



# Coastal Schemes with Multiple Objectives and Funders (FD2635) Lessons Learnt and Guidance Report

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Defra  
Ergon House  
Horseferry Road  
LONDON, SW1P 2AL



Environment Agency - Anglian Region  
Kingfisher House  
Goldhay Way, Orton  
PETERBOROUGH  
Cambridgeshire PE2 5ZR



## Maslen Office

Maslen Environmental (Part of the JBA Group)  
Salts Mill  
Victoria Road  
Saltaire  
Shipley  
West Yorkshire  
BD18 3LF

## Maslen Project Manager

Thomas Hudson

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## Contract

This report describes work commissioned by Phil McCormick and Daniel Johns, on behalf of Defra and the Environment Agency, by a letter dated 13<sup>th</sup> January 2010. Maslen Environmental's representative for the contract was Thomas Hudson and Steve Maslen. Dr Joanne Harvatt, Thomas Hudson and Steve Maslen of Maslen Environmental carried out this work.

Prepared by ..... Joanne Harvatt BA MSc PhD  
Social Scientist

Prepared by ..... Thomas Hudson BSc  
Project Manager

Prepared by ..... Terry Oakes BSc MICE  
Consulting Engineer

Reviewed by ..... Steve Maslen BSc MPhil CMLI  
Project Director

## Purpose

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## Acknowledgments

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# Contents

|           |                                                          |           |
|-----------|----------------------------------------------------------|-----------|
| <b>1.</b> | <b>Introduction</b> .....                                | <b>3</b>  |
| 1.1       | Summary of Case Studies .....                            | 4         |
| <b>2.</b> | <b>Multiple objectives</b> .....                         | <b>13</b> |
| 2.1       | Introduction .....                                       | 13        |
| 2.2       | Summary of lessons learnt from Case Studies .....        | 13        |
| 2.3       | Findings .....                                           | 13        |
| 2.4       | Guidance .....                                           | 15        |
| <b>3.</b> | <b>Partnership Building and Governance</b> .....         | <b>17</b> |
| 3.1       | Introduction .....                                       | 17        |
| 3.2       | Summary of key lessons learnt from the Case Studies..... | 17        |
| 3.3       | Findings .....                                           | 18        |
| 3.4       | Guidance .....                                           | 20        |
| <b>4.</b> | <b>Funding and contributions</b> .....                   | <b>22</b> |
| 4.1       | Introduction .....                                       | 22        |
| 4.2       | Summary of lessons learnt from Case Studies .....        | 22        |
| 4.3       | Findings .....                                           | 23        |
| 4.4       | Guidance .....                                           | 26        |
| <b>5.</b> | <b>Approvals</b> .....                                   | <b>27</b> |
| 5.1       | Introduction .....                                       | 27        |
| 5.2       | Summary of lessons learnt from Case Studies .....        | 27        |
| 5.3       | Findings .....                                           | 27        |
| 5.4       | Routes through the approval process.....                 | 30        |
| 5.5       | Guidance .....                                           | 31        |
| <b>6.</b> | <b>Recommendations for future work</b> .....             | <b>32</b> |
|           | <b>Further reading</b> .....                             | <b>33</b> |

## List of Figures

|                                                                                                                   |    |
|-------------------------------------------------------------------------------------------------------------------|----|
| Figure 1. Alkborough Flats Managed Realignment - breach to the right.....                                         | 4  |
| Figure 3. During (left) and after (right) construction of part of the Cleveleys scheme. ....                      | 5  |
| Figure 2. New sluices to allow more rapid floodwater evacuation (left) and the completed new channel (right)..... | 5  |
| Figure 4. East Head. ....                                                                                         | 6  |
| Figure 5. Erosion of Environment Agency flood defence embankment (Nov 2004).....                                  | 6  |
| Figure 6. East Lane, Bawdsey Coast Protection and Flood Defence Completed Scheme. ....                            | 7  |
| Figure 7. View of dilapidated defences, post construction of rock revetment (2007).....                           | 7  |
| Figure 8. Rock revetment in place at southern end (2007).....                                                     | 8  |
| Figure 9. Kilnsea (foreground) and Spurn Head (background) .....                                                  | 8  |
| Figure 11. Completed seawall, beach and jetties.....                                                              | 9  |
| Figure 10. Coastal Erosion 1962. ....                                                                             | 9  |
| Figure 12. Extent of Bridgwater area Flood Tariff to be imposed.....                                              | 9  |
| Figure 13. Before and after the beach replenishment at Poole. ....                                                | 10 |
| Figure 14. Poole sea defences - long floodwall section. ....                                                      | 10 |
| Figure 15. Poole sea defence - breakwaters.....                                                                   | 10 |
| Figure 18. New installed break-water part of unique feature. ....                                                 | 11 |
| Figure 16. Overtopping at Esplanade on 1 March 2006.....                                                          | 11 |
| Figure 17. Defence Failure at Redcar. ....                                                                        | 11 |
| Figure 19. Phase 1 Marine Lake. ....                                                                              | 12 |

