



flooding- minimising the risk

Flood plan guidance for communities and groups

Practical advice to help you create a flood plan

We are the Environment Agency. It's our job to look after your environment and make it **a better place** – for you, and for future generations.

Your environment is the air you breathe, the water you drink and the ground you walk on. Working with business, Government and society as a whole, we are making your environment cleaner and healthier.

The Environment Agency. Out there, making your environment a better place.

Published by:

Environment Agency
Horizon House,
Deanery Road,
Bristol BS1 5AH
Tel: 0870 8506506
Email: enquiries@environment-agency.gov.uk
www.environment-agency.gov.uk

© Environment Agency

All rights reserved. This document may be reproduced with prior permission of the Environment Agency.
October 2012

Why you should read this guidance

Understanding the risk of flooding and preparing for it now will help save lives and minimise the damage and distress flooding can cause.

Working together as a community or group will help you respond quickly and efficiently in a flood.

Who is this guidance for?

This guidance is for anyone involved in supporting communities or groups to improve their ability to plan for a flood.

This could be:

- people active in the local community;
- leaders of community groups;
- schools, hospitals or residential care homes;
- local responders;
- people working in the voluntary sector.

As well as any other interested members of the community.

This guidance outlines things to consider and steps that you can take to inspire and involve residents, local communities and groups to work together to improve how you prepare for the risk of flooding.



Contents

Section		Page
1	The importance of planning	1
	The benefits of flood plans	1
2	Information to help you get started	2
	First steps	2
3	Developing your flood plan	3
4	Your guide to completing the template	4
5	How will you know when to activate your plan?	8
6	Appendices	
	Appendix 1 – Flood warning codes	10
	Appendix 2 – Understanding different sources of flooding	11
	Appendix 3 – Who does what during a flood?	12

The importance of planning

Having a flood plan forms an important part of your community emergency plans. There are other situations for which you might require an emergency plan, such as pandemic flu, extreme hot and cold weather, and transport problems. Recovery from any emergency can be a complex and long-running process.

By planning in advance, you will not only be better prepared to respond in an emergency, but you will be better equipped to recover in the long-term.

The benefits of flood plans

Working together as a community or group to complete a plan will help you respond quickly when flooding happens. It can help you decide what practical actions to take before and during a flood, helping reduce the damage flooding can cause. Don't wait until it happens, you may not have time.

Being prepared in an emergency can help to reduce stress, panic and avoid loss of life.

Information to help you get started

First steps

The Civil Contingencies Secretariat (CCS) within the Cabinet Office works in partnership to enhance the UK's ability to prepare for, respond to, and recover from, emergencies.

It provides lots of information on community resilience, as well as tools and products that may help you develop your community emergency plan, including a useful guide, *Preparing for Emergencies – Guide for Communities*. It will help you think about how you can help your community be prepared for an emergency, including flooding.

Visit the CCS website for guidance and information on developing a community emergency plan – including a template – www.cabinetoffice.gov.uk/content/community-resilience

Developing your flood plan

To help you develop a plan, we have provided a template that you can use and amend. You can download the template from our website www.environment-agency.gov.uk/homeandleisure/floods/38329.aspx.

You should describe how information will be supplied, received and recorded during a flood. Include:

- details of local flood co-ordination centre;
- means of reporting incidents;
- location of emergency evacuation rest centres;
- methods of passing on information, for example, notice boards;
- details about the areas at risk.

You can use and modify this template to suit your needs. Try to keep your plan simple – there’s no need for it to be long and complicated.

And remember that building relationships and ways of communicating can be as important as the plan itself.

The image shows a screenshot of a form titled 'community flood plan' from the Environment Agency. The form is set against a blue background with the Environment Agency logo in the top right corner. The main title 'community flood plan' is written in large white letters. Below the title, the text 'Parishes and communities working together' is displayed. The form contains several input fields: 'Community or group', 'Address', 'Floodline quickdial number', 'Local flood warning trigger' (with a sub-note: 'i.e. when water reaches bottom of the bridge, sound siren'), and 'Date'. There is also a section for 'Which Environment Agency flood warnings are you registered to receive?' with a corresponding input field. At the bottom right of the form, the slogan 'Be prepared for flooding. Act now' is written.

