Introduction
This leaflet has been produced by South Worcestershire Land Drainage Partnership (SWLDP) and is intended to provide helpful advice and guidance for those at risk of flooding, and explain the roles of the various organisations that may have a responsibility.

SWLDP is a partnership formed between Worcestershire County Council, Malvern Hills District Council, Worcester City Council and Wychavon District Council to provide responsibility for all non main river land drainage related matters within the following district council areas: Malvern Hills, City of Worcester and Wychavon. If there is any section that you cannot understand, or you would like further information then please contact:

South Worcestershire Land Drainage Partnership in your district council area as follows:

Malvern District Council 01684 862151
worcestershirehub@malvernhills.gov.uk
www.malvernhills.gov.uk

Worcester City Council 01905 722233
customerservicecentre@worcester.gov.uk
www.worcester.gov.uk

Wychavon District Council 01386 565000
engineers@wychavon.gov.uk
www.wychavon.gov.uk

Read the leaflet now and on a regular basis. Do not wait until you start to flood!

Types of flooding
Two types of flooding occur regularly in the district:
• Flooding of major rivers and watercourses (fluvial flooding)
• Flash flooding, due to local rainfall (pluvial flooding)

Flood warnings
The Environment Agency monitors water levels in major rivers and issues flood warnings to properties at high risk, local authorities and the emergency services when flooding is expected. Warnings are sent using a telephone pre-recorded message system. Where a flood warden scheme exists, the volunteer warden receives the warning and passes it on to his/her group. Local radio stations also receive warnings. Updates on the progress of significant floods on the river system are available to all through the EA’s floodline telephone service 0845 9881188.

Flash flooding
Flash flooding occurs when the drainage infrastructure is overwhelmed as a result of intense rainfall in the locality. Flash flooding is a local event which develops rapidly and cannot be predicted with any reliability through weather forecasting. Each event is sensitive to prevailing local conditions which govern its extent, severity and duration. No system of flood warning for flash flooding exists, principally because
the periods of warning that could be given would be too short to be of any significant practical use.

**Flash flooding is occurring more frequently for a number of reasons, including:**

- Changes in land use which concentrate runoff
- Poor maintenance of ditches, drains, streams and culverts
- Changes in weather patterns

**Maintenance of watercourses**

No single body has the responsibility to manage watercourses in respect of flooding. The Environment Agency has a duty to exercise supervision over all matters to do with flood defence and has powers to maintain and improve main rivers. SWLDP has permissive powers over all other watercourse and land drainage matters within its area.

Riparian owners, that is those owning the bank or part of the bed of a watercourse, retain important responsibilities to other such landowners, the community and the environment.

**Riparian responsibilities**

**If you are a Riparian Owner**

- You have the responsibility to pass on flow without obstruction, pollution or diversion affecting the rights of others.
- You have the responsibility to accept flood flows through your land, even when caused by inadequate capacity downstream, as there is no common law duty to improve a watercourse.
- You have the responsibility for maintaining the bed and the banks of the watercourse (including trees and shrubs growing on the banks) and for cleaning any debris, natural or otherwise, including litter and animal carcasses, even if it did not originate from your land. Advice on the removal of animal carcasses may be obtained from an Environmental Health Officer at Worcestershire Regulatory services.
- You must not cause any obstructions to the free passage of fish.
- You are responsible for keeping the bed and banks clear from any matter that could cause an obstruction, either on your land or by being washed away by high flow to obstruct a structure downstream. Watercourses and their banks should not be used for the disposal of any form of garden or other waste.

**Ditches within the highway**

The question of who has responsibility for maintenance of ditches within the highway has been considered by the courts on many occasions.
Except in the case of new roads, the highway authority generally owns only the surface of the road and their powers do not extend to the maintenance of the roadside watercourse. It is therefore usual for roadside ditches to be the responsibility of the adjoining landowners.

**Local Land Drainage Authority**

South Worcestershire Land Drainage Partnership will exercise its powers under the Land Drainage Act 1991 where appropriate. If an obstruction impedes flow, the authority will serve notice on the person/persons responsible (riparian owners) to clear the obstruction.

Land drainage consent is required before any structure, likely to affect flow, is placed in a watercourse. Those structures within main river require consent from EA; for all other watercourses consent is required from SWLDP. This is particularly important where piping or culverting of a watercourse is proposed. There are certain types of structure, such as culverts, that have safety, maintenance and environmental problems associated with them. Authorities are therefore generally opposed to the culverting of watercourses and consent will usually only be granted if there is no practical alternative.

**Flood defence**

For fluvial flooding, the EA and local authorities can carry out flood defence work where appropriate to reduce the incidence and severity of flood events. Flash flooding is much harder to defend against. Water companies and highway authorities try to ensure that sewers and drains in their control are kept clear of blockages. SWLDP try to ensure that riparian landowners maintain their watercourses. If you have a watercourse that flows through or beside your property then you are probably a riparian owner. If you are unsure of your responsibilities, then contact the Land Drainage Officer for your district who may be able to advise you.

