Twigworth Parish Council

COMMUNITY FLOOD PLAN & HISTORY

Adopted by Council: 9th May 2024
Reviewed: July 2025
Next Review: 2026

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1. Introduction

This document provides information about the risk of Flooding in the Parish as covered in the Community Emergency Plan and additionally gives an Environment Agency description of what Groundwater and Surface flooding is and how it is the cause of flooding within our Parish.

The document also provides a view of documented information about the extent of flooding in our Parish in recent years, ensuring that actual events are recorded for reference, so that the Parish can take the appropriate actions to minimise the flood risk for the future.

Residents affected by a flood event should report it using the Flood Online Reporting Tool (FORT) - Here.

Using this tool does not impact insurance policies but allows the Environment Agency to identify trends and set strategies for dealing with these events with a view to gaining funding to support implementing the strategies.

Notes

1. The Flood Plan is intended to act as a guide to actions in the lead up to and during a weather emergency

2. This Flood Plan does not provide information to householders as that information will be supplied by the Parish Council on their website (and through posters/leaflets being made available via the Parish Council)

3. Twigworth Parish Council encourage all owners of property which has previously flooded or is liable to flood, to sign up to the Environment Agency flood alerts service via Floodline.

2. Environment Agency - Groundwater Flood Risk

The following is an extract from an Environment Agency Report on Groundwater Flooding, explaining what it is and its effects on Twigworth.

Groundwater Flooding - Risk Maps

The current national maps for groundwater flood risk are commercial products and not freely available.

This also means evidence is not accessible for a robust appraisal of the methods used, and therefore it is difficult to make a detailed, accurate assessment of their suitability and accuracy.

In general, they are derived from modelling which predicts the distance of the water table from the surface under peak winter conditions.

They do not, as a rule, indicate emergence zones which occur because of the local geology, hydrogeology, hydrological conditions and manmade factors such as the built environment.

Groundwater Flooding - Key Drivers

Groundwater water flooding is caused when the water table rises up from rocks or soils to above ground level, causing flooding to occur at the surface.

Surface water can seep underground to become groundwater, groundwater can resurface on land to replenish surface water.

This tends to occur after season-long periods of high rainfall.

The rainfall infiltrates into the ground causing the water table to rise in response above normal levels.

Surface water flooding is also known as pluvial flooding.

It occurs when the volume of rainfall exceeds the capacity of drains and surface water sewers and is unable to drain away through drainage systems or soak into the land, and instead flows over the land.

Conditions that can lead to Groundwater Flooding include:

- An accumulation of above average seasonal rainfall
- Hydrostatic pressure – the water table can be several tens of metres higher than at risk communities, forcing water up through emergence zones,
- Capillary action – water is drawn up from the aquifer by a wicking effect, meaning that flooding can continue for weeks after a period of heavy rainfall
- Proximity to natural or manmade emergence zones
- Soil Texture and Structure
- Natural drainage paths
- Artificial Land Drainage

2. Environment Agency - Groundwater Flood Risk /cont.

Local drainage networks rarely have the capacity to manage under these circumstances.

- Traditional attenuation ponds are ineffective as they fill from the bottom up and remain full until groundwater levels start to fall back.
- They can contribute to groundwater flooding by opening a pathway to the surface.
- Land drainage measures such as French drains and porous pipes can be effective at preventing flooding to existing properties by creating a very localised cone of depression in the water table. However, water that is drained away is immediately replaced from the aquifer – effectively by abstraction. This water will eventually contribute to river flows, with an increased fluvial flood risk downstream

Impact of human interference in Groundwater flow paths

There are several ways that groundworks associated with construction can contribute to groundwater flooding.

- Footings may redirect subterranean flow paths, leading to emergence in places that were previously dry,
- Groundwork can open fractures, leading to augmented emergence at the site e.g. through piling
- Culverts can create a linear barrier to underground flow. This may lead to weir water over the structure and break through to the surface or create a drainage path alongside the culvert leading to erosion along its length
- Depending on the structure of the regolith, this can change hydrogeological emergence characteristics locally
- Groundwater flows beneath the surface, through the valley gravel deposits.
- Construction of barriers (footings etc.) across the flow path commonly causes water to rise to the surface.

Impact of Groundwater intrusion into foul sewage systems

Whilst the impact of groundwater intrusion into the foul sewage system is unlikely to be directly worsened by new development where work has been undertaken to seal the sewage network, any additional input will cause problems where the network is struggling with capacity.

Where tankering away occurs, this can lead to additional heavy traffic along flooded roads.

Impact of traffic

With increased flow, roads will become impassable for longer periods.

Not only does this lead to more disruption but also carries the cost of damage to vehicles.

