

Beccles Flood Risk Management Project

November 2022

What are we telling you about?

This briefing provides an update on the progress the Beccles flood risk management project. We are also making you aware of the publication of a citizen space website page.

<https://consult.environment-agency.gov.uk/east-anqlia-c-e/becclesfm>

The citizen space website will be used to provide updates to you as the project progresses. We have drawn up a list of possible options to manage flood risk in the area and we are keen to hear your feedback. A survey is also available on the site to collect your feedback. The survey will close on Sunday 11 December 2022.

What's happened so far

The Environment Agency last updated you with a briefing in December 2021. This briefing is available on the website link above.

In December 2020 flooding occurred from a combination of sources including from the river, surface water runoff and through the ground. Between the 24 and 29 December 2020 flooding affected The Quay, Fen Lane, Bridge Street and to some of the properties off Northgate, Puddingmoor and Gillingham Dam. 17 properties reported experiencing internal flooding with an additional 10 reports of external flooding.

Since this time, we have been working with our flood risk consultants, Jacobs, to produce a Strategic Outline Business Case which assesses a list of options which could help manage flood risk from all sources of flooding in Beccles. To inform the project, we have also been undertaking surveys and assessments of the existing defences in Beccles to understand their current condition.

Our initial options

The list of options is based on initial findings. We have to ensure any option provides enough benefit (through economic analysis) when compared to the cost of implementing the option. If the scheme progresses to a more detailed assessment, some options will be ruled out as they will not provide enough benefit to justify the cost.

At this stage it is important that we identify a wide range of options and assess if any are potentially viable to include within the Strategic Outline Business Case.

Beccles benefits from an existing flood defence consisting of brick and concrete walls, wooden flood boards and a flood gate at access points and slipways. These are located at Fen Lane and at the Beccles Lido off Puddingmoor. A map of the defences at Fen Lane is provided on the website link.

The options below will be used in combination to address all sources of flooding and to create the best option for managing flood risk in Beccles. We would like your views on the options listed below and would welcome other ideas or opportunities which you think we need to consider in the business case. Please follow the website link provided at the beginning of this fact sheet and fill in the survey.

Aluminium flood boards

Replacing the existing timber flood boards with aluminium boards. The existing timber boards require reinforcement with sandbags and wedges and are heavy and difficult to install. Aluminium boards are more watertight and lightweight, so they are easier to install. Consideration would need to be given to storage of the aluminium boards and access requirements when boards are locked in place.

This option requires someone to install the boards.

Flood gates

Replacing existing timber flood boards with flood gates. The existing timber boards require reinforcement with sandbags and wedges and are heavy and difficult to install. Flood gates are more watertight and can be opened and closed. This could be particularly beneficial at slipways. Consideration would need to be given to access requirements when gates are closed and the space available to install them. This option requires someone to open and close the gate.



Figure 1 - Example of a flood gate

Ramps

Replacing existing timber flood boards with a ramp. The existing timber boards require reinforcement with sandbags and wedges and are heavy and difficult to install. Ground levels could be raised to create a ramp at some of the existing access points. This removes the need for someone to install boards and would provide permanent open access. Due to space constraints, a ramp is unlikely to be possible at all access points. This option would need to be considered alongside other options.

Closing unused access points

The existing timber boards require reinforcement with sandbags and wedges and are heavy and difficult to install. Unused access points could be closed off permanently. This removes the need for someone to install boards. This option would need to be considered alongside other options.



Figure 2 - Access point which could be closed to the east of the Harbour Master's office.

Replace surface water penstocks

Surface water run off which drains to Fen Lane is controlled by a penstock structure. This structure must be manually operated to ensure surface water can drain to the river and that river water does not flood the surface water system. Alternative structures could be investigated to remove the need for someone to operate the penstock.



Figure 3 - Surface water penstock on Fen Lane

New earth embankment or flood wall

Some of the walls that form part of the existing defence line are known to leak. Where space allows, a new earth embankment or wall could be installed in front of the existing defence. This may be possible in the open space at the quay. Further assessment would be required to confirm the technical viability of this option.

Improve the surface water drainage system

The existing surface water drainage system could be improved by ensuring the system is isolated from the river, and investigating whether capacity and conveyance is adequate. Issues with river water entering the surface water drains has been reported at Fen Lane, Bridge Street, and at properties off Northgate and Puddingmoor. Suffolk Highways and Anglian Water have recently undertaken surveys of the surface water network to investigate this further. Further details are provided below.

Sustainable Drainage Solutions

Sustainable Drainage Solutions also known as SuDS could be installed to manage surface water runoff in built up areas of Beccles. SuDS aim to reduce the surface water that enters the drainage system. Measures include green roofs, water butts and permeable surfaces. Further investigation will be required to determine which measures are appropriate.



Figure 4 - Example of a sustainable drainage solution in the form of a water but and rain garden

Surface Water Pump

If the existing drainage system is found to require improvement excess surface water could be moved out of low-lying areas where it cannot discharge to the river and exceeds the capacity of the surface water drains. The capacity of the existing surface water network is currently being investigated. Careful consideration will need to be given to the impact of this on flood risk elsewhere.

Property Flood Resilience (PFR) Measures

Offer individual properties products to reduce the likelihood of flood water entering the property. Products include air brick covers, flood doors, non-return valves and pumps. This option will not reduce flooding to the wider area and only reduce the impact of internal flooding to individual properties.



Illustration of Property Flood Resilience Measures

Other updates – Surface Water Drains

Since we last updated you our colleagues at Suffolk Highways have undertaken additional survey and jetting of the surface water drains at Bridge Street. The survey has identified that the outfall to the River Waveney is not isolated from the river. Suffolk Highways will be working closely with Anglian Water and the Environment Agency to ensure this is rectified as soon as possible.

Other Updates - Temporary Pump

East Suffolk Council and Waveney Norse, with support from the Environment Agency, set up a procedure for the deployment of a temporary pump to help alleviate flooding from the main river at Fen Lane. This procedure is still in place, but we are looking to determine if it is still required once the outfall at Bridge Street is fixed.

Other Updates - Community Engagement

We have been looking to support the community in creating a flood group or flood action plan. This would ensure residents know what to do and who to contact for support in the event of a flood. The Environment Agency and members of the Town Council met on Thursday 17 November 2022 to discuss how this could be set up in Beccles.

Any new flood group would link into the community emergency planning group already

in place which is managed by Beccles Town Council.

Contact

Charlotte La Vedrine

Environment Agency

Flood & Coastal Risk Management Advisor

Telephone: 020 302 58359

Email: charlotte.lavedrine@environment-agency.gov.uk