



Scottish Flood Forecasting Service
Working in partnership

Your guide to using the Flood Guidance Statement
Third publication

Flooding in recent years, across many parts of the country, has reminded people of our vulnerability to extreme weather.

To help protect lives, homes and livelihoods, the Met Office and the Scottish Environment Protection Agency (SEPA) have set up the Scottish Flood Forecasting Service — a partnership that provides Category 1 and 2 responders with better indications of flood risk.



I was extremely impressed by how well prepared authorities were – aided by the timely and accurate flood forecasts from the Scottish Flood Forecasting Service run by SEPA and the Met Office.

Paul Wheelhouse, Minister for Environment and Climate Change, comment in Scottish Parliament

Overview

The Flood Guidance Statement provides information for Category 1 and 2 responders to assist with tactical planning decisions around flooding.

Statements are issued on a daily basis by the Scottish Flood Forecasting Service to Category 1 and 2 responders and government departments.

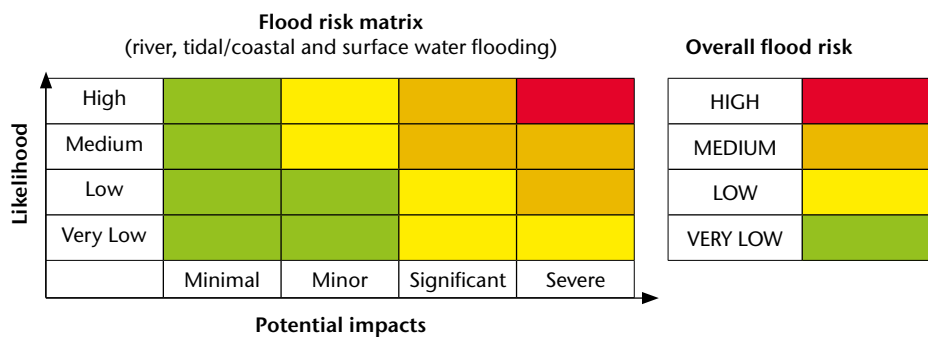
The guidance presents an overview of the expected flood risk across Scotland for the next five days ahead at Local Authority level. It identifies developing situations that could cause flooding and significant disruption to normal life.

The guidance highlights the risk for the main types of flooding – river, coastal and surface water.

The risk assessment is based on the **impact** and **likelihood** of flooding, drawing on meteorological information and advice, and an understanding of the situation across river catchments and the coast. Risk levels are agreed on a daily basis through consultation between Scottish Environment Protection Agency hydrologists and Met Office weather forecasters.

The level of impact is defined according to the table on page 6. Potential impacts are assessed by taking into account:

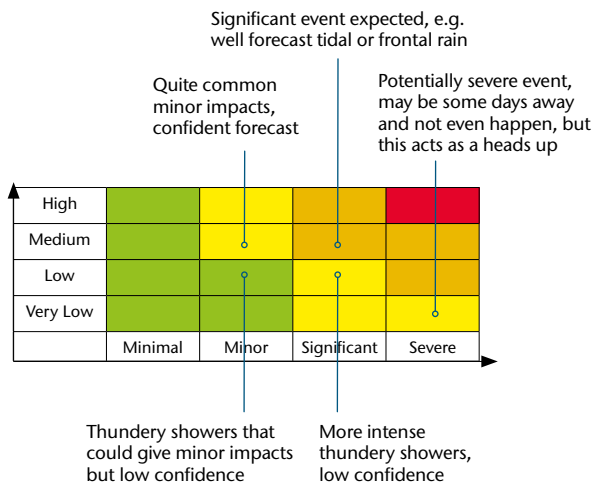
- What, how much, how long and where – for instance, how much rain is expected, how heavy will it be, where will it fall, how long will it last?
- Recent weather conditions – is the severe weather occurring shortly after a period of prolonged heavy rain or other high impact events?
- Knowledge about the condition of the catchments within the areas at risk – how saturated are they, how high are the rivers and how susceptible are they to flooding?
- Impact of tides – is extreme weather expected at a period of high (spring) tides?
- This **impact** is then combined with the **likelihood** of the event happening (taking into account the confidence in the forecast) to give a combined risk for each area and each day of the assessment.



