Shelfanger Flood Risk Management Investigation

February 2024

What are we telling you about?

This is an update on the Environment Agency's flood investigation for Shelfanger. Following last year's drop-in evening, we wanted to brief you on the next steps and actions that came out of the event.

The flood risk investigation is looking at how to reduce flood risk to peoples' homes in Shelfanger from the Frenze Beck (Main River) and Winfarthing drain. There is a map at the end of the briefing that shows both channels.



The drop-in evening

December 2020 flood risk investigation

The Initial Appraisal shortlisted three potential ways of reducing the flood risk to properties in Shelfanger, which require further research, including:

Floodwater storage ponds. These would be designed to prevent property flooding and potentially reduce the risk of road flooding.

Increasing channel capacity. This would aim to ensure channels and any culverts are large enough to carry flood flows through the village.

Property Flood Resilience. This consists of measures for individual properties, such as flood doors or barriers, to reduce the risk of water entering a property.

We are refining the computer model of the watercourses to improve its accuracy and our understanding of the flood risk. The modelling will provide us with confidence in how the options might work and their costs, and inform a business case to support funding applications.



The Initial Appraisal report into the investigation is available on request, or for any questions or comments, contact Rob Brooks via the Contacts section.

Natural Flood Management

Separately to the flood risk investigation, the Environment Agency and Natural England are looking into Natural Flood Management (NFM) in the catchments upstream of Shelfanger. NFM works with natural processes to slow the flow and hold back water until the flood peak has passed.

It can involve creating or enlarging ponds and scrapes in low spots where water can collect or the installation of woody dams in ditches to help hold back water during peak rainfall events. Overland flow pathways can also be slowed with vegetation field bunds and buffer strips.

We are in the initial stages of this work to assess measures and identify the landowners who would like to be involved. For more information on NFM, including what grants are available, please contact Helen George via the details in the Contacts section.



A woody debris dam.



A shallow scrape pond to catch overland flows.

customer service line 03708 506 506 incident hotline 0800 80 70 60

floodline 03459 88 11 88

How can you get involved?

Flood reporting

To inform the flood risk investigation, please report any flood history, including dates and times, the location(s) and any photos or videos, to Rob Brooks, via the Contacts section. This might include:

- Water ponding on fields, roads, or other low spots.
- Any other low spots where water gathers.
- Locations along the river where water levels are high during bad weather.

If there are current flooding problems, please report these to the Environment Agency (for issues relating to the river) or Norfolk County Council (for road flooding, blocked drains and ditches), following the details in the Contacts section.

Community flood actions

At the drop in evening, several actions were suggested to and by the community to help reduce the flood risk to the village. These included:

 Weedscreen reporting – to record and report blockages of the Norfolk County Council (NCC) culvert weedscreen through a single member of the community or parish council. This will ensure the correct information is passed to NCC and the community will have a record. This would be the responsibility of the village.



The culvert weedscreen

2. **Water level monitoring** – we are planning to install temporary water level monitoring in the channels upstream of Shelfanger later in the year. This will help us assess if flood warning options for the village are viable for flooding from the river.

 Consider whether personal and community Emergency Flood Plans would be useful to you and the community. These would be the community's responsibility to organise and put into action. Guidance can be found at: www.gov.uk/prepare-for-flooding

Ditch and river maintenance

You have a responsibility to maintain the ditches, ponds and the Frenze Beck river if they cross through or are adjacent to your land. This helps water flow and includes removing blockages. For more information see https://www.gov.uk/guidance/owning-a-watercourse.

If there are blockages along the Main River (see map) that the landowner cannot remove themselves, they can report these to the Incident Hotline (0800 80 70 60) so we can assess them.



A maintained channel that will allow flow to pass, without removing all vegetation.

Contacts (see GDPR note*)

Flood risk investigation and to report flood history: Rob.brooks@environmentagency.gov.uk or 07771 334 845.

Natural Flood Management:

Helen.george@environment-agency.gov.uk

Environment Agency Incident Hotline (flood risks from the Main River/Frenze Beck): 0800 80 70 60

Norfolk County Council (road flooding, blocked drains or ditches): 0344 800 8013 or www.norfolk.gov.uk/safety/floods/report-a-flood

Main River maintenance:

Report issues with maintenance of the Main River to: <u>APBroadland@environment-agency.gov.uk</u>

*General Data Protection Regulation note: the Environment Agency will collect your information to improve our understanding of flood risk in your area and to help inform flood risk management options. We will process your information for these purposes in accordance with GDPR. Your information may be shared with your local and county councils for them to use for the same purposes, and with consultants working on our behalf. By getting in contact, you consent to the information you provide being used in this way unless you specify otherwise. You can withdraw your consent at any time by contacting PSOENS@environment-agency.gov.uk. Your personal details (name and contact information) will be held for 3 years, the rest of the information provided, including the address of the property, will be held until it is no longer necessary. The Environment Agency is the data controller for the personal data you provide.