2. Environment Agency - Groundwater Flood Risk /cont.

Increased 'downstream' risk

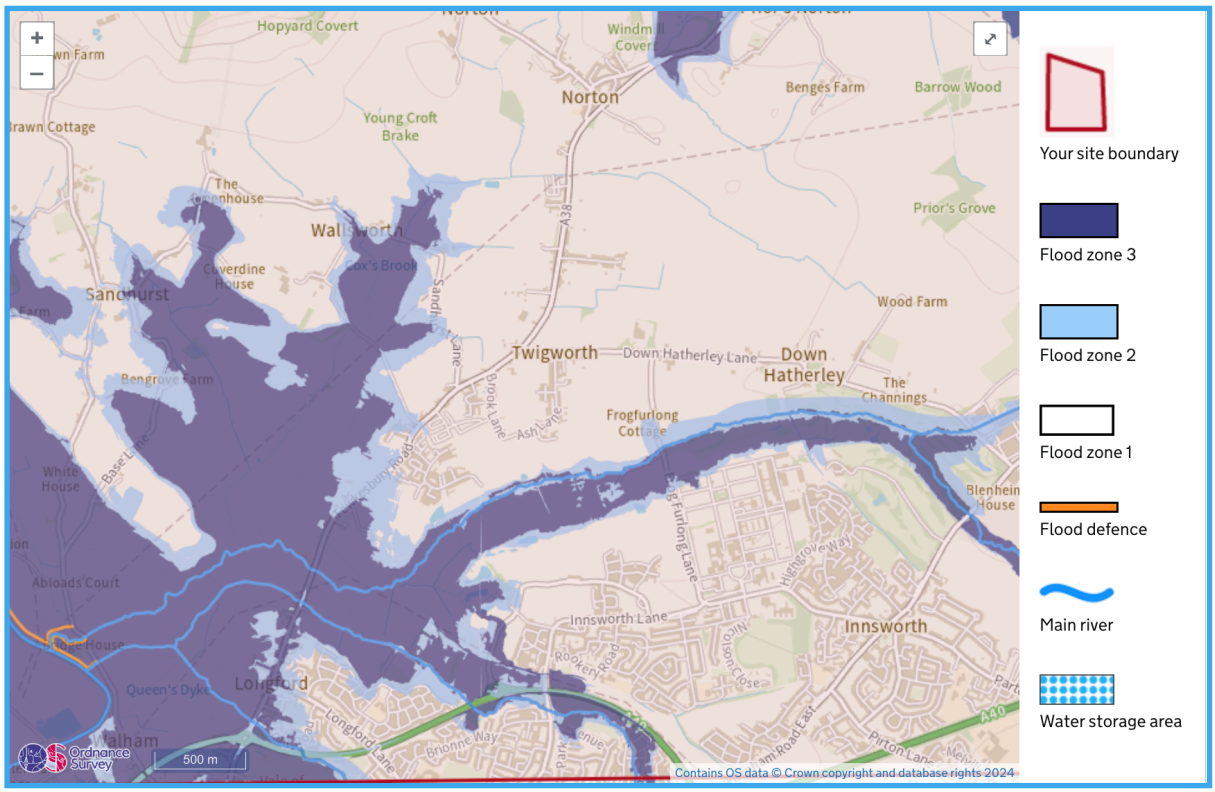
Several factors can increase the flood risk to properties downstream of any development

- Inappropriate surface water management schemes (as above) can contribute additional flow to existing watercourses
- Contribution to sewage systems being overwhelmed, leading to effluent backing up into downstream properties
- Increased access problems as highways become inundated for longer periods
- Increased contribution to fluvial flood risk

3. Environment Agency - Flood Risk Summaries

The following data has been obtained from the Environment Agency website

This location is in flood zone 3



What flood zone 3 means

Land within flood zone 3 has a high probability of flooding from rivers and the sea.

You need to carry out a flood risk assessment (FRA) as part of the planning application for this development.

To find out about other factors that might affect the flood risk of this location, you should also check:

- surface water, groundwater and reservoir flood risk
- Tewkesbury planning authority's strategic flood risk assessment (SFRA), which includes future flood risk

Flood map showing the flood zone your site is in

The map shows the flood risk to your site and the surrounding area.

Flood defences

Flood defences have been built to protect against flooding from rivers or the sea (shown as an orange line on the map). Flood defences reduce, but do not completely stop the chance of flooding because they can be overtopped or fail.

