

Introduction

We are responsible for managing flood risk and minimising the damage caused by flooding. In 2003 we studied the flood risk from Bin Brook. This study assessed the standard of flood defences and the areas affected by the flooding. As a result of this study, a number of options for flood defence improvements have been identified for further detailed investigation.

Figure 1, over the page, shows the location map of the study area.

Background

Bin Brook is a tributary of the River Cam, flowing west to east and joining the River Cam in the centre of Cambridge. This is shown on the location map opposite.

The river flows parallel to the A603 Barton Road and passes beneath the Gough Way housing estate through a culvert. Properties in the Gough Way estate and nearby are at risk of flooding from the brook.

An existing flood relief channel, shown on the location map, reduces the risk of flooding but its capacity is limited. The flood relief channel, which skirts Gough Way, carries excess water downstream when the capacity of the culvert beneath Gough Way estate is exceeded. The channel is concrete lined along most of its length and the last section is earth. This is shown in Photograph 1 at the back of the document.

During extreme events, the capacity of the flood relief channel is insufficient to carry the volume of water. This results in flooding, as experienced in October 2001.

Proposed options

The initial flood risk study identifies a number of possible flood alleviation options. These are outlined in Table 1 below and locations are shown on Figure 2 over the page. Photographs of the locations discussed are at the back of document.

All options are compared to the 'Do nothing' option.

Table 1 Proposed Flood Alleviation Options

	Option	Description	Outcome
1	Do nothing	No works undertaken, including maintenance works.	Increased flooding as the condition of the channel deteriorates.
2	Do minimum	Continued maintenance as under the present management regime.	No improvement in the level of flood alleviation to affected properties.
3	Increase the capacity of existing flood relief channel	Two alternative options: a) Widening the existing flood relief channel into adjacent arable fields. b) Channel diversion to the rear of properties in Barton Road to join the existing flood relief channel.	Increased standard of flood protection through increased channel capacity, allowing greater volumes of water to be carried downstream.
4	Storage of floodwaters upstream of affected properties	Creation of a flood storage area in agricultural land near Coton in partnership with the Coton Countryside Park project. This will involve constructing earth embankments and a control structure to restrict flows.	Increased standard of flood protection through storage of excess volumes of water and controlled release downstream. Recreational and wildlife area including pond or lake.

Key environmental issues

The environmental issues and enhancement opportunities associated with each option are investigated. This is part of the Environmental Assessment and option selection process, together with any additional issues raised through this consultation.

Key issues

- disturbance to local community from increased noise, traffic and visual intrusion during construction
- disturbance to protected species during construction
- habitat loss
- disruption and disturbance to recreational activities during and following construction including possible diversions to public Rights of Way
- visual intrusion of flood storage embankments
- changes to landscape character
- deterioration in water quality from accidental spillage or in-channel working
- damage or disturbance to unknown archaeological features

Enhancement opportunities

- reduced risk of flooding following construction
- habitat creation and enhancement opportunities
- visual enhancement opportunities
- recreational improvements

These will be considered during the selection of the preferred option, together with any additional issues raised through this consultation.

Preferred option selection

The next step will be to identify the preferred flood alleviation option. This will involve technical, economic and environmental assessment of each option.

Technical considerations will include:

- whether the option can be constructed and operated
- what standard of flood protection the option will provide
- whether the option will affect drainage of the surrounding land

Economic considerations will include:

- the cost of the damage caused by flooding if no flood alleviation works are undertaken
- the reduction in these damages provided by the option
- the cost of constructing and operating the option

Environmental considerations will include:

- the potential positive and negative environmental effects of constructing and operating the option
- the potential for environmental enhancements
- the support for the option identified during consultation

Consultation

A consultation reply slip is enclosed for you to help us. We would like to hear your views on the proposed flood alleviation options and any information you or your organisation may hold relating to the proposed options. This is an important part of the decision making process and the environmental assessment.

Consultation will continue with statutory organisations, interested parties, landowners and residents as the development of the preferred option progresses. This process is shown in Table 2.

Table 2 Outline of consultation process

Stage in programme	Consultation opportunity	Timescale
Option identification and technical, economic and environmental evaluation Scoping of environmental assessment	<ul style="list-style-type: none"> • distribution of this consultation document • public exhibition and advertising • meetings with interested consultees 	April - May 2005
Selection of preferred option Detailed environmental assessment of preferred option Issue of Environmental Report	<ul style="list-style-type: none"> • distribution of stage 2 consultation document, presenting the preferred option • public exhibition (if required) and advertising • meetings with consultees and stakeholders 	June 2005 - September 2005
Application for planning permission (subject to selected option)	<ul style="list-style-type: none"> • local Planning Authority consultation process 	September 2005
Detailed design	<ul style="list-style-type: none"> • continued consultation with all affected consultees 	2006
Construction	<ul style="list-style-type: none"> • continued consultation with all affected consultees 	2007 (depending on availability of funding)

Consultees

The following organisations will be consulted as part of this consultation process. Responses from other interested parties are welcome.

This consultation document will also be distributed to landowners, affected residents and internally within the Environment Agency.

Statutory Consultees

Countryside Agency
English Heritage
English Nature
South Cambridge District Council
Cambridge City Council

Other Interested Parties

Biological Records Centre	Department of Food and Rural Affairs (Defra)
British Horse Society	Faber Maunsell
British Waterways	Farming and Wildlife Advisory Group (FWAG)
Butterfly Conservation Trust	Hawk & Owl Trust
Cambridgeshire Badger & Otter Group	Inland Waterways Association
Cambridgeshire Bat Group	Landowners
Cambridgeshire Biological Records Centre	Local Residents
Cambridgeshire Bird Group	National Farmers Union
Cambridgeshire County Council	Ramblers Association
Cambridgeshire Mammal Society	Royal Commission on the Historical Monuments of England
Cambridgeshire Preservation Society	Royal Society for the Protection of Birds (RSPB)
Cambridgeshire Wildlife Trust	National Grid Transco
Council for the Protection of Rural England	Woodland Trust
Ministry of Defence, Defence Estates	

Contacts

If you have any queries or issues you wish to discuss please contact:

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We would be grateful for any of your comments. Please return the enclosed consultation reply slip to the above address by the date shown on the slip.

Photographs of proposed sites

The following photos show where proposed works may take place.

Photograph 1

The existing flood relief channel may be widened into adjacent arable fields



Photograph 2

Proposed channel may be diverted to the rear of properties along Barton Road.



Photograph 3
Location of the proposed flood storage area near to Coton village, with the M11 to the north.



Photograph 4
Example of a Flood Storage Area.

