

Broadland Flood Alleviation Project

Protecting



Broadland

Flood alleviation improvements for Short Dam Level, Burgh St Peter (Compartment 23)

Public Consultation November 2005

Introduction

In May 2001 Broadland Environmental Services Limited (BESL) was awarded a long-term contract by the Environment Agency to improve and maintain flood defences in Broadland. The Agency's approach to flood alleviation in Broadland was adopted in the 1990's and is based on a strategy consisting mainly of bank strengthening, erosion protection and reducing the risk of banks breaching. BESL updated this strategy and is now carrying out improvement works throughout 40 individual flood compartments in Broadland.

The major improvement works will be undertaken during the first 10 years of the Project; thereafter the banks will be subject to regular condition monitoring and maintenance works as required.

Consultation

This leaflet has been prepared as part of an ongoing process of consultation to inform you about BESL's proposals and to seek your views on them.

The purpose of this consultation document is to:

- Explain the range of flood defence options that BESL can consider
- Outline our preferred flood defence proposals at this stage
- Invite your views on these proposals
- Ensure, from the responses we receive, that we are aware of any specific local issues that ought to be considered as we go on to develop the proposals in greater detail.

BESL will carefully consider any comments it receives, seeking clarification and incorporating changes before finalising its plans. The results of this consultation will play an important part in BESL's planning application for the proposals. General feedback on this consultation will be contained in the planning application documents.

A questionnaire is provided with this leaflet. If you have not received one, or if you would like an electronic copy of the questionnaire by email, please contact Adele Dodgson at the address given at the end. Alternatively, all consultation documents produced by BESL can be downloaded from the BFAP project website (www.bfap.org)



Floodbank and Reeded Road



Need to improve existing flood defences

The existing flood defences along the north bank of the River Waveney at Short Dam Level (Compartment 23) comprise earth floodbanks with a mixture of reeded ronds and a small amount of metal and timber piling.

The defences protect almost 80ha of grazing marsh and fields under arable reversion. The standard of the banks has progressively reduced over time due to bank settlement and the combined effects of erosion of the rond and corrosion of sheet metal piling. There are also some areas of tree cover on the banks and rond which appear to have contributed to the loss of reed fringe and erosion of the rond. In some areas the floodbanks are too narrow and the banks too steep, making them vulnerable to breaching during very high tides when floodwater overtops them. The floodbanks should be able to cope with a certain amount of overtopping in extreme surge events. By carrying out flood defence works BESL aims to strengthen the banks to prevent breaching of the floodbanks that could have long term adverse effects on the nature of the grazing marshes.



Grazing Marsh Dyke

What options did BESL consider for improvement works in this compartment?

The range of flood alleviation solutions that BESL considered for these works follows the Environment Agency's and BESL's overall Strategy for flood alleviation in Broadland. The choice of technique follows the Strategy options for sustainable flood defences that are technically feasible; offer value for money; are environmentally sound; and acceptable to local communities. Specific solutions are based on up-to-date survey data (assessing the condition of the existing floodbank and erosion protection), an evaluation of the level of flood defence provided and local issues including environmental considerations.

The options BESL considered are illustrated and explained in the enclosed flyer. A brief outline of some of the decision criteria leading to a particular option as the preferred solution is also given.

What are BESL's specific proposals for Compartment 23?

The plan on page 3 shows the solutions that BESL are proposing for particular sections of floodbank. A summary of these works is as follows:

