Halesworth Factsheet

Autumn 2021

Introduction

We have produced this factsheet to provide you with information about flood risk in Halesworth. We have included information on other issues including; flood warnings, river maintenance, river habitat enhancement, and development in the floodplain.

- New flood modelling shows that the **risk of property flooding is lower** than previously thought, with an annual probability of less than 1% (1 in 100 years). The **historic flood** in 1993, flooded 43 properties in Halesworth, had an annual probability of 0.03% (1 in 350 years).
- The open countryside and wildlife areas to the west and east of the town, including Millennium Green and countryside north of Chediston Street, are at **high risk of flooding**, and are classed as functional floodplain as they flood with a 5% annual probability (1 in 20 years). It is natural for rivers to flood open floodplain in times of high rainfall.
- Maintenance - We annually **maintain** the rivers in Halesworth to clear overhanging or obstructing vegetation. But we do not remove the **silt** from New Reach as it does not reduce flood risk, and will build up again within three years.
- DEFRA will not provide funding for **flood risk management projects** in Halesworth to manage the flood risk from the River Blyth as the risk to people and property is too low.
- We provide **Flood Alerts** and **Flood Warnings** for Halesworth, which you can sign up to.
- A **Permit** is required for any work or structures within the main river itself or within 8m of the banks of the main river.
- We are a consultee on **planning applications** for proposed developments in the flood zones, and recommend that they are only approved if they are appropriate, will be safe from flooding and not increase flood risk elsewhere.
- Channel and floodplain **restoration** work can provide environmental benefits.

Flood Risk

Floods can range from small frequent events which only flood small areas of adjacent land, to larger rare events which cover a wide areas.

We have recently updated the flood modelling of the River Blyth catchment, including Halesworth. These models are reviewed periodically to ensure they are up to date. This revised model uses the best available information about the Blyth catchment and computer software calculates the depth and area of flooding for given river channel conditions and specified river flow rates.

The latest modelling shows that flood risk to properties in Halesworth is low, with no residential or commercial properties at risk of flooding in a 1% (1 in 100) annual probability flood, which is equivalent to Flood Zone 3 on the flood map for planning available at https://flood-map-for-planning.service.gov.uk/.

In an extreme 0.1% (1 in 1000) annual probability flood, equivalent to Flood Zone 2 on the flood map for planning, there would be approximately 60 properties at risk of flooding (33 commercial and 26 residential).

Below is a table showing the number of properties at risk of flooding in a range of flood events:

Flood Event – annual probability of flooding	No. of Residential Properties	No. of Commercial Properties
5% (1 in 20) – Flood Zone 3b	0	0
1% (1 in 100) – Flood Zone 3a	0	0
0.1% (1 in 1000) – Flood Zone 2	26	33

The height of the internal floor level of each property threshold was determined by undertaking a GPS survey which uses observations from a network of satellites, or from LIDAR estimation which estimates the height of the land using an airborne laser profiling system and is generally accurate to +/- 0.15m.

Flood zones published on GOV.UK will be amended to reflect the extent of flooding in these different flood events. These are smaller than previous flood zones, due to improved hydrology and modelling, and could be advantageous in future discussions with insurance providers. Information on flood risk, including results of the modelling, and any threshold survey data we hold, can be obtained from ourselves free of charge.

Maps showing the extents of the flood outlines, and what will become the new flood zones, are at the end of this factsheet. Areas of open space to the west and east of the town are at risk of more frequent flooding, in the 5% (1 in 20) annual probability flood event, which includes footpaths and small foot bridges.

This area of open countryside, is classed as Flood Zone 3b 'functional floodplain', and is defined as *'land where water flows and is stored in times of flood'*. It is natural that in times of high flows the river will overtop and flood low-lying land, and it is particularly beneficial that in Halesworth this land is predominantly open countryside and wildlife sites, such as Millennium Green, which are naturally designed to flood, rather than properties. Nature is very resilient and winter floods are natural events, so the vast majority of species living in these areas quickly bounce back.

Every 10 years we review the modelling, and amend it based on the latest information and methods. This will ensure that the impacts of climate change on flood risk are taken into account over time.

