



ENVIRONMENT AGENCY

CONSULTATION ON IMPROVING FLOOD DEFENCES IN HORNCastle, HALTHAM AND KIRKBY ON BAIN



PRELIMINARY CONSULTATION ON IMPROVING FLOOD PROTECTION IN HORNCASTLE, HALTHAM AND KIRKBY ON BAIN

JULY 1999

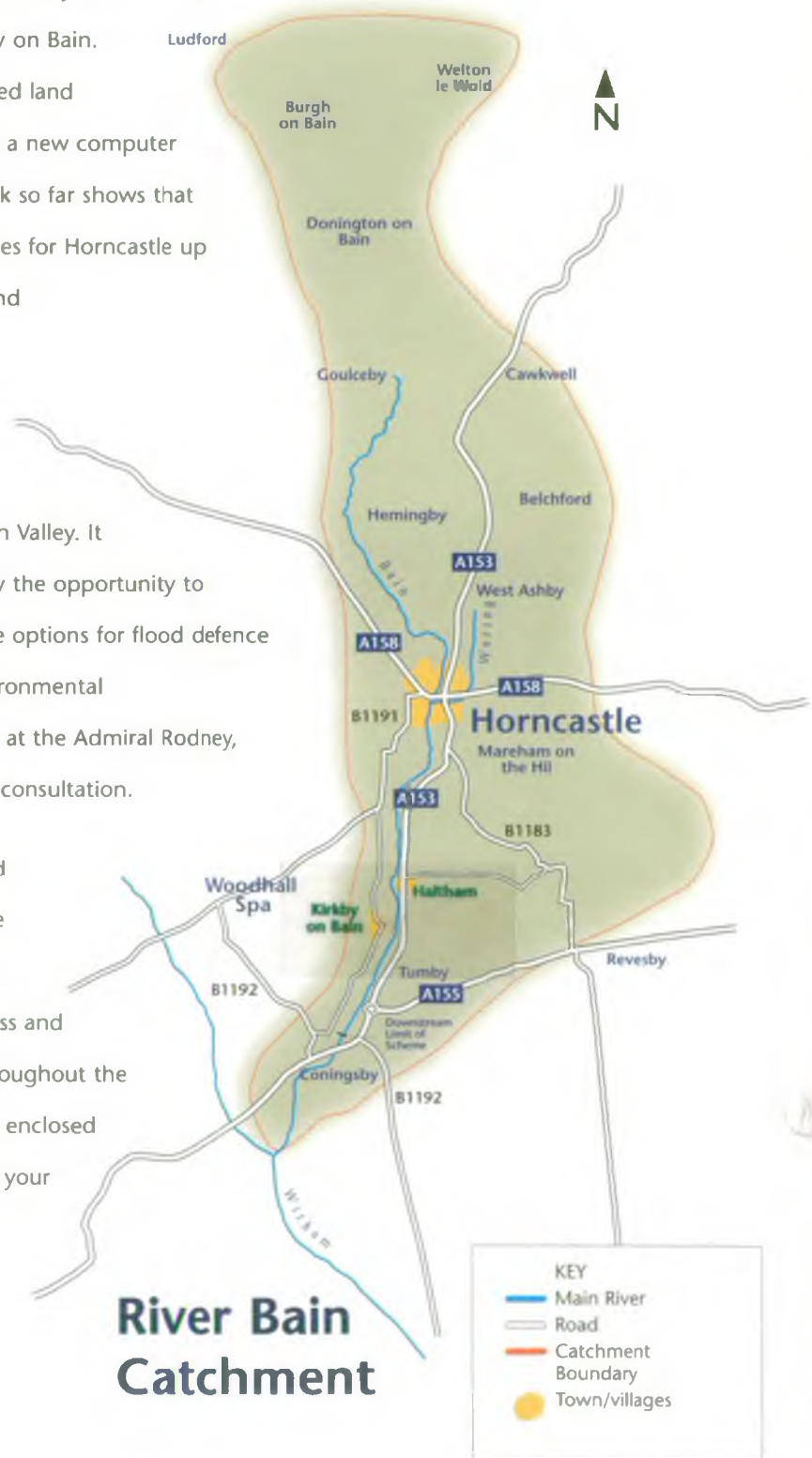
INTRODUCTION

Following completion of the Lower Witham Strategy Study and the River Bain Strategy Study in May 1997, the Environment Agency has reviewed the flood defences in the River Bain valley upstream of Coningsby Lock and specifically in and around Horncastle, Haltham and Kirkby on Bain.

The first stage of these reviews was a detailed land survey of the valley and the construction of a new computer model of flows in the river system. The work so far shows that it is worthwhile improving the flood defences for Horncastle up to a 1:100 year standard and in Haltham and Kirkby on Bain to a 1:75 year standard.

This document is part of the first stage of formal consultation on possible flood defence improvements within the River Bain Valley. It gives everyone with an interest in the valley the opportunity to express views about the flood defences, the options for flood defence improvements and the possibilities for environmental improvements. There will be an exhibition at the Admiral Rodney, North Street in Horncastle to promote this consultation.

There is a formal process for assessing flood defence schemes which is laid down by the Ministry of Agriculture, Fisheries and Food (MAFF). The Agency is following this process and keeping everyone informed of progress throughout the key stages of our review. A questionnaire is enclosed with this document for you to put forward your views. All written responses will be published in the final report.



BACKGROUND

There is a history of flooding in Horncastle and the villages downstream as a result of inadequate flood defences. Flooding occurred most recently in April 1981 and October 1993.

The situation in Horncastle is complicated due to the convergence of two rivers (Waring & Bain), the Witham Third Internal Drainage Board (IDB) Drain and surface water being unable to enter the rivers during high flows.