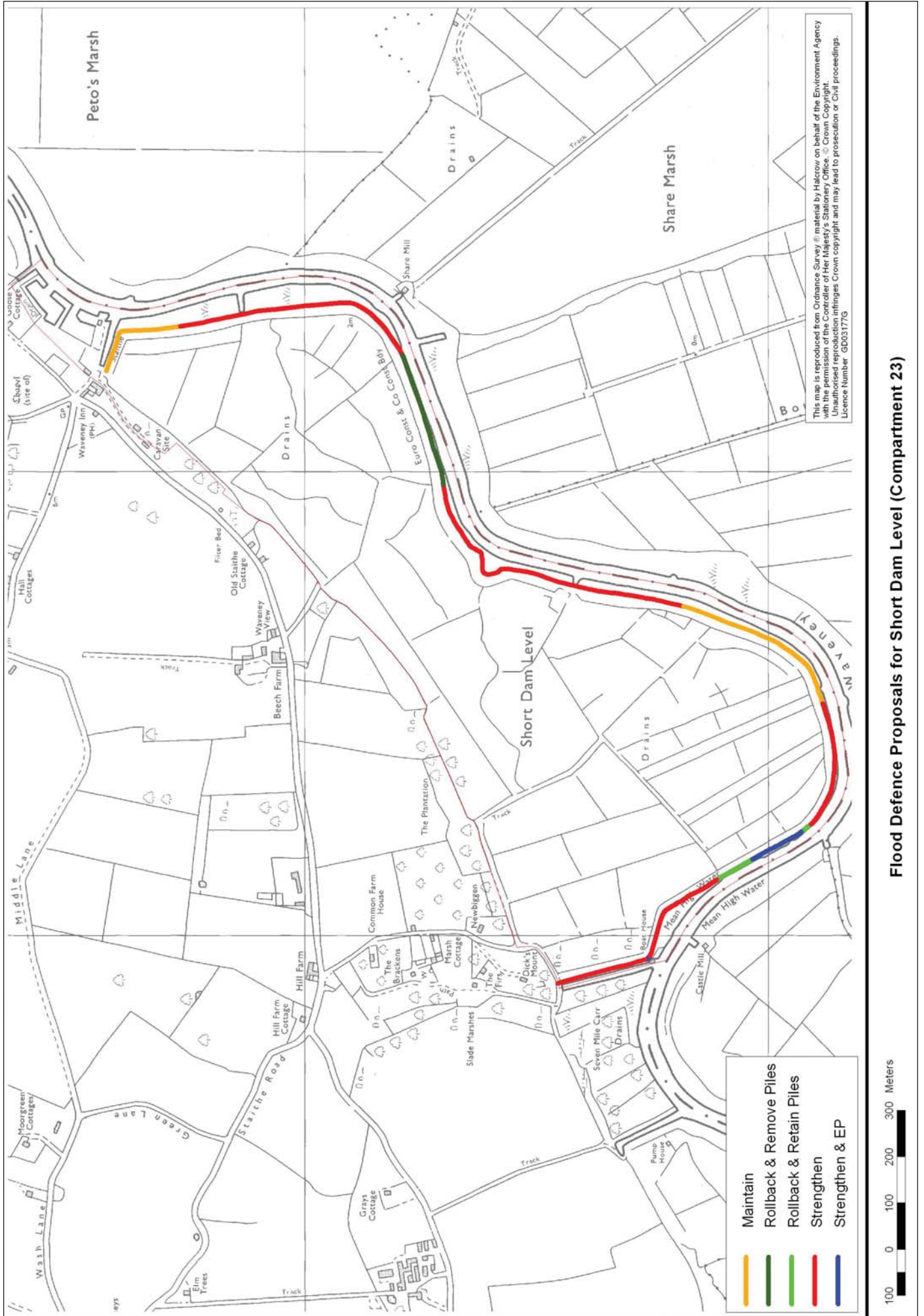
Short Dam Level (Compartment 23)	
Proposed Works	Length (m)
Maintain	608
Strengthen	1900
Strengthen and install erosion protection	134
Rollback and remove piles	294
Rollback and retain piles	116



Informal Mooring Area

The proposals comprise a combination of maintenance, strengthening, rollback, pile retention, pile removal and erosion protection. The primary aim is to provide defences that will resist breach in the event of a high level flood event occurring (the actual standard of defence against over-topping remains that which existed in 1995, so there will be no change in flooding patterns in the valley as a whole).

Plan of proposals



Flood Defence Proposals for Short Dam Level (Compartment 23)

What are the potential issues associated with this work?

The Strategic Environmental Framework (SEF) process, developed by BESL with extensive stakeholder input, sets out environmental standards for maintenance, flood defence improvements and first-time defences for undefended communities. The scheme details are consistent with these environmental standards.

The table below identifies some of the key issues associated with these proposals. We would welcome your comments on these and any other issues that you think should be included.