Your guide to completing the template

Step 1 (Section 1 A of the template)

From the information you have available make a list of the areas that flood and the level of warning each area would receive.

Information on flood warnings and codes can be found in Appendix 1.

1 Locations at risk of flooding		A Flood warnings	
From the information you have available make a list of areas liable to flood and the level of warning which would affect them.			
Area number	Location at risk	Trigger level	Actions
Area 1	Brook Terrace	Flood Alert	Call the Environment Agency's Floodline (0845 988 1188) for more information using the quickdial number XXXXX

Step 2 (Section 1 B of the template)

Floods can happen anywhere at any time. They're caused by rising ground water levels, burst water drains, rainwater running off hillsides as well as flooding from rivers and the sea. Even if you live miles away from the coast or a river, there's still a chance flooding could affect you. The most common sources of flooding are explained in Appendix 2.

Investigate the range and extent of flooding in your area. You should consider the timing and direction of flooding (flow route). Often, the source of flooding is not immediately obvious; check local drainage and small watercourses. Find out about previous flooding in your area. Sources of information include the Environment Agency, your council and local library archives. Local knowledge, particularly from long-standing residents, is invaluable.

Add the details of areas at risk from flooding and the direction of flooding into your plan. Include maps and if possible details of existing flood schemes.

1 Actions to be taken before a flood		B Locations at risk of flooding / Source of flooding	
Insert details of areas at risk from flooding and the direction of flooding. Include maps and if possible details of existing defences.			
Area number	Location at risk	Source of flooding	Direction of flooding
Area 1	Brook Terrace	River	Water flows down footpath Via High Street (B313)

Step 3 (Section 2 A of the template)

Prepare in advance

With careful planning, you can take action to help reduce the impact of flooding. For example placing floodboards across openings, blocking airbricks, creating sandbag walls or temporary defence systems. It is impossible to completely flood-proof a property but there are lots of things you can do to reduce flood damage.

You can find more information on preparing your property for flooding on our website - www.environment-agency.gov.uk/flood

Some people may need help or support to prepare for flooding. As part of your flood planning, we recommend you think about who may need help and who you can ask for assistance before, during and after a flood.

2 Actions to be taken during a flood		A Local flood actions			
Identify local flood actions					
Area number	Location at risk	Action / trigger	Local action	Equipment required	Time required
Area 1	Brook Terrace	Flood warning	Block the flow route where the footpath joins the High Street	Sandbags and polythene sheeting	1 hour and 30 min
Area 2					

Step 4 (Section 2 B of the template)

Compile a list of local volunteers/flood wardens who can be contacted in an incident. The CCS emergency plan toolkit has information on how you can assess skills and resources for these volunteer roles.

In a flood, volunteers may need to help people move furniture and other possessions so they should be reasonably active or fit. Consider using other volunteers as communicators, administrators or to help people who may need extra support during an incident. These volunteers could be registered on our Floodline Warnings Direct (FWD) service so they receive flood warnings.

Flood water is dangerous. Remember that you should not put yourself or others at risk. The emergency services are responsible for ensuring public safety and co-ordinating the incident response.

Step 5 (Section 2 C of the template)

Make a list of important telephone numbers so all the information you need during an incident is readily available.

Names and contact phone numbers need to be listed and made available to all potential emergency team members within your community. Once the list is prepared, it's also important that someone is given the task of updating any changes to the team. Members of your group will probably be first on the list and be allocated tasks, for example, phoning external agencies and local contacts, or alerting vulnerable residents. It is vital that the flood plan outline is discussed with the relevant individuals and organisations including your council, local Environment Agency office, landowners and water companies.

