

Flood Warnings

A guide to the Environment Agency's flood warning codes



A User Guide for Emergency Responders
Version 1.0 – November 2012

We are the Environment Agency. We protect and improve the environment and make it a better place for people and wildlife.

We operate at the place where environmental change has its greatest impact on people's lives. We reduce the risks to people and properties from flooding; make sure there is enough water for people and wildlife; protect and improve air, land and water quality and apply the environmental standards within which industry can operate.

Acting to reduce climate change and helping people and wildlife adapt to its consequences are at the heart of all that we do.

We cannot do this alone. We work closely with a wide range of partners including government, business, local authorities, other agencies, civil society groups and the communities we serve.

Published by:

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Further copies of this report are available from our publications catalogue: <http://publications.environment-agency.gov.uk> or our National Customer Contact Centre: T: 03708 506506

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What counts in a flood is good information you can act on...

Whether we like it or not, floods happen. Over the years, forecasting techniques have improved, giving us more time to prepare for flooding. The Environment Agency is here to help. We are responsible for issuing flood warnings throughout England and Wales. However, after 1 April 2013, the Environment Agency will issue warnings for England and Natural Resources Wales will issue warnings for Wales.

We help by:

- Building and maintaining flood defences.
- Issuing flood warnings.
- Working with partners on multi-agency flood response.
- Sharing accurate flood risk information and advice.

What is this user guide for?

This user guide has been prepared with the aim of increasing our partners' awareness and understanding of the flood warning codes used when we issue flood warnings. In turn, this will improve how we all prepare for flooding. This material should be referred to on a regular basis to ensure responding organisations are fully aware of what the flood codes mean and know what actions to consider when a warning is issued for a particular area of interest. This user guide can also be used to find out how the warnings are issued.

This document has been developed as part of the Joint Responder Training Project 2012. It is intended to be used by strategic, tactical and operational responders as self-taught guidance material.

Our flood warning codes – an overview

The Environment Agency provides a free flood warning service throughout England and Wales in areas at risk of flooding from rivers or the sea. In some parts of England we also provide a flood warning service for flooding from groundwater. Using the latest available technology, our staff monitor rainfall totals, river levels and sea conditions 24 hours a day and use this information to forecast the possibility of flooding. We issue warnings using the following three different codes:

- Flood Alert;
- Flood Warning;
- Severe Flood Warning.

Each warning type is triggered by particular weather, river or sea conditions which cause flooding. Emergency responders need to understand our flood warnings and know how to respond when they receive them.

During an event, responders should not assume that a Flood Alert will always be upgraded to a Flood Warning, and this in turn upgraded to a Severe Flood Warning.

It is important to note that after 1 April 2013, the Environment Agency will issue warnings for England and Natural Resources Wales will issue warnings for Wales.

How are warnings issued?

Flood warnings are available to emergency responders, media organisations and the public. There are a number of ways in which this information can be received, including the following:

- **Direct to you** - receive warnings by phone, text, email or fax. Sign up for our free Floodline Warnings Direct service by calling Floodline on 0845 988 1188 or by visiting our website;
- **On our website** - view up-to-date flood information, monitor the river or sea levels in your area and check our latest flood risk forecast for your area by visiting our website www.environment-agency.gov.uk/flood;
- **By calling Floodline on 0845 988 1188** – listen to recorded information on the latest warnings and predictions or speak to an operator for more general information 24 hours a day. Our operators can also provide a quickdial number which gives you faster access to information for your area. Responders can also contact their local Environment Agency [Flood Resilience team](#) for further information and advice by calling 03708 506 506;
- **Through the media** - you may see or hear our warnings on television and in radio broadcasts;
- **Flood Wardens** - in some areas Flood Wardens are there to alert and support their local community when a flood warning is issued. Contact your local Environment Agency [Flood](#)




[Resilience team](#) for to find out if this service is available in your area or for further information and advice by calling 03708 506 506;