<p>What effects will the proposal have on nearby designated sites such as Stanley and Alder Carrs SSSI?</p>	<p>BESL have already undertaken hydraulic modeling for these proposals, in combination with other planned schemes, and demonstrated no impact on designated sites.</p>
<p>How will the proposals affect flora and fauna throughout the compartment ?</p>	<p>Surveys of water voles, bats, reptiles, scarce plants and dyke vegetation have been undertaken to identify specific requirements that need to be incorporated into the detailed design and work schedule. Issues associated with ecology and nature conservation will be addressed in the Environmental Statement that accompanies the planning application.</p>
<p>What changes to the local landscape will the work cause?</p>	<p>Most of the visual impacts will be confined to the construction period and therefore be temporary in nature e.g. the view of bare ground until vegetation re-establishes. However, there will be a need to remove some mature trees which will lead to some localised changes. Completion of the flood alleviation works will provide long-term protection of the Broads landscape and its valuable habitats from the damaging effects of flooding</p>
<p>To what extent will the proposed work affect navigation?</p>	<p>The majority of the construction works will be land-based. Any water-based work will be completed outside of the main holiday season and on weekdays only to limit effects on navigation. Temporary channel markers will be provided where necessary to mark any hazards arising during and immediately after construction work while vegetation re-establishes. Tree removal may improve sailing conditions in some river stretches by reducing the level of wind shading</p>
<p>What are the effects of the works on other recreational activities?</p>	<p>Great Yarmouth Wildfowling is carried out within a section of the bank. The works will be undertaken outside of the shooting season.</p>
<p>What are the implications for landowners within Compartment 23 as a result of the proposed improvement works?</p>	<p>During the works there may be some loss of access and disruption to farming activities. On completion there will be a small reduction in grazing marsh. BESL contact landowners and tenants early in the design process to ensure their requirements are taken into account.</p>
<p>Will flood defence works be carried out elsewhere in the Waveney Valley? What is the proposed timing of these works?</p>	<p>Flood defence schemes are also planned to start in Compartments 24 (Long Dam Level), 26 (Beccles Marshes), 27 (Barnby and North Cove Marshes) and 28 (Share and Carlton Marshes) in 2006.</p>

Alternatives BESL considered and discounted

Overall, the existing flood defences need improving. Where the existing erosion protection is failing (e.g. piling is in bad condition or the road is too narrow), setback or rollback are usually the preferred solutions to improve the level of flood protection. Where erosion protection is considered as adequate or adjacent land use and/or poor ground conditions and material precludes setback, then floodbank strengthening is proposed instead.

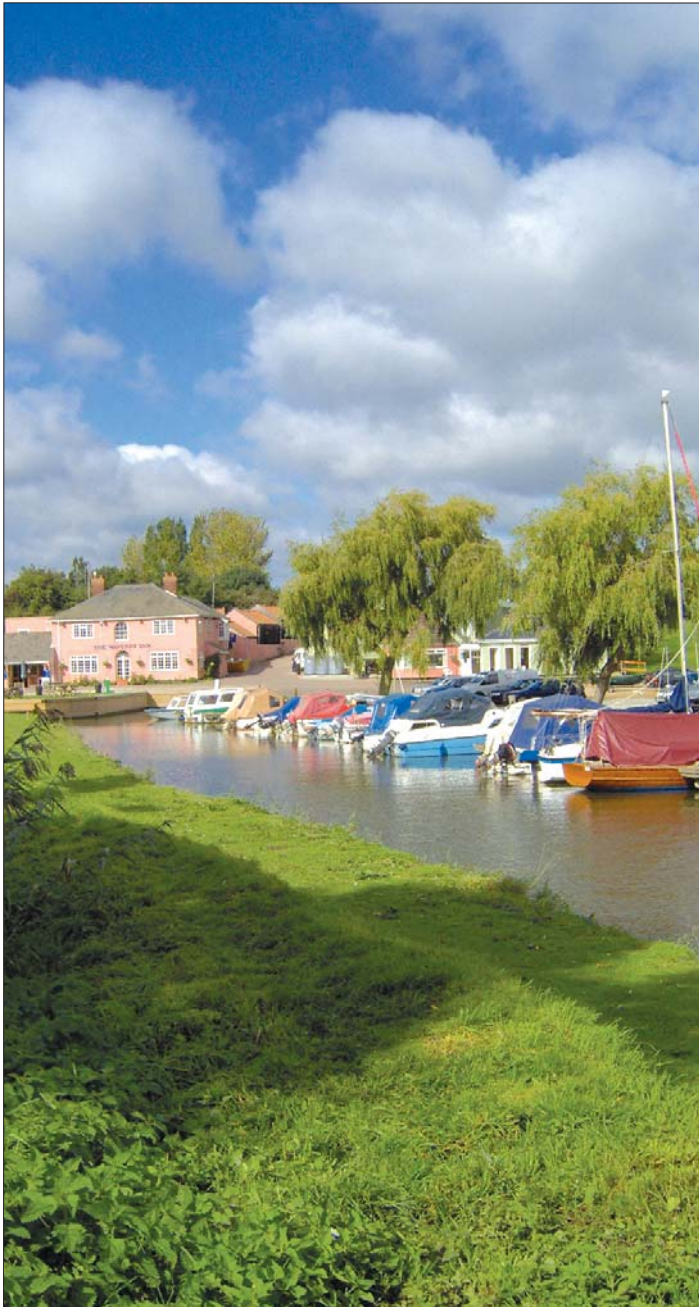
The “do minimum” alternative would involve ‘maintenance only’ to both the floodbank and existing erosion protection. Some sections of the existing flood defences within this compartment only require maintenance. However, large parts of the remaining floodbanks do not provide the level of protection required, as they are low and/or unstable due to small roads, steep slopes and poor piling. If the proposed works are not undertaken, there would be an increased risk of overtopping and a greater likelihood of breach. BESL do not consider the consequence of this alternative acceptable.