2 Actions to be taken during a flood		C Important telephone numbers	
Make a list of important telephone numbers so all the information you require during an incident is readily available.			
Organisation	Telephone (office hours)	Telephone (out of hours)	Fax
Floodline	0845 988 1188	0845 988 1188	
Environment Agency			

Step 6 (Section 2 D of the template)

It's really important that you are aware of the actions taken by all organisations that respond to flooding. This will help you contact the correct organisation when you need help. Details of who does what during a flood is available in Appendix 3. Identify the resources available to you and your community.

2 Actions to be taken during a flood		D Available resources		
Identify available resources.				
Organisation	Resource	Number	Location	Notes
Local Health Centre/Doctors Surgery Contact Details: Dr Knott tel no: Mrs Clark tel no:	Evacuation centre	The health centre can hold up to 100 people. Anyone evacuated should take with them: warm clothing, a torch, food, drink, medication, children's toys and pets requirements etc	The health centre is situated on the outside of the flood risk area and access to the surgery can be made without driving or walking through floodwater.	Dr Knott and Mrs Clark are both key holders to the health centre
Local storage facility? District Council Contact details:	Sandbags, shovels, polythene sheeting, floodboards, torches etc		Local shopkeepers store	Shopkeeper has provided a key for access to equipment in his/her absence

Step 7 (Section 2 E of the template)

Details of specific arrangements between the various authorities can be included within this section of the template.

Step 8 (Section 2 F of the template)

Certain groups, the elderly or infirm for example, may require assistance in a flood. You should establish who these people are and what their needs are in advance. Encourage people who may need more time during a flooding event to prepare now. In an emergency these people may, for example, need help obtaining medicine/supplies or need help to secure their property.

Some locations may be more vulnerable than others. Identify properties which may flood first. Any schools, residential care homes or campsites in your area may require assistance or an early warning. We recommend that people in charge of such properties should also develop their own flood plan.

List vulnerable people, properties and locations where early assistance may be required. The CCS toolkit gives more information on how to gather information and how to find out about your vulnerable community members. This can be found at www.cabinetoffice.gov.uk/content/community-resilience

Step 9 (Section 3 A of the template)

Make a list of reputable contractors who may be required after a flood.

After a flood, be careful of bogus trade people calling door-to-door. Always check references and do not pay in advance.

How will you know when to activate your plan?

The Environment Agency offers a free flood warning service in many areas at risk of flooding from rivers and the sea. FWD gives you an advance warning for your area by telephone, mobile, fax, text message or email. All you need to register is a telephone number that we can use to send you flood warnings at any time of the day or night.

Flood warnings are not available in every area. Find out if you can receive flood warnings for your area by calling Floodline, our 24-hour telephone information service, on **0845 988 1188** or going online at **www.environment-agency.gov.uk/flood**.

You can also get up to date information about potential flooding or flood warnings for your area by:

- calling Floodline and asking for a quick-dial number that will give you direct access to recorded flood warnings for your local area;
- visiting our website (**www.environment-agency.gov.uk/flood**) for flood risk forecasts, live flood warnings and alerts;
- listening to local radio and TV for weather information.

If flood warnings are not available for your area

If there is no flood warning service available for your area, then you need to have your own system in place for activating your plan. The following points should help to establish when to activate your plan:

- use local information and observations. You are the local experts and will know, for instance, whether the river responds rapidly or not to heavy rainfall;
- the plan should be activated when river levels are approaching bank full. If the river responds rapidly, you may need to set a lower level as your trigger point;
- consider putting a depth marker by the river to help gauge levels. A marker will help confirm whether the river is rising or falling. Alternatively use an existing structure such as a bridge or other local reference on the river that shows you when the river is getting to dangerous levels;
- decide what level the water needs to reach in order for you to activate your plan and write this in your flood plan.

We can advise you on monitoring techniques and flood warning methods. If you need help with flood warning arrangements ring your local Environment Agency office.

Raise awareness and promote your plan

You have worked hard to help prepare the community, so you should let them know the flood plan exists. Consider promoting the plan at local meetings, through parish newsletters, leaflets, drop-ins in affected areas, through the local press or at flood exhibitions.