3. Environment Agency Flood Risk Summaries /cont.

The following data has been obtained from the Environment Agency website

Rivers and the sea

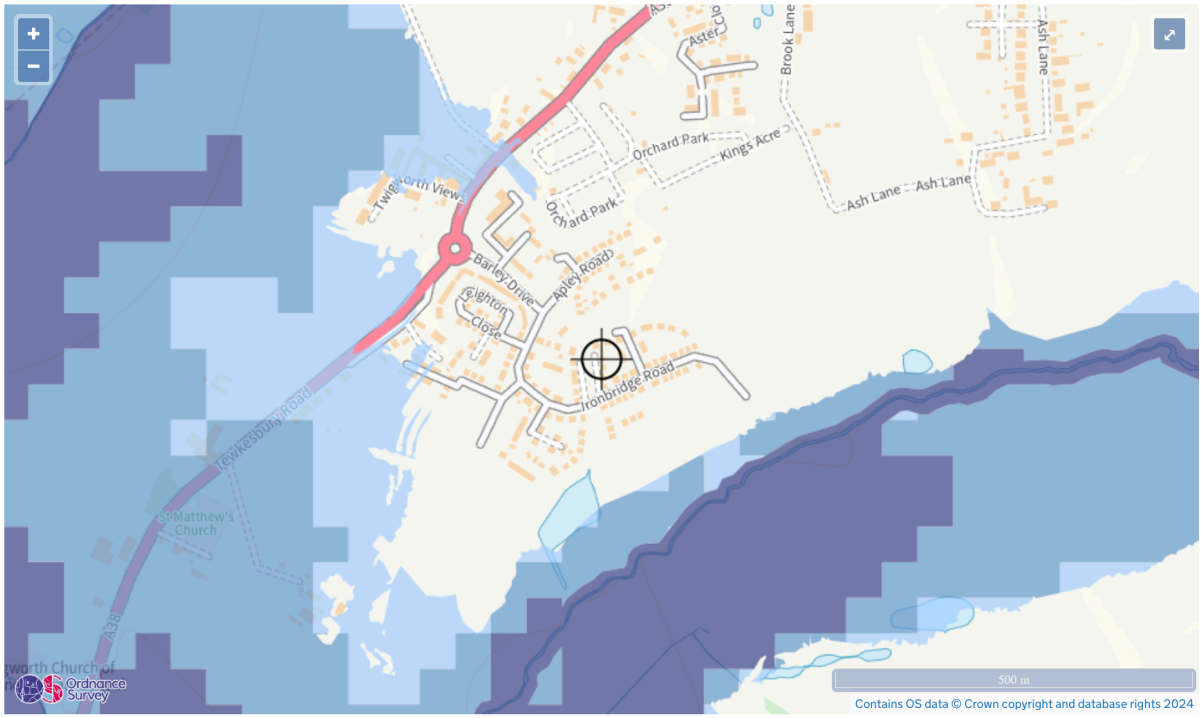
Very low risk

This flood risk summary is not property specific.

Very low risk means that this area has a chance of flooding of less than 0.1% **each year**.

This service takes into account any flood defences.

The Environment Agency is responsible for managing the flood risk from rivers and the sea.



Extent of flooding from rivers or the sea

High Medium Low Very low Location you selected

3. Environment Agency Flood Risk Summaries /cont.

The following data has been obtained from the Environment Agency website

Surface Water

Very low risk

Surface water flooding happens when rainwater cannot drain away through the normal drainage systems. Instead, it lies on or flows over the ground. Surface water flooding is sometimes known as flash flooding. It can:

- be difficult to predict as it depends on rainfall volume and location
- happen up hills and away from rivers and other bodies of water
- affect areas with harder surfaces, like concrete, more severely

Lead local flood authorities (LLFA) are responsible for managing the flood risk from surface water and may hold more detailed information.

Your LLFA is Gloucestershire council.

Extent of flooding from surface water

High Medium Low Very low Location you selected

3. Environment Agency Flood Risk Summaries /cont.

The following data has been obtained from the Environment Agency website

Reservoirs

There is a risk of flooding from reservoirs in this area

A reservoir is a large natural or artificial lake that is designed to collect and store water.

We use predicted scenarios to understand the risk of flooding from reservoirs.

Flooding from reservoirs is extremely unlikely.

An area is considered at risk if peoples' lives could be threatened in the event of a dam or reservoir failure.

Groundwater

Flooding from groundwater is unlikely in this area

Flooding caused by groundwater happens when water underground that is usually held in the rocks and soil (known as the water table) gets so high that it flows above the surface.

We use flood alert data to check the risk of flooding from groundwater.

4. Local Flood Risk Assessment

Risks	Impact on Community	What can be done to prepare
Flooding to: • Local business or property	• Business cease to trade • Homeowners have to move out of their homes • Negative impact to community, to prospective residents and businesses	• Encourage residents to sign up to Environment Agency Flood Alert Scheme 0345 988 1188 • Encourage residents/business to sign up for Met office warnings • Encourage residents to find out if they are at risk of flooding and to take steps to make them more resilient • Report any local flooding to Gloucestershire County Council Highways • Find out what flood defences exist or are planned in the area • Encourage residents/business at risk of flooding to install resistance and/or resilience measures • Educate children not to play in flood water • Identify vulnerable people in the area • Prepare for distribution of flood warnings and any evacuation and rest centre establishment required
Obstruction in Brooks and watercourses: • Branches, debris		• Organise clearance of Brooks and watercourses • Encourage Landowners to maintain watercourses
Ditches • Vegetation overgrown • Debris		• Organise clearance of Brooks and watercourses • Encourage Landowners to maintain watercourses

5. Possible Mitigation Measures

Land Drainage Maintenance

- Mark outfalls clearly
- Clear outfalls on a regular basis (annual / bi annual)
- Clear ditches on a regular basis Clay soils every 3 to 5 years, sandy soils every 1 to 2 years
- Keep trees, shrubs and bushes on the banks cut back every 3 to 5 years (Especially important on flood banks)

Check and clear culverts on an annually in late summer / early autumn in preparation for winter rainfall.

- Check flood banks every summer and after flood event for damage
- Every 3 to 5 years check and repair culvert banks and crossing surface
- Annually mark unusual wet areas on a plan and compare with drainage plans to identify areas that may need existing systems repaired or new drains installed

6. Climate Change

The Environment Agency now publish the expected flood levels for 1 in 100 year events due to climate change out to the year 2125, which have to be taken into account for local planning applications (as happened recently for School House).