These results are corroborated by the fact there has not been flooding of property in Halesworth for many years, despite other locations having flooded. During the heavy rainfall experienced in December 2020 and January 2021 for example, hundreds of properties flooded across Norfolk and Suffolk, but none were recorded in Halesworth.

Government Flood and Coastal Erosion Risk Management funding is allocated to projects in order to protect people and property, and enhance the natural environment. It also considers the economic, social and environmental benefits projects can deliver. In Halesworth, given the limited number of properties at risk of flooding from the River Blyth, there is limited justification for capital investment to reduce flood risk from this source. These can range from conventional hard engineering approaches such as concrete walls, storage of flood water upstream of a community in times of flood, through to natural flood management which works with natural processes to help reduce the risk of flooding in smaller flood events. In all cases, the benefits provided by the flood risk management measures must be greater than the costs, and the project must be affordable.

In Great Yarmouth for example, there are thousands of people and property at risk of flooding, and concrete flood walls provide protection in extreme events. In more rural catchments the use of natural flood management may be more appropriate, including measures such as land management, planting of trees, reconnecting the natural floodplain and in-channel leaky barriers to delay flood peaks. However installation of measures across a whole catchment are required to have measureable benefits, and these benefits are likely to be in smaller flood events, so other flood risk management measures are likely to be required in parallel with natural flood management.

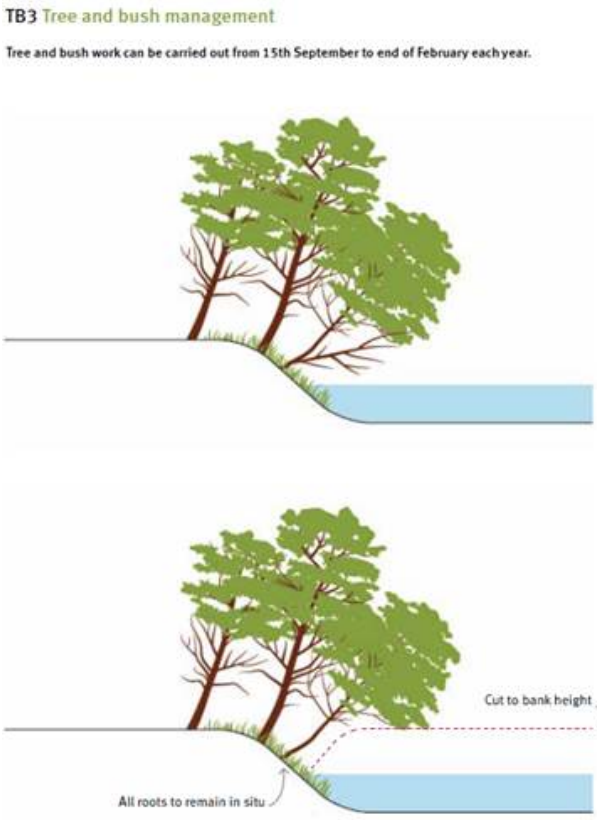
Historic Flooding

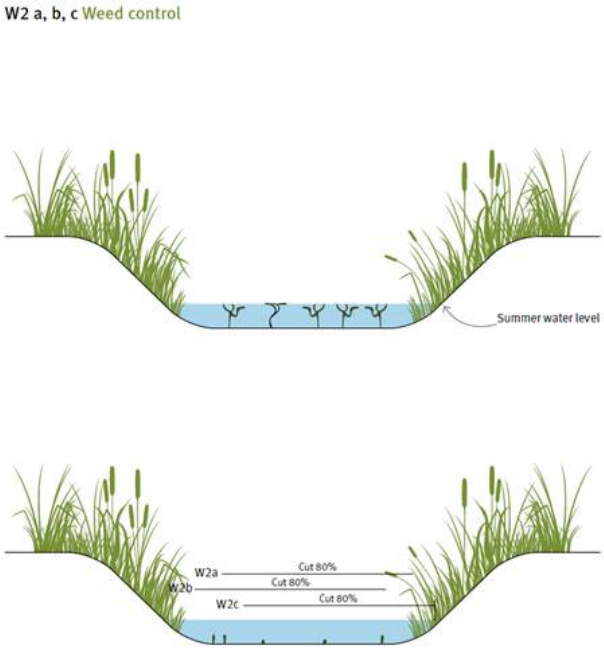
The last serious flooding in Halesworth was in October 1993 with reports of 46 properties flooding. The latest flood modelling, and analysis of the rainfall records and hydrology, has shown that the 1993 flood had annual probability of approximately 0.03% (1 in 350 years). This was, therefore, a more extreme flood event than previously thought based on earlier flood modelling.