The Agency recognises that these matters are linked and any improvements to the flood defences cannot impact upon the surface water or IDB drain. The Agency is in liaison with all relevant parties to ensure that a comprehensive overall solution is promoted.

This document is the start of public consultation on the flood defence improvements. The Agency is establishing a Horncastle Liaison Group to ensure effective consultation on all relevant issues.

FIGURE 1 PROGRAMME

STAGE	TIMESCALE
OPTIONS DEVELOPMENT STUDY	JULY 1999
General Consultation	July-Sept 99
Assessment of Defence Improvement Options, technically, economically and environmentally	Sept-Oct 99
Finalisation of Options Development Report (ODR)	Nov 99
Lincolnshire Local Flood Defence Committee considers ODR	Jan 2000
Submission of ODR to MAFF for Agreement in Principle	Feb 2000

At the General Consultation stage the Agency aims to:

- (1) Outline the type of flood defence improvement options to be considered.
- (2) Identify the views and concerns of consultees on these options.
This also provides an opportunity for consultees to put forward any other options that may require consideration.
- (3) Collate environmental data.
- (4) Inform consultees on the consultation programme.

CONSULTATION PROGRAMME

This is the first stage in the consultation process. As proposals develop, there will be further detailed consultation. The general programme and timescales are shown in Figure 1.

Once the Options Development Report has been completed it will be submitted to MAFF for Agreement in Principle. Thereafter, depending on the availability of finance and priority of need, detailed design and further consultation will be carried out.



The River Waring and Thunker Drain confluence

CONSULTATION CONTACT

The Agency is committed to consulting widely and would like to receive the views of local residents and organisations with regard to the options being considered for defence improvements.

If you have any queries, or wish to discuss the proposed plans further then please contact:

Andrew Osborne
The Environment Agency
Kingfisher House
Goldhay Way
Orton Goldhay
Peterborough
PE2 5ZR

A questionnaire and pre-paid address label is provided with this document. Alternatively, feel free to write, telephone or e-mail the Environment Agency with your comments.