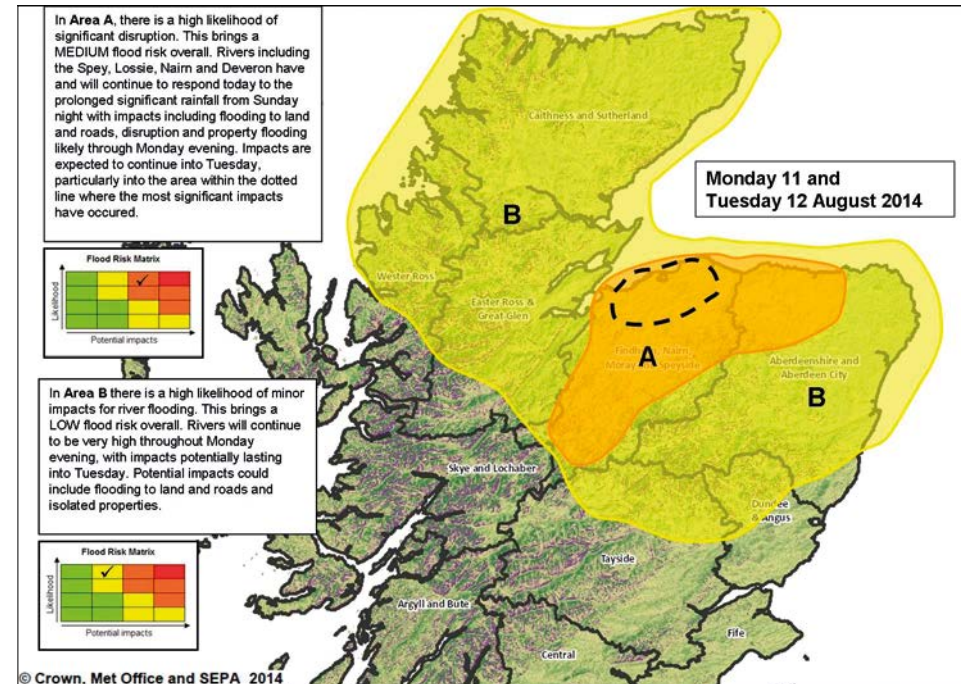
Things to look out for in the Flood Guidance Statement

- Text will refer to **impact** (minor, significant etc) and **likelihood** (possible, likely etc) as well as the overall risk.
- Make sure you know where we are on the risk matrix – the same colour can refer to different levels of potential impact, with different likelihood.
- Even if all areas are coloured green there could be the potential for minor impacts.
- The text will give further information beyond what is in the risk maps.
- Area of Concern maps will give further specific information on areas at risk, and how the risk colour has been chosen from the matrix. These are sometimes used even when the risk is very low (green) as there may still be minor impacts to be pointed out.

Examples of some scenarios you may see in the Flood Guidance Statement



Area of concern map that will usually be added when more detailed local information is needed



FLOOD GUIDANCE STATEMENT SECTIONS EXPLAINED

General overview of flood risk

This section provides an overview of flood risk for the next five days and explains how flood risk status has been allocated to different areas. It is always worth reading this in conjunction with the five-day flood risk maps.

Bear in mind that there may still be localised issues despite an overall GREEN status. The text should highlight this.

Weather summary

This is an overview of weather conditions expected over the next five days. When read in conjunction with the 'General overview of flood risk' it helps explain the rationale behind the risk maps.

Warnings and Alerts in force in Scotland

This provides a summary of the numbers of both Flood and National Severe Weather Warning Service Alerts and Warnings in force at the time the statement is issued. The links take you to the SEPA and Met Office websites for the latest and live information.

Flood risk

Up to three paragraphs (one for each type of flooding) detail the risk of flooding from rivers, coastal effects and surface water (i.e. localised flooding due to very intense rainfall). These paragraphs are ordered by severity and/or priority of flood risk.

Area of concern map

When there is a need to provide further detail there will be a map that shows the main areas at risk, including matrices to indicate how the risk has been derived.

Next statement due

This indicates when the next statement will be issued. Normally this is at the same time the next day but if an event is ongoing, or is expected, then updates are likely to follow later in the day.

Contact details

This gives the number for the SEPA Communications Centre, (01698 839039), where all enquiries should be directed in the first instance.

FREQUENTLY ASKED QUESTIONS

Q. How frequently are statements issued?

- A. Flood Guidance Statements are issued daily at the following times:
- Very low and low risk situations – 10:30 (local time)
 - Medium risk situations – 10:30 and 16:00
 - High risk situations – 10:30, 16:00 and at other times as required

Q. Who receives the statements?

- A. All Category 1 and 2 responders including emergency services and local authorities can register to receive the daily Flood Guidance Statement by emailing flooding@sepa.org.uk.