Current Maintenance

Our routine maintenance work is carried out in November and December each year. Work begins between School Lane and Chediston Street, through to the Thoroughfare and Town Park and ends next to the Millennium Green railway bridge.

We cut and clear all sections of overhanging and obstructing vegetation from the channel using hand tools. All fallen trees in the channel are removed. Any blockages that could potentially increase flood risk are removed. All clearance works are undertaken in accordance with our environmental standards, and the illustrations below show the requirements for tree and bush management and weed control.





All material is left onsite with branches, weed cuttings etc. placed away from the channel to provide habitat and naturally decompose as per the U13 waste exemption - 'Spreading of plant matter to confer benefit'.

We intend to re-introduce a herbicide application to the vegetation along approximately 215m length of the New Reach section of the watercourse. We'll apply the herbicide on alternate banks following the path of natural flow to create a meandering pattern where possible. The Glyphosate herbicide that we are licenced to use is a systemic treatment that has to be sprayed onto green, live vegetation, preferably young emergent vegetation as this transfers the herbicide to the root / rhizome much better, this means application is best at the plants emergent stage which is usually in March – April.

We are also responsible for the maintenance of Environment Agency owned structures in the river. This includes the gauging station at Mells, which is used to monitor and record the flow and level of water in the river at all times.

Siltation of the New Reach

The latest flood modelling looked at the impacts of a variety of siltation scenarios, and the results show that removing all the silt from New Reach has no effects on the flood outlines and very minimal effects on the flood depths. As a result, the presence of the silt does not result in an increase in the number of properties flooding in the 5% (1 in 20) annual probability flood event.

Flood model shows that desilting New Reach has minimal effect on flood risk and there are no properties at risk in a 1% annual exceedance probability flood event, therefore we have no current plans to de-silt the New Reach section of the Blyth in Halesworth. We always focus our river maintenance work where it will demonstrably reduce flood risk to people and property.

Our flood risk management specialists have confirmed that when the New Reach was last de-silted it re-filled with sediment in approximately 3 years. This sediment is predominantly soil from arable fields in the catchment. This demonstrates the importance of reducing to a minimum across the whole Blyth river catchment the input of sediment to help reduce the likelihood of this happening. Reducing sediment inputs to a minimum will also help improve the water quality and ecology of the river system.

River Floodplain Habitat Enhancement

Water quality in the Blyth and its tributaries is generally good, but as is the case with most rivers in England, there is further work to be done to enhance water quality and restore river habitats. This work is vital to ensure our rivers and floodplains support as much wildlife as possible and they are able to adapt to our changing climate. Floods and droughts are inevitable but we need to work with landowners and managers across the country to enable our wildlife to become more resilient to the effects of floods and droughts.

Taking action to restore our rivers and functioning floodplains helps people as well as wildlife, because such restoration will encourage the recharge of aquifers, storage of carbon and better management of floodwaters, as well as providing more varied habitats in a better condition for wildlife to thrive.

There is the potential for channel restoration work to be carried out in the catchments upstream of Halesworth to improve the water quality and provide wider environmental benefits. We can only do this work with landowners interested in these projects and so are always looking to work with landowners who own sections of the Blyth and its tributaries to deliver river habitat and water quality improvements.

Flood Warning

The flood zones in Halesworth are covered by Environment Agency flood alerts and flood warnings. Flood alerts inform you when flooding is possible, while flood warnings will be issued when flooding is expected. Please visit https://www.gov.uk/sign-up-for-flood-warnings to sign up to receive them. It is possible that the flood alert and flood warning areas may be reduced in size in future to reflect the reduced flood risk shown in the revised flood modelling.