Tel: 01733 464469
Fax: 01733 464372
Email: jenny.buffrey@environment-agency.gov.uk

FLOOD DEFENCE IMPROVEMENTS

Funding for flood defence improvement schemes is provided by a local levy and Grant Aid from MAFF. The scheme is appraised in accordance with MAFF guidelines. This is to ensure that all flood defence schemes constructed with Grant Aid from the Government meet established criteria for the justification of public funding and are sustainable in the long term.

There will always be several options depending on local circumstances and these must include the option of 'Do Nothing'.

Potential storage area locations for Horncastle



THE OPTIONS CONSIDERED FOR HORNCASTLE ARE:

(1) Do Nothing

Do nothing is the baseline option common to all schemes and its purpose is to establish the damage and loss if no improvement or maintenance works are carried out.



Plaque showing level of 1960 Flood

Improvement options can then be assessed alongside this baseline.

Under this option no work or maintenance would be carried out. As a result the standard of flood protection through the town will gradually reduce with time as the river channels become obstructed by, for example, siltation and the growth of vegetation.

(2) Maintain Existing Conditions

Under this option the Agency would maintain the river channels and flood defences as they exist today by, for example, regular dredging of the channels, vegetation and vermin control.

The option would maintain the present level of flood protection for the foreseeable future but would not take into account the effects of development, climate change or change in land use which could increase run off. It would not improve the standard of flood defence.

(3) Containment

The standard of flood protection in the town would be improved by the provision of new flood defences and by extending and raising existing defences. The principal locations where such works are necessary are:

- (a) between Bridge Street bridge and Victoria Mill on the River Bain;
- (b) from Jubilee Way culvert for a distance of 200m upstream on the right hand bank of the River Waring; and
- (c) from Stanhope Road Bridge alongside Banks Road to North Street.

Channel improvements would improve the capacity of rivers to pass flood flows thereby reducing the levels of rivers during flood events. This in turn would lead to a reduction in the scale of flood defence improvements required. There are two locations where improvements to the river channels may be feasible, namely:

- (i) Bridge Street - The bridge is a major restriction to river flow. To eliminate the 'back up' of water levels upstream of the bridge it would be necessary to replace it and widen the channel for a distance of 100m upstream.

- (ii) Widening of the River Waring where it runs alongside Banks Road would increase the flow capacity of the river and have the effect of reducing flood levels upstream.

Containment will exacerbate the surface water drainage problems and an interceptor sewer would also need to be constructed. The IDB drain by the Co-op would also require works under this option.

(4) Flood Storage

When the levels of the rivers upstream of Horncastle rise, flood water would be stored in designated storage areas on the rivers Bain and Waring, and then released from storage in a controlled manner when river levels fall. This would reduce flood flows and water levels in the town and significantly reduce the extent of any flood defence works required within the town itself.

Storage facilities of at least 400,000 cubic metres on the River Bain, and at least 200,000 cubic metres on the River Waring, would be necessary to significantly improve flood protection. There are suitable areas on both rivers to provide these amounts of flood storage. It is likely that several areas on both rivers would be required to provide the total storage volumes needed in each case. The storage areas would fill on a sequential basis, with the area furthest upstream on each river always filling first and the most downstream area only filling during severe flood events.

Under this option the need for walls in the town centre would be reduced. However, works would still be required on the River Bain and the IDB drain by the Co-op.



The River Waring Banks Road



The River Bain at Watermill Road

Containment improvements in Horncastle



THE OPTIONS CONSIDERED FOR HALTHAM AND KIRKBY ON BAIN ARE:

The options for Haltham and Kirkby on Bain depend to a limited degree on the flood alleviation measures for Horncastle. The options so far considered for the villages are:

(1) Do Nothing

(2) Maintain Existing Conditions

The details of the above two options are the same as for Horncastle.

(3) Village Protection Banks

At Haltham, the left bank of the River Bain would be raised and a bank across the floodplain would be constructed to tie into the higher ground downstream of the village. At Kirkby on Bain, the right bank of the river would be raised along a length of approximately 1 km.