Although the flood level predicted for the 2020s has not yet been reached, the recent flooding event was the highest since 2007 and may well be a precursor of what will actually happen.

It is also worthwhile looking at the EA flood maps published for the whole of the U.K. that show which areas are deemed to be vulnerable as the century goes on.

There is a significant area locally that will flood and property owners need to consider this.

7. Managing Flood Risks

The following tasks and activities are initiated through this plan

- Registration with the EA Alert system by individuals and Emergency Planning Officer
- EA Alert system issued when *** is reached
- Email alert to identified parishioners, typically those who could be affected by the floods when the EA Alert system triggers
- Residents and Businesses to take action with their own Flood Protection in line with the EA alerts and Flood Warden emails.
- Residents and Businesses to obtain sandbags
- Properties effected by sewage backup should report any occurrence to Severn Trent Water and on the FORT online reporting tool
- Facebook messages initiated when the likelihood of flood is going to occur, updates to this are in line with how the floods and impacts progress
- Flood Warning signs to be deployed as appropriate by GCC Highways
- Interact with GCC Highways as necessary throughout the floods, this maybe to request additional signage and/or support
- Vehicles should not drive through floods
- Any vehicle that drives through floods, must drive slowly to prevent bow waves that would otherwise cause damage to properties alongside the road and/or splash pedestrians
- Members of the public affected by motorist 'splashing' pedestrians when driving through the floods should report them via 101 as this is an offence under the road traffic act
- The Parish Council will notify the public that this is an offence and should be reported

8. Flood Alert

A flood alert means that flooding is possible so you should prepare now.

Flood Alert		
	What it means	**When it is issued by the EA**
	Flooding of low lying roads and land is possible	Two days to two hours in advance of flooding
Trigger	**Actions**	
	• Flood Co-ordinator decides if Flood Alert trigger is activated	
	• Flood Co-ordinator also checks Met Office for severe weather	
	Flood Plan Activated	
	• Flood Co-ordinator calls Floodline for further information	
	• Community Volunteers monitor water levels and drains	
	• Community Volunteers inform at risk residents of Flood Alert. Advise physical protection measures should be readied.	
	• Community Volunteers report back to Flood Co-ordinator	
	• Flood Co-ordinator provide feedback on conditions to ◦ Environment Agency Incident Line 0800 807 060 ◦ North Gloucestershire Borough Council	

Environment Agency Flood Alert

To use Environment Agency Quick Dial:

- Dial EA Floodline 0345 988 1188
  Press 1 for warnings
  Hold the line
  When asked, enter the QuickDial number. 164163

8. Flood Alert /cont.

The Environment Agency issues a flood alert when forecasts show that flooding may be possible from:

- rivers
- high tides, surges or strong winds at seaTimeframe

The Environment Agency usually issues a flood alert between 2 and 12 hours before flooding. Flood alerts are usually issued during waking hours where possible.

What you should do

You should regularly check if there's a flood alert for your area and follow the official advice.

If a flood alert is issued, you should:

- be ready to follow your flood plan
- have insurance documents and any medications ready
- avoid walking, cycling or driving through any flood water
- move any livestock and farming equipment away from areas likely to flood

Find out more about what to do during a flood.

Get help from Floodline

You can contact Floodline for advice.

What is at risk during a flood alert

The following can be at risk when a flood alert is in force:

- fields, recreational land and carparks
- minor roads
- farmland
- coastal areas affected by spray or waves overtopping

9. Flood Warning

A flood warning means that flooding is expected so you should act now.

Flood Warning		
	What it means	**When it is issued by the EA**
	Flooding of properties is expected	One day to half an hour in advance of flooding
Trigger	**Actions**	
Warning received from met office Warning received from Environment Agency Aim to give 2 hours warning notice Local observation	• Flood Co-ordinator decides if Flood Warning trigger is activated • Flood Co-ordinators coordinate activities of Community Volunteers/council staff • Flood Co-ordinator contact Parish Clerk or Deputy to advise rest centre's may need to be activated (Village Hall) • Distribute emergency planning information, advice and note requests for help and advice • Community Volunteers monitor local water levels & provide feedback to Flood Co-ordinator or Deputies • Flood Co-ordinator provide feedback on conditions to: ◦ Environment Agency Incident Line ◦ Gloucestershire County Council • Provide liaison to the general public/erect information and or signage regarding the barriers and why they are there • Assist EA and Gloucestershire County Council Highways where requested • Community volunteers record and photograph the extent of flooding if safe	

Environment Agency Flood Alert

To use Environment Agency Quick Dial:

- Dial EA Floodline 0345 988 1188
  Press 1 for warnings
  Hold the line
  When asked, enter the QuickDial number. 164163

9. Flood Warning /cont.

The Environment Agency issues a flood warning when forecasts show that flooding is expected from:

- rivers
- heavy rain that will cause rivers to flash flood
- high tides and surges coupled with strong winds at sea

Timeframe

The Environment Agency usually issues a flood warning 30 minutes to 2 hours before flooding.