- **Sirens/loudhailers** - in some areas we use loudhailer or siren systems to warn people that a flood warning has been issued. Contact your local Environment Agency [Flood Resilience team](#) to find out if this service is available in your area or for further information and advice by calling 03708 506 506;
- **Flood warning feeds** - Flood warning (RSS) feeds shows national and regional flood warnings in force and are updated every 15 minutes. The feeds contain a brief summary and link to the full information on our website;
- **Targeted Flood Warning Service** – The Targeted Flood Warning Service (TFWS) is a web-based flood warning service to provide Category 1 and 2 responders with a more targeted and efficient service. This service provides email notifications and displays flood warnings relating to relevant assets stored within the system. Category 1 responders are able to get this service for free and at a low cost for Category 2 responders. You can register by calling the Environment Agency on 03708 506 506 or by speaking to your [local Environment Agency Flood Resilience team](#);
- **Flood Warnings For Infrastructure** – The Flood Warnings For Infrastructure (FWFI) service has been set up to make it as easy and flexible as possible for organisations to access our data and information and for tailored flood warning products, applications and services to be developed. Individuals or organisations are licensed to access our live flood warning data and Geographical Information System (GIS) data / polygons. For further information or to register your interest in accessing our data, visit our 'FWFI' webpage, email commercial.services@environment-agency.gov.uk or call 03708 506 506;
- **Social media / Smartphone Apps** – Flood warning updates can also be received using a number of social media sources, such as Facebook (www.facebook.com/environmentagency) and Twitter (@EnvAgency). Various Smartphone Apps are now available to provide flood alerts for a specific location. These services are largely intended to be used by the public, providing access to live flood warning information;
- **Live Flood Warning map** – This is a map-based view of live flood warnings and is available on [our website](#). Users can zoom into a specific location of interest to see which flood alerts and warnings have been issued.

Know your flood warning codes

The following table provides information on the flood warning codes for emergency responders and for each it details:

- What it means;
- When it's used;
- Triggers;
- Impact on the ground;
- Advice to the public/media;
- Advice to operational organisations and emergency responders.

 <p>FLOOD ALERT</p>	 <p>FLOOD WARNING</p>	 <p>SEVERE FLOOD WARNING</p>	<p>Warning no longer in force</p>
<p>What it means Flooding is possible. Be prepared.</p>	<p>What it means Flooding is expected. Immediate action required.</p>	<p>What it means Severe flooding. Danger to life.</p>	<p>What it means No further flooding is currently expected for your area.</p>
<p>When it's used Two hours to two days in advance of flooding.</p>	<p>When it's used Half an hour to one day in advance of flooding.</p>	<p>When it's used When flooding poses a significant risk to life or significant disruption to communities.</p>	<p>When it's used When a flood warning or severe flood warning is no longer in force.</p>
<p>Triggers</p> <ul style="list-style-type: none"> • Forecasts that indicate that flooding from rivers may be possible. • Forecast intense rainfall for rivers that respond very rapidly. • Forecasts of high tides, surges or strong winds. 	<p>Triggers</p> <ul style="list-style-type: none"> • High tides, surges coupled with strong winds. • Heavy rainfall forecast to cause flash flooding of rivers. • Forecast flooding from rivers. 	<p>Triggers</p> <ul style="list-style-type: none"> • Actual flooding where the conditions pose a significant risk to life and/or widespread disruption to communities. • On-site observations from flooded locations. • A breach in defences or failure of a tidal surge barrier or dam that is likely to cause significant risk to life. • Discussions with partners. 	<p>Triggers</p> <ul style="list-style-type: none"> • Risk of flooding has passed. • River or sea levels have dropped back below severe flood warning or flood warning levels and no further flooding is expected. • Professional judgment and discussions with partners agree that a severe flood warning status is no longer needed.
<p>Impact on the ground</p> <ul style="list-style-type: none"> • Flooding of fields, recreation land and car parks. • Flooding of minor roads. • Flooding of farmland. • Spray or wave overtopping on the coast. 	<p>Impact on the ground</p> <ul style="list-style-type: none"> • Flooding of homes and businesses. • Flooding of rail infrastructure. • Flooding to roads with major impacts. • Significant waves and spray on the coast. • Extensive flood plain inundation (including caravan parks or campsites). • Flooding of major tourist/recreational attractions. 	<p>Impact on the ground</p> <ul style="list-style-type: none"> • Deep and fast flowing water. • Debris in the water causing danger. • Potential or observed collapse of buildings and structures. • Communities isolated by flood waters. • Critical infrastructure for communities disabled. • Large number of evacuees. • Military support. 	<p>Impact on the ground</p> <ul style="list-style-type: none"> • No new impacts expected from flooding, however there may still be: <ul style="list-style-type: none"> • Standing water following flooding; • Flooded properties; • Flooded or damaged infrastructure.
<p>Advice to the public/media</p> <ul style="list-style-type: none"> • Be prepared to act on your flood plan. • Prepare a flood kit of essential items. • Avoid walking, cycling or driving through flood water. • Farmers should consider moving livestock and equipment away from areas likely to flood. • Call Floodline on 0845 988 1188 for up-to-date flooding information. • Monitor local water levels on the Environment Agency website www.environment-agency.gov.uk. 	<p>Advice to the public/media</p> <ul style="list-style-type: none"> • Protect yourself, your family and help others. • Move family, pets and valuables to a safe place. • Turn off gas, electricity and water supplies if safe to do so. • Put flood protection equipment in place. • If you are caught in a flash flood, get to higher ground. • Call Floodline on 0845 988 1188 for up-to-date information. 	<p>Advice to the public/media</p> <ul style="list-style-type: none"> • Stay in a safe place with a means of escape. • Be ready should you need to evacuate from your home. • Co-operate with the emergency services. • Call 999 if you are in immediate danger. • Call Floodline on 0845 988 1188 for up-to-date flooding information. 	<p>Advice to the public/media</p> <ul style="list-style-type: none"> • Be careful. Flood water may still be around for several days and could be contaminated. • If you've been flooded, ring your insurance company as soon as possible.
<p>Advice to operational organisations</p> <ul style="list-style-type: none"> • Check your flood response plans to see how your organisation needs to respond. • Speak to your local Environment Agency Flood Warning Duty Officer for the latest forecast information. • Dial into Flood Advisory Service teleconferences. • Advise the public to call Floodline on 0845 988 1188 for up-to-date flooding information. • Please report any flooding in your area to your local Environment Agency office. 	<p>Advice to operational organisations</p> <ul style="list-style-type: none"> • Check flood response plans for actions required at this stage. • Speak to your local Environment Agency Flood Warning Duty Officer for the latest forecast information. • Advise the public to call Floodline on 0845 988 1188 for up-to-date flooding information. • Please report any flooding in your area to your local Environment Agency office. 	<p>Advice to operational organisations</p> <ul style="list-style-type: none"> • Check flood response plans for actions required at this stage. • Advise the public to put their safety first and to be ready to evacuate should the authorities decide it's needed. • Develop clear messages for local communities and the public. 	<p>Advice to operational organisations</p> <ul style="list-style-type: none"> • Recovery phase will have started. • Advise the public to call Floodline on 0845 988 1188 for advice on what to do if they have been affected by flooding.