Property Flood Resilience

Property flood resilience measures can help reduce the amount of water from entering a property, using waterproof doors, flood barriers and air brick covers for example, or help reduce the consequences of the flooding once water has entered, tiled floors and raised electrical sockets. These measures are normally only recommended for properties that flood frequently. However individual property owners could still choose to install such measures, if they wanted to further reduce the flood risk to their property.

Further information including case studies can be found at this link.
https://www.knowyourfloodrisk.co.uk/sites/default/files/FloodGuide_ForHomeowners.pdf

Development in the Floodplain

Planning applications for proposed development within the flood zones are required to meet the requirements of the National Planning Policy Framework and the Planning Policy Guidance on Flood Risk and Coastal Change. This requires the Environment Agency to be consulted on the planning applications by the local council, and we provide comments on whether the proposed development is suitable, designed to be safe and will not increase flood risk elsewhere.

Residential and commercial developments are not allowed in Flood Zone 3b functional floodplain which is a 5% risk of flooding (1 in 20 year flood event), as this needs to remain open space and able to flood. Residential development in Flood Zone 3a has a 1% risk of flooding in each year so anything built would need to be designed to be above the flood levels as well as taking into consideration of climate change increases. It would not be able to take up current flood storage capacity or increase flood risk elsewhere.

Development is only allowed in flood zones 2 or 3 if it has first passed the sequential test, which requires development to be located in flood zone 1 wherever possible and to only be located in flood zones 2 or 3 where there are no alternative sites at lower flood risk.

As part of a planning application for a new development, a surface water drainage scheme must be designed. This is required to demonstrate that the surface water generated from the development will be adequately managed to ensure the flood risk to surrounding land and properties and nearby watercourses is not increased, and preferably decreased. This will include directing the surface water to ground using infiltration where feasible, and limiting the runoff to watercourses to below the existing greenfield runoff rate. Sufficient surface water storage will also need to be provided on the site to store the amount of surface water generated in a 1% (1 in 100) annual probability rainfall event including climate change over the lifetime of the development. Suffolk County Council are the Lead Local Flood Authority and will be consulted by the Local Planning Authority to enable the LLFA to check that the proposed surface water drainage scheme is correctly designed and so ensure there will be no increase in flood risk on-site or elsewhere.

Watercourse Maintenance

It is the landowners' responsibility to maintain their watercourse, to allow the free flow of water, and so ensure that flood risk is not increased. It is also the landowners' responsibility to ensure that any works to a watercourse are carefully designed and undertaken in a sensitive way and at the right time of year to ensure river habitats and legally protected species (including breeding birds, fish, water vole and otters) and their habitats are not damaged. Please contact the Environment Agency for free advice and guidance when you are considering undertaking watercourse management work and before any work begins on site. Some works can be undertaken without any permissions required, while other works will need a Flood Risk Activity Permit.

Under the Environmental Permitting Regulations, works in, under, over, or within 8m of main rivers, such as the Chediston Watercourse and Wisset Watercourse, require a Flood Risk Activity Permit from the Environment Agency. The type of permit required will depend on the nature of the works. Further information on how to apply for a permit can be found at https://www.gov.uk/guidance/flood-risk-activities-environmental-permits. A bespoke permit application can take up to two months to determine, so you should aim to apply in plenty of time before you want to carry out the works. There is a fee for the permit application, the cost depending on the type of works proposed. Anyone carrying out these activities without a permit, where one is required, is breaking the law.

Contacts

To discuss water quality and river habitat opportunities please contact: Will Akast, Catchment Delivery Manager Suffolk at will.akast@environment-agency.gov.uk.

To discuss flood risk issues please contact: Sarah Palmer, Flood Risk Management Advisor at sarah.palmer@environment-agency.gov.uk.

To report an incident contact the Incident Hotline 0800 807060.
Customer Service line 0370 8506506. Floodline 03459 881188.