Q. Are the statements targeted?

- A. All those registered are sent the 10:30 statement. Subsequent statements during the day are targeted at responders for areas at risk, or where there has been a change in flood risk since the previous statement.

Q. What are the recommended actions following receipt of a statement?

- A. The aim of the statement is to provide longer lead times to prepare for a flood event. Partners will need to consider what actions they can take in the lead up to an event to minimise the impact of the event and reduce recovery time.

The Scottish Flood Forecasting Service advises partners to talk to their local SEPA Flood Advisor or Met Office Public Weather Service Advisor for a more detailed discussion about local risk.

For more information on the SFFS visit www.sepa.org.uk/flooding



FLOOD RISK MATRIX GUIDANCE ON IMPACTS

	Minimal disruption	Minor disruption	Significant disruption	Severe disruption
Typical impacts	<p>Generally no impact, however there may be:</p> <ul style="list-style-type: none"> Isolated and minor flooding of low-lying land and roads. Isolated instances of spray/wave overtopping in coastal roads and promenades. 	<ul style="list-style-type: none"> Localised flooding of land and roads. Localised flooding affecting individual properties. Localised disruption to key sites on floodplains. Individual properties in coastal locations affected by spray and/or wave overtopping. Local disruption to travel. 	<ul style="list-style-type: none"> Flooding affecting parts of communities. Damage of buildings/structures is possible. Possible danger to life due to fast flowing/deep water/wave overtopping/wave inundation. Disruption to infrastructure. Small scale evacuation of properties may be required. 	<ul style="list-style-type: none"> Widespread flooding affecting 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. Large scale evacuation of properties may be required.
Expected partner response level	Business as usual.	Single agency operational response.	<p>Regional Resilience Partnership awareness likely to be needed at a tactical level.</p> <p>SGoRR may be considered.</p>	<p>Regional Resilience Partnership awareness likely to be needed at a tactical level.</p> <p>Mutual aid likely with perhaps national co-ordination. SGoRR convened.</p>
Implications for public	Generally no impact; however there may be some isolated and minor flooding. Little or no disruption to travel although wet road surfaces could lead to difficult driving conditions.	Localised flooding possible. Wet road surfaces and possibility of ponding water, especially in known trouble spots. Local disruption to travel – longer journey times.	Flooding of land and roads and property is likely. Disruption to travel and infrastructure.	Widespread flooding of property. Severe disruption to travel. Loss of gas, electricity, water supplies. Significant disruption to communities.

FLOOD RISK MATRIX GUIDANCE ON LIKELIHOOD

	Very low	Low	Medium	High
Guidance on likelihood	<p>Flooding is possible, although the likelihood is very low.</p> <p>Forecast suggests less than 20% chance of occurrence.</p>	<p>Flooding is possible.</p> <p>Forecast suggests between 20% and 40% chance of occurrence.</p>	<p>Flooding is likely.</p> <p>Forecast suggests between 40% and 60% chance of occurrence.</p>	<p>Flooding is expected or ongoing.</p> <p>Forecast suggests greater than 60% chance of occurrence</p>

HOW FLOOD GUIDANCE STATEMENTS DIFFER FROM EXISTING SERVICES AND COMPARE TO SEPA'S FLOOD ALERTS AND WARNINGS

Product	Who is responsible?	Who receives them?	Purpose	Scale	Lead time
National Severe Weather Warning Service (NSWWS) Alerts and Warnings	Met Office	All recipients, including the general public.	Includes Alerts and Warnings for the potential impact of rainfall. The impact will often be a flood risk or flood event.	Region based.	Up to a few days ahead.
Flood Guidance Statement	Scottish Flood Forecasting Service	Category 1 and 2 responders.	Planning tool to help category 1 and 2 responders prepare for a flood event.	Area based.	Five days ahead.
Flood Alerts	SEPA	All registered recipients, including the general public.	General information about the possibility of flooding.	Local Authority or large Hydrological boundaries.	Up to 24 hours ahead.
Flood Warnings	SEPA	All registered recipients, including the general public.	Specific information about an imminent flooding event, requiring action by the recipient.	Flood warnings are for more localised areas, based on detailed local forecasting models.	Generally 3 to 6 hours ahead.



How to register

Category 1 and 2 responders and other partners can register to receive daily flood guidance statements by emailing flooding@sepa.org.uk

For more information on the Scottish Flood Forecasting Service visit www.sepa.org.uk/flooding



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