What you should do

You should regularly check if there's a flood warning for your area and follow the official advice.

If a warning is issued, you should:

- protect yourself and your loved ones
- move your loved ones, pets and valuables to a safe place
- move to higher ground or the upper floor of a building
- turn off the gas, electricity and water in your home if it's safe
- put flood protection equipment in place
- do as the emergency services tell you
- help others if it's safe to do so

Find out more about what to do during a flood.

Get help from Floodline

You can contact Floodline for advice.

What is at risk during a flood warning

The following can be at risk when a flood warning is in force:

- homes and businesses
- railway lines and infrastructure
- roads
- coastal areas affected by spray or waves overtopping
- flood plains, including caravans park and campsites
- major tourist and leisure attractions

10. Severe Flood Warning

A severe flood warning means that flooding could cause danger to life and significant disruption to communities. You must act now.

Severe Flood Warning		
	What it means	**When it is issued by the EA**
	Flooding of properties, danger to life, severe disruption to services and transport	When flooding poses a significant risk to life
Trigger	**Actions**	
Met office indicates severe weather incident Received from Environment Agency (from monitoring point between Tewkesbury and Gloucester) Will be issued dependent on issues on the ground. Local observations:-	• Flood Co-ordinator decides if Severe Flood Warning trigger is activated • Flood Co-ordinator liaise with Gloucestershire County Council Highway Duty Engineers • Notify Co-ordinator of any potentially vulnerable people who will advise Gloucestershire County Council and/or emergency services • Community volunteers record and photograph if safe the extent of flooding • Flood Co-ordinator assist Emergency Services by providing local knowledge about conditions • Community volunteers support Parish Council in opening and setting up rest centre and continued support to Gloucestershire County Council if required • Community Volunteers assist Gloucestershire County Council in manning road closure points if required	

Environment Agency Flood Alert

To use Environment Agency Quick Dial:

- Dial EA Floodline 0345 988 1188
  Press 1 for warnings
  Hold the line
  When asked, enter the QuickDial number. 164163

10. Severe Flood Warning /cont.

Timeframe

The Environment Agency issues a severe flood warning when flooding threatens life and communities.

What you should do

You should regularly check if there's a severe flood warning for your area and follow the official advice.

If a severe warning is issued, you should:

- stay in a safe place
- be ready to evacuate your home
- do as the emergency services tell you
- call 999 if you are in immediate danger
- if you are caught in a flash flood move to higher ground or the upper floor of a building if it's safe

Find out more about what to do during a flood.

Get help from Floodline

You can contact Floodline for advice.

What may happen when a severe flood warning is in force

The following may happen during a severe flood warning:

- deep and fast-flowing water
- dangerous debris in the water
- buildings collapsing or at risk of collapsing
- communities unable to escape
- infrastructure not working, like gas, electricity and water
- the evacuation of lots of people

11. Flood Warning No Longer in Force

Flood Warning No Longer in Force		
	What it means	**When it is used**
	No further flooding is currently expected for your area	When a flood warning or severe flood warning is no longer in force
Trigger	**Actions**	
Met office warning level reduced Or local observation • Rivers back in bank, levels falling and no significant rain forecast • Rivers back below trigger levels that activated initial warning • Alerts issued but no resultant flooding and forecast improved	• Advise at risk people that flood warning is no longer in force • Assist / support flood victims with information, including safe procedures for cleaning up • Community volunteers and flood plan committee meet to review incident what went well, what not so well and any amendments to plan required	

12. Roles and Responsibilities of Authorities

The level of service offered by local authorities varies from district to district.

Local authorities do not have a statutory duty to provide sandbags or give other assistance at times of flooding. But they will usually endeavour to help, particularly in cases of emergency. Most local authorities take the threat seriously and will put aside adequate resources to help combat the risk of flooding. However resources are limited and the view of most authorities on residential flooding is that householders should take measures to protect their own properties from flooding .

In some locations, where there is a known flood risk, the Parish Council holds a limited supply of gel sacs for distribution at times of emergency. They are used to divert water flows and protect property. Often the flood community volunteers will coordinate this when a flood warning has been received.

Roadside Ditches

The maintenance of these is normally the responsibility of the adjoining landowner (riparian owner) and not the highway authority.

If road flooding occurs as a result of blockages in these ditches the highway authority may use its legal powers to require the riparian owner to clear the ditch.

Land Drainage

Local Councils are the local land drainage authority for non-main rivers, but the maintenance of most watercourses is the responsibility of private owners (riparian owners) or of the local water supplier.

The Council has no responsibility for the maintenance of watercourses and land drainage (except on council-owned land); however, they may be able to offer general advice.

The Environment Agency may undertake maintenance of some main river sections, however the responsibility is still with the riparian owner.

Other

Public surface water sewers - these are drainage . systems, usually piped, which are maintained by the water supplier. However, it is possible that the water supplier and waste disposal authorities are different organisations.

Highway drains - culverts under public roads, piped roadside ditches or other drainage that has been specifically built to-drain the highway. The highway authority maintains these.