(4) Kirkby on Bain Bypass Channel

Flood flows would be diverted away from the village by constructing a bypass channel through land on the left bank of the river between Haltham Lock and Haltham Beck.

(5) Flood Storage Area Upstream of the Villages

A storage area upstream of the villages would be created to hold up flood flows and release them in a controlled manner when river levels have fallen. Some works within the villages may also be required.

(6) Kirkby on Bain Weir

The weir structure presents an obstruction to flood flows and results in their 'backing up' upstream of the weir. Modifications to the weir structure would reduce this 'back up'.

(7) Hybrid Scheme

An improvement scheme may consist of a mixture of the above options.

COMPLEMENTARY WORKS

Internal Drainage Board and Surface Water Sewerage works

The preceding options concern Agency maintained rivers. There are, however, two other systems which contribute to flooding in Horncastle – Ings Drain which is the responsibility of the Witham Third Internal Drainage Board and the surface water sewerage system. The latter is a mixture of sewers maintained by Anglian Water, highway drains and private drains. In order to provide a comprehensive flood alleviation scheme for the town the deficiencies of the two systems need to be assessed and options developed for their improvement.

Environmental Assessment

Sections 6 and 7 of the Environment Act 1995 require the Agency to take into account the environmental impact of its actions and, through its actions, to conserve and enhance the environment. The environmental implications of each of the options will therefore be fully assessed during the production of the Options Development Report.

Once the preferred option(s) has/have been chosen, detailed environmental assessments or appraisals will be

undertaken. This will be done in parallel with the detailed design in order to comply with the Environmental Impact Assessment (Land Drainage Improvement Works) Regulations 1999, SI1783, and the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999, SI293.

The Environmental assessment/appraisal process will:

- Describe the existing environment.
- Identify potential impacts of the detailed design options.
- Identify possible mitigation measures.
- Identify monitoring requirements.

LIST OF CONSULTEES

1st Horncastle Scout Group Headquarters
Anglian Water – Lincoln
British Horse Society
Coningsby and Tattershall Joint Village Appraisal Council for the Protection of Rural England
Country Landowners Association
Countryside Agency
East Lindsey District Council
Edlington with Wispington Parish Council
English Heritage
English Nature
English Sports Council
Farming and Rural Conservation Agency
Farming and Wildlife Advisory Group
Haltham Parish Council
Heritage Trust of Lincolnshire
Horncastle Canal Restoration Society
Horncastle Town Council
Horncastle Youth Centre
Inland Waterways Association
Institute of Fisheries Management
Kirkby on Bain Parish Council
Lincoln and District Angling Association
Lincolnshire Anglers Consultative Association
Lincolnshire County Council
Lincolnshire Heritage
Lincolnshire Trust for Nature Conservation
Low Toynton Parish Council
Ministry of Agriculture, Fisheries and Food
Ministry of Defence
N&S Anglers Consultative Council
National Farmers Union
National Federation of Anglers
Ramblers' Association
Roughton Parish Council
Royal Society for the Protection of Birds
Salmon and Trout Association
Scrivelsby Parish Council
Tattershall Parish Council
The Witham Third District Internal Drainage Board
The Woodland Trust
West Street Residents Association

ANGLIAN REGION ADDRESSES

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NORTHERN AREA OFFICE

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Waterside North
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CENTRAL AREA OFFICE

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EASTERN AREA OFFICE

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Cobham Road
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Suffolk IP3 9JE
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For general enquiries please call your local Environment Agency office. If you are unsure who to contact, or which is your local office, please call our general enquiry line.

**ENVIRONMENT AGENCY
GENERAL ENQUIRY LINE
0645 333 111**

The 24-hour emergency hotline number for reporting all environmental incidents relating to air, land and water.

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EMERGENCY HOTLINE
0800 80 70 60**

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