the southwest on Wednesday morning.

General Overview of Flood Risk

On Wednesday there is a MEDIUM risk of coastal flooding causing some significant disruption at some coastal communities along the west and south coast of Wales and along the coasts of Cornwall, Devon and Somerset. The situation will be closely monitored and updated if necessary.

Today and during Wednesday morning and evening high tide levels and strong winds will lead to a LOW risk of coastal flooding at other coastal locations highlighted in yellow on the map above. Within these areas there is a moderate likelihood of minor disruption.

On Wednesday morning, a band of heavy rain will affect many parts of England and Wales, However, the southwest of England is currently sensitive to small rainfall amounts, and the intense nature of the rain gives a medium likelihood of minor disruption leading to a LOW risk of surface water and river flooding at some locations.

Warnings and Alerts in force in England and Wales at 16:00hrs

Flood ([click here](#))
0 Severe Flood Warnings / 12 Flood Warnings / 41 Flood Alerts

Severe Weather ([click here](#))
Alerts - No / Warnings - Yes

Best Judgement

© Crown, Met Office and Environment Agency 2012 Page 1 of 3

<http://www.fcc-environment-agency.metoffice.gov.uk>

b. Environment Agency - Flood Alert

From: floodline@environment-agency.gov.uk [mailto:floodline@environment-agency.gov.uk]
Sent: 16 October 2012 20:08
To: NtcWeather
Subject: The Flood Alert for the Tyne and Wear Coast is no longer in force.
[Scanned]

This is a message from the Environment Agency.

The Flood Alert for the Tyne and Wear Coast is no longer in force.

The situation is improving and no further flooding is expected in this area.

- Check your flood response plans to see how your organisation needs to respond.
- To speak to your local Environment Agency Duty Officer, call the Incident Communication Service on 0845 850 3518.
- Advise the public to call Floodline on 0845 988 1188 for advice if they have been affected by flooding and to use quickdial 130104 for up-to-date flooding information.
- The Environment Agency website contains details of river level and flooding information and can be accessed at www.environment-agency.gov.uk.

- Please report any flooding in your area to your local Environment Agency office.
Contact

Yorkshire & North East Region, North East Area
Flood Warning Duty Officer
Environment Agency
Tyneside House
Newcastle Business Park
Newcastle
NE4 7AR

Please do not reply to this email. If you want more information about flooding or to stop receiving these emails, please phone Floodline on 0845 988 1188 or log onto Floodline Warnings Direct at www.environment-agency.gov.uk/floodline.

Annex: H – Distribution

NAME	DATE
Directors	
Heads of Service	
Emergency Response Leadership Group	
Facilities Managers (nominated responsible person)	
Highways	
Resilience Team	
Engineers	
Head Teachers and Deputy Head Teachers	