Where to go for further information

We realise that organisations have a variety of responding roles, locations and needs across England and Wales, which is why our partners should work closely with the Environment Agency. Our local Flood Resilience Teams are available to provide further assistance on your specific response area. They can help your organisation link the flood codes to triggers and typical impacts seen on the ground at a local level. Our teams can help you define specific triggers appropriate in your area and ensure your emergency response plans incorporate suitable actions upon receipt of a Flood Alert, Flood Warning or Severe Flood Warning. In turn, we can provide you and your organisation with confidence to respond to a potential or actual flood event. To contact your local Environment Agency Flood Resilience Team, speak to our National Customer Contact Centre on 03708 506 506 and one of our advisors will put you through to your local team.

In addition to issuing flood warnings, we also provide the following services:

- **Three day flood risk forecast** – This shows, county by county, where there is risk of flooding over the next three days. The three-day forecast is updated at least every eight hours. For more information, please visit [our website](#).
- **Rivers and sea levels** – We measure river and sea levels by collecting data from our monitoring stations along rivers and the coast. This information will show you how the rivers and sea are behaving at key locations. Rivers and sea levels are updated once a day on our website. During flooding, it will be updated more frequently if levels reach above a given threshold. For more information, please visit [our website](#).

Weather and flood products provided by the Met Office and Flood Forecasting Centre can also be used by responders to ensure they are fully aware of the current and forecasted situations.

**Would you like to find out more about us,
or about your environment?**

Then call us on

03708 506 506 (Mon-Fri 8-6)

Calls to 03 numbers cost the same as calls to standard geographic numbers (i.e. numbers beginning with 01 or 02).

email

enquiries@environment-agency.gov.uk

or visit our website

www.environment-agency.gov.uk

incident hotline 0800 80 70 60 (24hrs)

floodline 0845 988 1188



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