Pump House



Soke Dyke and Grazed Folding



Staithe at Waveney River Centre

What is the proposed timing of the works?

Tree and scrub clearance in this compartment is programmed for the 2005/2006 winter period. Flood alleviation works are proposed to start in 2006 and be completed in 2007.

Sections of the floodbank that are to be maintained will have their condition reassessed each year as part of BESL's ongoing maintenance programme.



Tree-lined River Edge

What are the next steps?

Thank you for taking the time to read through this information leaflet and answering the associated questions in the accompanying questionnaire. BESL is keen to find out what you think of these proposals. We will collate your replies and will then consider all comments made; these will help to inform us as we develop the proposals in more detail. If you have any queries regarding either these proposals, or those elsewhere in the Waveney Valley, please phone Adele Dodgson, BESL Environmental Scientist on:

01603 226161

If you wish to reply we would encourage you to email your reply to Adele Dodgson at:

Feedback@bfap.org

Please mark the subject line of your email with:

Compartment 23 Consultation

Alternatively, our freepost address is:

**Broadland Environmental Services Limited
Freepost ANG20504
Norwich
NR1 1ZW**

Both the consultation document and accompanying questionnaire can be downloaded from the project website at:

www.bfap.org

Please ensure that all replies are received by

5th December 2005

NB. To reduce paper usage, BESL would like to email future consultation documents to as many stakeholders as possible. We would greatly appreciate it if you could provide us with an email address to send correspondence to in the future.

List of consultees

In addition to landowners this consultation document is being sent to the following public bodies and organisations:

- Aldeby Parish Council
- Beccles Amateur Sailing Club
- British Dragonfly Society
- British Marine Federation
- Broads Angling Strategy Group
- Broads Authority
- Broads Authority Navigation Committee
- Broads Hire Boat Federation
- Broads Reed and Sedge Cutters Association
- Broads Society
- Burgh St Peter with Wheatacre Parish Council
- Countryside Agency
- Campaign to Protect Rural England (CPRE)
- DEFRA – Rural Development Service East
- English Nature – Norfolk and Suffolk Teams
- Environment Agency
- East of England Tourist Board
- Lower Waveney First Internal Drainage Board
- National Association of Boat Owners
- Norfolk and Suffolk Boating Association
- Norfolk Anglers Conservation Association
- Norfolk Broads Yacht Club
- Norfolk County Council
- Norfolk Wildlife Trust
- River Cruiser Class
- Royal Norfolk and Suffolk Yacht Club
- RSPB (East Anglian Regional Office)
- Suffolk Wildlife Trust
- South Norfolk District Council
- Waveney & Oulton Broad Yacht Club
- Waveney River Tours
- Waveney Valley Canoe Club

Please advise us if you think there are other organisations that we should be consulting.

Contact details:

Broadland Environmental Services Limited
Third Floor, Grosvenor House
112 – 114 Prince of Wales Road
Norwich
NR1 1NS



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The Broadland Flood Alleviation Project is being delivered under the Public Private Partnership Programme by Broadland Environmental Services Limited on behalf of the Environment Agency.

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