Authorities Involved

The following organisations may be involved in direct specific action during a flooding event. Property owners are listed as it is their responsibility to protect their own property from flooding

Environment Agency

- Maintain flood defences
- Issuing flood warnings
- Receiving and recording details of all flooding incidents
- Monitoring the situation and advising other organisations
- Dealing with emergency repairs and blockages on main rivers and own structures

12. Roles and Responsibilities of Authorities /cont.

Gloucestershire County Council

- Co-ordinating emergency arrangements
- Maintaining safe conditions on the roads
- Putting flood warning signs on the roads
- Organising road closures and traffic diversions
- Clearing blockages on highway drainage systems
- Protect property from flooding by water from the highway (optional)
- Emergency assistance - providing sandbags (optional)
- Clearing blocked watercourses etc. (Land Drainage Act powers)
- Environmental health issues - pollution

Twigworth Parish Council

- Preparation of Flood Plan and organisation of Community Volunteers
- Flood warning dissemination (by local agreement with Environment Agency)

Rescue

- Responding to all emergency incidents as required
- Assisting the populace where a need is identified and the use of fire service personnel and equipment is relevant

Water Company

- Emergency overpumping or tankering at pumping stations
- Clearing blockages in public sewers and outfall grills
- Repairing burst sewage and water pumping mains

Property Owners

The principal actions of owners of property at risk of flooding or which is flooded are:

- Moving to a safe area if life is at risk
- Preventing water from entering property if possible
- Switching off electricity and gas supplies at mains
- Moving valuable possessions above floor areas liable to be flooded

13. Emergency Flood Management Team - Contact List

Emergency Flood Management Team Member	Contact Name	Contact Tel Nos
Emergency Flood Coordinator	George Sharpley	07587 772982
Rescue and Equipment Coordinator		
First Aid, Medical and Health Coordinator		
Welfare and Accommodation Coordinator		
Assistance Coordinator		

Councillors	Contact Name	Contact Details
Parish Councillor Chairman	Cllr. George Sharpley	cllrsharpley.twigworthpc@gmail.com
Parish Councillor Vice Chairman	Cllr. John Redfern	cllrredfern.twigworthpc@gmail.com
Parish Councillor	Cllr. Elaine Watson	cllrwatson.twigworthpc@gmail.com
Parish Councillor	Cllr. Graham Bocking	grahambocking@msn.com
Parish Councillor	Cllr. Mike Davies	mberesforddav1947@gmail.com
Parish Council Clerk	Belinda Holder	twigworthparishcouncil@gmail.com
Borough Councillor	Cllr. Sarah Hands	councillor.hands@tewkesbury.gov.uk
Borough Councillor	Cllr. Rojina Rai	
County Councillor	Cllr. Sarah Hands	

14. Agencies & Emergency Services - Contact list

Agency	Telephone No	Website/Email
Emergency services	• 999 - Police, Fire, Ambulance	
Gloucestershire Police Force Headquarters	• 101 - Non-Emergency • 01453 753510	www.gloucestershire.police.uk
Gloucestershire Fire & Rescue	• 01452 888774 • 01452 888777 (24hr)	www.gloucestershire.gov.uk/glosfire
South West Ambulance Service (SWASFT)	• 0300 369 0130 • 111 - NHS Direct	www.swast.nhs.uk/welcome
Gloucestershire County Council	• 01452 425000 (Main Switchboard) • 01452 614194 (24hr) Emergency Duty Planning Officer • 01452 426868 - Adult Social Services • 01452 426565 - Children's Social Services	www.gloucestershire.gov.uk/
Gloucestershire County Council - Highways	• 0800 514514	www.gloucestershire.gov.uk/highways
North Gloucestershire Borough Council	• 01684 293445 (24hr) • 01684 295010 (Main Switchboard)	www.tewkesbury.gov.uk/
Environment Agency	• 0800 80 70 60 (24hr)	www.environment-agency.gov.uk/
Environment Agency - Floodline	• 0345 988 1188 (24hr) • Type talk (for the hard of hearing) 0345 602 6340	www.environment-agency.gov.uk/
National Grid (Gas)	• 0800 111 999 (24hr)	www.nationalgas.com/
UK Power Networks (Electricity)	• 0800 31 63 105 (24hr)	www.ukpowernetworks.co.uk/
Severn Trent Water	• 0800 8783 4444 (24hr)	www.stwater.co.uk
NHS Direct	• 111 - Non-Emergency	www.nhs.uk
British Telecom	• 0800 800 151 - To report a fault	www.bt.com/

15. Local Skills & Resources - Contact list

Skill	Contact & Telephone No	Location
Community Volunteers		
4 X 4 Owners/Drivers		
Flood Signs		
Suppliers of Sand Bags		
Suppliers of Sand		
Supplier of Gel Sacs		
Dehumidifiers		
Plant & Generator Hire		

16. Local Flood History

The following sub sections identify the actual flood impact for each time the Parish has been affected by flooding from information captured within the community.

They indicate the scope and period the flooding occurred and how the parish was impacted along with supporting photographs.

If anyone has additional information on a flood, please make it available to the Parish Clerk for inclusion in this page to ensure a full and accurate record of the floods is maintained.