**Sandbags**

Local authorities may issue sandbags in certain circumstances when flooding is expected. Contact your local authority for information. You should prepare in advance if you think sandbags will be required. You should not rely on the council to provide sandbags in an emergency.

Demountable defences such as flood boards may be more effective for your property.

If using sandbags, a large sheet of heavy duty plastic between them and the wall of your house makes a better defence than sandbags alone. Do not forget that water will come through air bricks if they are not covered.
A number of firms sell flood shields which can be fitted to doors and airbricks. However, neither these or sandbags will prevent underground seepage which may lead to flooding from below.

Insurance

It is important to seek the best possible insurance cover for your home and its contents NOW - it is too late after a flood.

In some cases, people have been refused flood re-insurance. It may be worth taking steps to reduce the risk of flooding to your property as this may make insurers more willing to consider insuring your home.

After a flooding incident:

• Take immediate action to prevent further damage.
• Contact your insurer as soon as possible to request a claim form.
• Often it will have a list of approved builders to help with repairs. A helpline number will be given on your policy.
• Keep all receipts for repairs made.
• When making a large repair, get two estimates to show the insurer.
• Try to take photographs of damage when it is at its worst.
• Don’t throw damaged items away unless they are a health hazard - the insurer may want to see them.

Don’t be in a rush to redecorate - there may be problems if the property hasn’t dried out properly.

Drainage systems

There are three types of publicly maintained drainage systems in the area covered by South Worcestershire Land Drainage Partnership

• Foul sewers - maintained by Severn Trent Water Limited
• Surface water sewers maintained by Severn Trent Water Limited
• Highway drains - maintained by Worcestershire County Council’s Highways Partnership

All water that requires treatment before it is discharged into a watercourse should be diverted into a foul sewer. Run-off from vehicular areas should be drained via an interceptor system before being discharged into surface water sewers and watercourses. Only run-off from roof areas may be discharged directly to a watercourse.

It is important that foul water is not discharged into surface water systems as pollution of watercourses will result and an offence may be committed.
It is also important that storm water is not discharged into foul sewers as this may lead to flooding. Following intense rainfall a foul system, which is not designed to handle such surges, will become surcharged. The result will reverse flows in low lying parts of the system, leading to foul flooding of domestic and commercial premises. It should be appreciated that all sewerage systems have a finite capacity and flooding from sewers is always a possibility when design capacity is exceeded.

**Advice**

For flooding from main rivers, contact the Environment Agency to find out if your house is at risk and how to obtain flood warnings.

Be a good neighbour. If you have old or infirm people near you, spare a thought for them if you are filling or collecting sandbags.

- When choosing furniture, floor coverings, etc keep in mind how they may be affected by water and the need to be able to move them easily.
- Make sure you know how to turn off the electricity, gas and water.
- Have a supply of drinking water in clean bottles or similar containers.
- Fill the bath and buckets with water for washing etc.
- Keep a battery radio, torch, candles and matches handy.
- Think about cooking without gas or electricity supplies.
- Do not use any foodstuffs which the flood water has reached. They will be contaminated.
- Any utensils which have been in the flood water must be cleaned and boiled in fresh water before use.
- Seek advice from the Environmental Health Officer, Worcestershire Regulatory Services on clearing up if you have any doubts about it.
- Consider having a clear route to safety marked with posts so that when wading you do not fall into deep water;
- Remember that while sandbags help to keep water out, they will also keep it in as the level goes down.
- If your property is at risk of flooding you should consider installing flood proofing and/or protection systems.
- For local numbers of electricity, gas, and water companies, see the back page of this leaflet or consult your telephone directory.
- Details of qualified tradesman such as plumbers and electricians can be found in the yellow pages.
In the event of flooding

Do...

• Stay Calm. Keep this leaflet handy.
• Check that neighbours, especially the elderly and infirm, are aware of any flood warnings.
• Move people and animals to a place of safety.
• Switch off gas, water and electricity.
• Contact the EA’s Floodline and listen to local radio for up to date news on the situation.
• Have spare clothes, wellingtons, waterproofs, torch, batteries, radio and food readily available.
• Seek professional advice if your property is damaged.
• Ventilate your building after flooding - less damp is less damage.
• Contact the emergency services if you consider yourself or family to be at risk because of severe flooding and/or damage so caused.
• If you have to evacuate, remember to lock up as you leave the property.

Do not...

• Throw rubbish into watercourse or leave debris on the banks - it can cause flooding.
• Use electrical circuits or equipment exposed to flood water until checked by a qualified electrician.
• Dispose of damaged goods until your insurers have had a chance to inspect them.
• Use domestic water supply until you are advised it is safe to drink.
• Drive vehicles through floodwater such that bow waves are created which could damage roadside properties.
Useful numbers

South Worcestershire Land Drainage Partnership
Wychavon District Council 01386 565000
Malvern Hills District Council 01684 862151
Worcester City Council 01905 722233

Worcestershire County Council - 01905 763763

Worcestershire Regulatory Services - 0845 607 2005

Severn Trent Water - 0800 783 4444

Electricity - EON General Enquiries - 0800 096 3080

Gas - National Gas Emergency Service - 0845 605 6677