Frequently asked questions from the drop-in event

Q1: Which sections of the river does the Environment Agency own and manage?

A: The Environment Agency does not own any of the river, ditches, or other watercourses in the village. We have permissive powers (but no obligation) to manage the Frenze Beck where it is classed as Main River (see map).

Q2: What maintenance do you carry out on the river?

A: We cut back vegetation to allow a clear channel throughout the village (see map). This is carried out annually, timed for after the growing season to ensure the work is not required again before the flooding season.

Vegetation is reduced to allow higher flows, without fully removing plants, as this can lead to erosion. This approach also does less harm to the environment.

Q3: The river runs through or next to my garden. Do I have any responsibilities to look after it and can I carry out works next to the river?

A: If the river runs adjacent to your garden, you are likely to own up to halfway across the channel, or all the watercourse if it flows through your land. This means you have responsibilities to maintain the river to reduce flood risk, as explained here:

www.gov.uk/guidance/owning-a-watercourse

It also means that if you are planning to carry out any construction works or to alter the river and its banks, you will need a Flood Risk Activity Permit: www.gov.uk/guidance/flood-risk-activities-environmental-permits

Q4: I have ditches at my garden boundary. Do I own these?

A: You are likely to own up to halfway across any ditches that border your garden and will have responsibilities with the neighbouring landowner to ensure these can pass flows and are not filled in either deliberately or through a lack of maintenance.

Q5: There are ditches in and around the village that are not being maintained. What is the Environment Agency doing to resolve this?

A: Ditches and other non-Main River bodies of water, such as ditches or ponds are the responsibility of the landowner(s).

As the Lead Local Flood Authority, Norfolk County Council may inspect and take legal action if flooding from these watercourses affects residential properties, critical infrastructure or certain roads:

www.norfolk.gov.uk/rubbish-recycling-and-planning/flood-and-water-management/flood-risk-management-responsibilities

Q6: What is the Environment Agency's flood risk investigation hoping to achieve?

A: The investigation is focused on trying to find an option to reduce the flood risk to people's homes in Shelfanger.

Q7: What is the computer modelling used in the flood risk investigation and why is it important?

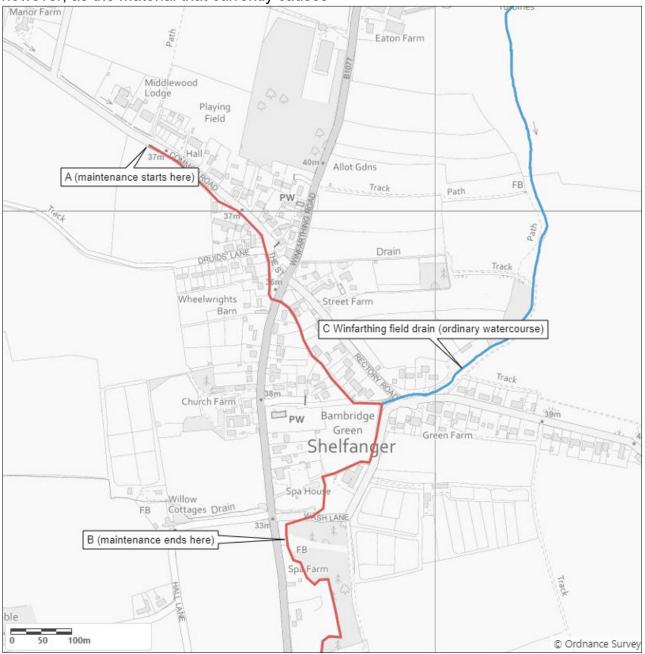
A: The modelling is a simulation of the landscape in which we model flood events. This is important as it shows us what happens throughout flood events of different scales.

Modelling is based on resident accounts of flooding, satellite modelling of the landscape and records from local rainfall and groundwater gauges. The model calculates the amounts of water involved in flood events and how much of this needs to be controlled, where and when, to reduce flood risk.

Without this information, we are unable to design features to reduce the flood risk to the correct scale. We also need the findings as evidence to apply for funding to carry out any works.

Q8: The grill on the twin culvert pipes near the village hall often blocks. Why don't you remove it?

A: As this is a Norfolk County Council Highways structure, we cannot alter it. We would not recommend removing the grill, however, as the material that currently causes blockages could easily block the culverts underneath the road instead. This would be much more difficult and costly to unblock and could still cause the channel to flood onto the road. As part of the flood risk investigation, we are looking at ways to potentially improve the structure to help reduce the risk of blockages.



Map of the Frenze Beck where it is classified as Main River in Shelfanger (red line)

The Environment Agency has permissive powers to manage the river where it is highlighted in red on the map. Also marked are the limits of the Environment Agency's annual maintenance programme, as is the Winfarthing field drain (blue line), which is managed by the Internal Drainage Board on behalf of the landowner(s).