We may be able to help you raise awareness and promote your plan. Call 03708 506 506* (Mon-Fri, 8am - 6pm) and ask to be put through to your local Flood Resilience team.

Remind local residents that they have a responsibility to prepare and protect their lives and property. Encourage them to check to see if they can receive a flood warning, and to develop their own personal flood plan, including preparing for possible evacuation. A template for producing a personal flood plan can be found on our website here www.environment-agency.gov.uk/homeandleisure/floods/38329.aspx.

Test your flood plan

The next step is to see if your plan works. You could ask your local Environment Agency office and local authority to help you carry out a simulated flooding event. This would also help to check that communications are correctly set up and that contact numbers are up to date.

Keep your plan up to date

Your plan has been designed and developed by you and your community. It belongs to you and not the Environment Agency or your local council. You will need to ensure that the details in your plan are checked and updated regularly so that all details remain up to date with current contact numbers.

Where to get further information

Web links:

- Civil Contingencies Secretariat - information and tools www.cabinetoffice.gov.uk/content/community-resilience
- National Flood Forum www.floodforum.org.uk/
- Flood Group UK – a Facebook community for people and community groups affected by or at risk of flooding www.facebook.com/floodgroupuk
- Health Protection Agency www.hpa.org.uk/flooding
- Your council – list of councils available here www.direct.gov.uk/localcouncils

Other publications:

- Living on the edge <https://publications.environment-agency.gov.uk/PDF/FLHO0912BWUP-E-E.pdf>
- What to do before, during and after a flood <https://publications.environment-agency.gov.uk/pdf/flho1110btfk-e-e.pdf>
- Prepare your property for flooding <http://publications.environment-agency.gov.uk/pdf/GEHO1009BRDL-e-e.pdf>

*Calls to 03 numbers cost no more than a national rate call to an 01 or 02 number and must count towards any inclusive minutes in the same way as 01 and 02 calls. These rules apply to calls from any type of line including mobile, BT, other fixed line or payphone.

ONLINE FLOOD RISK FORECAST

Meaning

Be aware.
Keep an eye on the weather situation.

General advice

- Check weather conditions.
- Check for updated flood forecasts on the Environment Agency website.



FLOOD ALERT

Meaning

Flooding is possible
Be prepared.

General advice

- Be prepared to act on your flood plan.
- Prepare a flood kit of essential items.
- Monitor local water levels and the flood forecast on our website.



FLOOD WARNING

Meaning

Flooding is expected.
Immediate action required.

General advice

- 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.



SEVERE FLOOD WARNING

Meaning

Severe flooding.
Danger to life.

General advice

- Stay in a safe place with a means of escape.
- Be ready should you need to evacuate.
- Co-operate with the emergency services.
- Call 999 if you are in immediate danger.

WARNING NO LONGER IN FORCE

Meaning

No further flooding is currently expected in your area.

General advice

- Be careful. Flood water may still be around for several days.
- If you've been flooded, ring your insurance company as soon as possible.

Understanding different sources of flooding

Floods can happen anywhere at any time, caused by rising ground water levels, burst water drains, rainwater running off hillsides as well as flooding from rivers and the sea.

Even if you live miles away from the coast or a river, there's still a chance flooding could affect you.

The most common sources of flooding are:

- **River flooding** happens when a watercourse cannot cope with the water draining into it from the surrounding land. This can happen, for example, when heavy rain falls on an already waterlogged catchment.
- **Coastal flooding** results from a combination of high tides and stormy conditions. If low atmospheric pressure coincides with a high tide, a tidal surge may happen which can cause serious flooding.
- **Surface water flooding** happens when heavy rainfall overwhelms the drainage capacity of the local area. It is difficult to predict and pinpoint, much more so than river or coastal flooding.
- **Sewer flooding** happens when sewers are overwhelmed by heavy rainfall or when they become blocked. The likelihood of flooding depends on the capacity of the local sewerage system. Land and property can be flooded with water contaminated with raw sewage as a result. Rivers can also become polluted by sewer overflows.
- **Groundwater flooding** results from water levels in the ground rising above surface levels. It is most likely to occur in areas situated over permeable rocks, called aquifers. These can be extensive, regional aquifers, such as chalk or sandstone, or may be more local sand or river gravels in valley bottoms underlain by less permeable rocks. This is not a significant source of flooding in Wales.
- **Reservoir flooding.** Some reservoirs hold large volumes of water above ground level, contained by walls, or 'dams'. Although the safety record for reservoirs is excellent, it is still possible that a dam could fail. This would result in a large volume of water being released very quickly.