The following articles were submitted by Neville Cowan

Groundwater

There was always surface water sitting on land at Yew Tree Farm (Fallow Fields) after heavy rains and would remain for some weeks afterwards.

There are wells at some of the older houses along the east side of the A38 (including YTC) that are a very good indicator of the surface water levels, with variations that were witnessed being just at ground level in winter to some feet below ground level in a dry summer.

These wells could be used as monitoring points for ground water levels in the village, if thought to be beneficial.

The building of the Fallow Fields houses was of concern, in that they would be at a higher elevation than the older properties and surface water would be pushed away from Fallow Fields and affect these older properties.

However the developers put in a surface water drainage system that takes the surface water to a Victorian drain under the A38, which carries it all the way to a discharge point into Hatherley Brook at Broadboard Bridge, just alongside School House.

The same water discharge is being done with the 32 house development underway on the corner of Down Hatherley Lane.

Some of the rainfall data used by developers to calculate surface water run-off from the Fallow Fields development was queried, as to it being far too low, and could result in higher volumes of surface water to be handled than is allowed for in the site drainage system design.

A document detailing these concerns is available.

The A38 drain was originally installed to drain water off the A38, as well as take surface water from an area east of Broadclose Road.

It has a finite capacity and the concern is that too much surface water is being put into it and during heavy rain it will not have the capacity to take everything, the road drains will fill and a river of water will run down the A38, as was seen in 2007.

No-one listened to the concerns of local residents, despite a CCTV survey on part of the drain showing structural problems in some places.

The capacity of the drain will reduce further when Hatherley Brook is flooded, as the head of water on the drain discharge point increases.

A document detailing these concerns is available.

The Twigworth Green development is a different situation to Fallow Fields, in that the surface water drains to the attenuation ponds that discharge a controlled volume of water into Hatherley Brook.

We are not aware if there are issues arising from the TG development on the surface water flows and control, but local opinion always was that there should not be if the developers did everything correctly during construction.

Field Flooding

When there is significant rainfall in the local area it can result in some field flooding but it is not usually significant or threatening.

The main factor in serious field flooding (on the historic flood plains) is due to the level of the River Severn, which is fed by water from the Welsh Hills via the R Severn and from the Midlands via the R Avon that come together in Tewkesbury and result in the almost total flooding of the surrounding area.

When the Severn is in flood, there are 2 large flap gates, located where Hatherley Brook discharges into the Severn, that close due to the head of water.

This results in water coming from the huge catchment area (that extends to Leckhampton Hill and across to Cheltenham) backing up in Hatherley Brook and flooding the fields on both sides of the A38 road.

Only when the level of the Severn starts to drop can the flap gates gradually open and release water from Hatherley Brook.

The same situation occurs with Cox's Brook that forms the boundary between Twigworth Parish and Sandhurst Parish, with 2 large flap gates at the discharge of Cox's Brook into Hatherley Brook, controlling flood water that sits in the fields to the west of Twigworth, where the solar farm is proposed.

The TG development discharges surface water into Hatherley Brook and therefore adds to the field flooding situation but it is probably not significant in the total water volume.

When the field flooding level reaches the top of the Broadboard Bridge arch, then the area of flooding to the east of the A38 expands further and does start to flood the A38 road, as happened in 2007 and now (Jan 2024) outside School House in a slight dip.

17. Impact of Floods - 31 December 2023

The following article was submitted by George Sharpley

Glos villages experience unprecedented levels of flooding, which in turn blocks the sewers

Brook Lane, which separates the villages of Twigworth and Down Hatherley, is suffering unprecedented levels of flooding after hundreds of new houses have been built on one side of the lane – with another 160-plus houses still to come on the other side.

Resident Sam Tibble has spent the last two days fighting a losing battle to keep the water out of his house. “I’ve never seen anything like this. It came nowhere near us in the floods three years ago, before all these new houses were built.”

Apart from filling Ivor Gurney’s ‘water meadows’ with concrete, bricks and tarmac, the new houses are built several feet above the existing level, on imported soil, which neighbouring residents believe puts them at extra risk.

Sam Tibble, Brook House
02.01.24 - local resident

The flooding also causes sewage from Severn Trent’s antiquated network to revisit people’s bathrooms, front-rooms, gardens and public walkways.

Video on website: Brook Lane sewage – 31.12.23 – Chris Weaver

Despite this, Severn Trent Water continues to accept hundreds more houses on adjacent plots to their failed network.

Their routine answer to these foul-water floods is to send in tankers to pump out the sewers, which causes inevitable smells, noise and extra traffic.

Chris Weaver is not the only local resident to hold the local council responsible for this ongoing nightmare.

“North Gloucestershire Borough Council does not challenge Severn Trent’s acceptance of all these new houses despite their failed network.

We routinely bring it to their attention. We are routinely ignored,” says George Sharpley, a member of the local flood-risk group.

Eighty-five new houses are pencilled in for Chestnut Tree Farm (22-01343-OUT) on the other side of the A38. This is currently under appeal with the Planning Inspector.

17. Impact of Floods - 31 December 2023 /cont.

On 3rd May last year, Severn Trent admitted that they were unable to accept any new flows here “until upgrades have been delivered.”