Who does what during a flood?

This lists the principle actions of each organisation. It may not always be possible for all actions to be carried out during a flood event.

Responding organisations have limited resources so may not be able to provide assistance in all circumstances. In such cases the owners and occupiers need to be aware that they should make their own arrangements to protect their property from flooding. This should be clearly stated in the plan.

Environment Agency

- issues flood warnings for flooding from rivers, the sea and groundwater;
- receives and records details of flooding incidents;
- monitors the situation and advises other organisations;
- deals with emergency repairs and blockages on main rivers and own structures;
- responds to pollution incidents;
- advises on waste disposal issues.

County Council and Unitary Authority

- co-ordinates emergency arrangements;
- maintains safe conditions on the roads;
- puts flood warning signs on the highway;
- organises road closures and traffic diversions;
- clears blockages on highway drainage systems;
- may take action to protect property from flooding by water from the highway where there is a failure of the highway drainage system.

Lead Local Flood Authorities (LLFA)

- leads the co-ordination of flood risk management in their areas;
- develops local flood risk management strategies for local sources of flooding;
- manages surface water and groundwater flooding;
- maintains a register of structures or features which have a significant effect on flood risk in their area;
- investigates flooding incidents in its area.

District Council

- co-ordinates emergency response for its own area;
- issues flood warnings (by local agreement with Environment Agency);
- provides emergency assistance including providing sandbags;
- clears blocked watercourses (Land Drainage Act powers);
- deals with environmental health issues, including pollution;
- clears blocked road channels and gully gratings and street cleaning;
- runs emergency planning support groups.

Town and Parish Council

- issues flood warnings (by local agreement with Environment Agency);
- some distribute sandbags.

Police

- takes an overall co-ordination role during an incident.

Fire and Rescue Service

- responds to all emergency incidents as required;
- assists the public where a need is identified and the use of Fire Service personnel and equipment is required.

Water companies

- clears blockages in public sewers;
- may take action to protect property from flooding by water from the public water mains or discharges from the public sewerage systems.

Electricity, gas and telecommunication companies

- attends to emergencies relating to their service at properties where life is at risk as a result of flooding;
- attends to flooding emergencies at their own serviced installations.

Large industrial companies

- protects own premises and installations;
- provides resources which could be hired.

Property owners

- moves to a safe area if life at risk;
- prevents water from entering property if possible;
- switches off electricity and gas supplies at mains;
- moves valuable possessions above areas liable to be flooded.

Flood plan co-ordinator

- is aware of the current situation;
- contacts flood wardens or volunteers and advises on actions to prepare for flooding;
- liaises with the local authority, Environment Agency and other organisations;
- updates the flood wardens if the situation changes;
- maintains emergency contacts.

Flood wardens/volunteers

- acts on the advice received from the flood plan co-ordinator or their assistant;
- puts flood protection measures in place;
- helps and advises vulnerable people and helps move them to safety early if required;
- informs the community of the situation and advises them to prepare by moving cars, putting sandbags or floodboards in place etc.

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

Then call us on

03708 506 506* (Mon-Fri, 8am - 6pm)

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

*Calls to 03 numbers cost no more than a national rate call to an 01 or 02 number and must count towards any inclusive minutes in the same way as 01 and 02 calls. These rules apply to calls from any type of line including mobile, BT, other fixed line or payphone.



Environment first: Are you viewing this on-screen?

Please consider the environment and only print if absolutely necessary. If you're reading a paper copy, please don't forget to reuse and recycle if possible.