Weeks later, on 6th June, their position had changed: “We have no objections in principle to the proposals.” (Severn Trent documents are on North Gloucestershire Borough Council portal - 22-01343-OUT)

Were the upgrades mentioned in May implemented? If so, what?

The following month (19th July 2023) local residents met with Matt Jeynes, a senior engineer with Severn Trent, who expressed his professional opinion that no further major developments should be added to the drainage network until a full review had been carried out and necessary improvements made.

And yet new sites continue to be waved through.

At Twigworth Green, a new pipeline was connected to take sewage away from the new houses, to avoid the current failing network.

In January 2023, this new pipeline spewed hundreds of gallons of untreated sewage into the meadows along the Hatherley Brook.

Video on website Hatherley Brook public footpath under sewage – 15.01.23 – Chris Weaver

Twigworth Green is now routinely visited by tankers to relieve the new sewer.

Does North Gloucestershire Borough Council think that residents of these new houses should accept as standard the inevitable smells, noise pollution and additional traffic these measures are causing?

Is it acceptable for additional sites now under proposal?

The authorities must be aware of the problems – as are residents of Twigworth and Down Hatherley who in wet periods continue to have sewage revisiting their properties and public areas.

George Sharpley

Twigworth and Down Hatherley Flood Rep

1st January 2024

18. Impact of Floods - 4th -7th January 2024

A38 Tewkesbury Road - Twigworth

From 4th - 7th January

Due to flooding on the A38 the road was closed from Coombe Hill to the Longford Roundabout; it was not possible to travel between Gloucester and Tewkesbury

The road was flooded from the A40/A38 Longford Roundabout towards the Twigworth Church and also at Norton, near The Dawn Inn.

There was no Stagecoach 71 bus service during this period of closure.

Reports from residents:

- Reports of sewage backing up to houses connected to the pumping station at the bottom of Twigworth on the A38 (close to the BP/Skoda garage).
- Severn Trent Water were informed and stated that they would be in touch with a resident who raised it on their Hotline within 48 hours (Ref: 2006377744) - this did not happen
- It is believed that the pumping station was overrun with floodwater and infiltrated the system
- This is an issue every time that a high flood water level situation arises, observations indicating when flood level is approx 10.50m AOD.
- The manholes for a number of houses on the West side of the A38 from the BP/Skoda garage south to School House become flooded.
- The result is that the small sewage pumping station, south of the BP/Skoda Garage cannot handle the volume of water feeding it.
- On this occasion the sewage system was flooded for some 3 days, making toilets in houses and a pre-school nursery unusable.
- The issue has been reported on previous occasions, the last being in Feb 2020 when flood water level rose to about 10.84m AOD.
- Previous very high flood levels were 10.87m AOD in Feb 2014 and 11.38m AOD in July 2007 - Last week's level was 11.04m AOD.
- With predicted increasing floods due to climate change and other factors there needs to be protection in place to limit the resulting effect.
- Sealing the manholes, or raising them above flood levels, would seem to be a way of preventing the inundation of the sewage pumps
- Some of the STW manhole cover seals failed resulting in contamination downstream and a few properties were being able to flush toilets on the ground floor
- Backwash from vehicles was a problem along A38 Tewkesbury Road for the residential properties south of the BP/Skoda Garage

18. Impact of Floods - January 2024 /cont.

- There was little surface water flooding in Twigworth due to unusual but not exceptional rainfall. I.e. Twigworth residents who live north of Skoda got off lightly
- Specifically during a 72 hour period (4, 5, 6 January 2024) we were unable to use our normal toilet facilities due to the sewer pipes being full of flood water. Additionally a non-return valve on the sewer outflow pipe from the house was subsequently found to be broken (not sure how) that resulted in flood water back-flowing and exiting one of the manholes in the 'dry' area between the house and the protective flood wall, thus requiring multiple pumps to manage the water and return it to the brook.

  If the non-return valve had not broken there would still be the flooded sewer pipes from our house to the pumps, that would preclude using the sewer for anything but water. The sewer main runs in the fields behind the houses fronting onto the A38 at Twigworth south, from the BP/Skoda garage to School House @ Broadboard Bridge
- During the recent flooding episode (4,5,6 January 2024) the A38 road was covered with water to a few centimetres at various points where there are dips in the road level, from the BP/Skoda garage south towards Longford, making use by vehicles quite risky. Some were abandoned. The A38 was, of course, closed at Longford

  The road surface has been raised over time but it is at a level now that results in flood water flowing down the road to run into driveways and overtops the pavement edge. This situation will worsen as new housing developments further north along the A38 are being allowed to discharge their surface water into the Victorian culvert running beneath the road. The culvert discharges into Hatherley Brook @ Broadboard Bridge. When capacity of the culvert is reached, and will be reduced when Hatherley Brook is at flood level, the culvert will discharge water back onto the A38 road via the drains.

Down Hatherley Lane

This route is used as a diversion for all forms of traffic in the event of any closure, accident or diversion between the Longford roundabout and Coombe Hill on the A38.

Frogfurlong Lane

This route is used as a diversion for all forms of traffic in the event of any closure, accident or diversion between the Longford roundabout and Coombe Hill on the A38.

19. Photographs - January 2024