## Abbreviations

|       |                                                       |
|-------|-------------------------------------------------------|
| CABE  | Commission for Architecture and the Built Environment |
| CCAG  | Coastal Concern Action Group                          |
| CHC   | Chichester Harbour Conservancy                        |
| CPA   | Coastal Protection Act                                |
| EEDA  | East of England Development Agency                    |
| EHWG  | East Head Working Group                               |
| EIA   | Environmental Impact Assessment                       |
| ELT   | East Lane Trust                                       |
| ERDF  | European Regional Development Fund                    |
| EU    | European Union's                                      |
| FCERM | Flood and Coastal Erosion Risk Management             |
| FDGiA | Flood Defence Grant-in-Aid                            |
| FEPA  | Food and Environmental Protection                     |
| FRM   | Flood Risk Management                                 |
| GC    | Gwynedd Council                                       |
| HCA   | Homes and Communities Agency                          |
| HLF   | Heritage Lottery Funding                              |
| LDF   | Local Development Framework                           |
| MoU   | Memorandums of Understanding                          |
| MTP   | Medium Term Plan                                      |
| NNDC  | North Norfolk District Council                        |
| NWDA  | Northwest Regional Development Agency                 |
| PAB   | Project Appraisal Board                               |
| PAR   | Project Appraisal Report                              |
| PHC   | Poole Harbour Commissioners                           |
| RDA   | Regional Development Agency                           |
| RFA   | Regional Funding Allocation                           |
| SAC   | Special Areas of Conservation                         |
| SDC   | Sedgemoor District Council                            |
| SMP   | Shoreline Management Plan                             |
| SPA   | Special Protection Area                               |
| SSSI  | Sites of Special Scientific Interest                  |
| WDDC  | West Dorset District Council                          |
| WRFDC | Wessex Regional Flood Defence Committee               |
| WW    | Wessex Water                                          |
| YWT   | Yorkshire Wildlife Trust                              |

# 1. Introduction

This Guidance and Lessons Learned Report has been prepared to help exchange best practice and knowledge between stakeholders involved in coastal schemes. Specifically it provides advice on the delivery of schemes with multiple objectives, partners and funders.

The Guidance has been derived from Case Study evidence from around England and Wales. Case Studies were chosen which demonstrated innovative or good practice approaches to:

- Setting and managing multiple objectives;
- Building partnerships;
- Attracting alternative funding;
- Managing the approvals process.

These four topic areas are used as the framework for analysis and the guidance in this report. The Case Study detail has been derived from interviews and workshop events with the main partners and project managers involved in each scheme.

The outputs from the study work are presented in two parts. Part 1 comprises the Guidance and Lessons Learned Report. Part 2 comprises 14 Case Studies. Each of the 14 Case Studies provide greater background and depth on the issues faced on each project and how these were resolved.

## **Who should use the Guidance Report and Case Studies?**

The Guidance Report and Case Studies are intended to be of value to all potential stakeholders faced with coastal flood and erosion issues. To assist the process of selecting Case Studies of particular interest we have included key words at the beginning of each Case Study.

## **Why have the Guidance and Case Studies been produced?**

The Environment Agency's 'Long Term Investment Strategy', published in July 2009, anticipates that investment in flood and coastal erosion risk management will need to double by 2035, when compared to the 2010/11 levels of investment, in order to avoid the number of properties at significant risk of flooding from rivers and the sea increasing over the period.

The Strategy highlights the importance of efficiencies savings, voluntary contributions and other multiple-sources of funding in addressing this funding gap. This 'Long Term Investment Strategy' reinforced a recommendation made by Sir Michael Pitt during his independent review of the 2007 floods, saying that, "this long-term approach should not assume that the costs of flood risk will be met centrally".

Defra supported this view and suggested county and unitary authorities, in their new local flood risk leadership role, should consider whether additional local priorities could be funded differently.

The overall aim of research project 'FD2635 - Coastal Schemes with Multiple Funders and Objectives' was to provide evidence and guidance for Defra's and Environment Agency's approach to securing contributions to Flood and Coastal Erosion Risk Management (FCERM) schemes. It has collated evidence from a range of FCERM schemes that had, or have, multiple objectives, multiple partner organisations and multiple funding streams, or any combination of the above. Case Studies have been prepared which cover the whole portfolio of FCERM measures, with particular focus on multi-partner, multi-funder and multi-objective schemes. These provide an evidence base and the basis of guidance for coastal practitioners.

A short list of 14 Case Studies was derived from a much longer list of coastal projects. A range of project types and scales of project were chosen to ensure that most coastal issues were reflected in the study.

## **How is the Guidance Structured?**

Following a brief overview of each Case Study this Guidance Report is structured into sections based on the four researched topic themes:



- Multiple Objectives;
- Partnership Building and Governance;
- Funding and Contributions;
- Approvals.

Each section firstly summarises the key lessons learnt from relevant Case Studies, then describes in more detail the findings and finishes with guidance.

### Research Process Summary

The methodology took a comprehensive approach, starting with the gathering of an evidence base of coastal schemes in England and Wales. This process used desk research, and a large scale, quantitative online questionnaire sent (to over 300 coastal practitioners) to gather a long-list of 130 schemes. These schemes are available as an online database resource to be used by coastal stakeholders planning for future schemes. A shortlisting process then took place, where schemes were screened for their appropriateness to the brief, this involved 70 telephone interviews with coastal scheme representatives and their partners. On completion of scheme screening, 14 exemplar schemes were chosen for further examination at regional stakeholder workshops, and further telephone interviews. An overview of these schemes is included within this document.

## 1.1 Summary of Case Studies

### Case Study 1 - Alkborough Flats Tidal Defence Scheme

The largest managed realignment scheme in the UK completed in 2006, costing £10.2 million; located on the south bank of the Humber Estuary. The Humber is internationally important for habitat and biodiversity interests, with 400,000 people living on its flood plain. It is also internationally important for navigation. Climate change could raise sea levels in the Humber by 1.2m by 2100. The project was led by a partnership including the Environment Agency, English Nature (Natural England), Associated British Ports, North Lincolnshire Council and supported by RSPB, Parish Councils and local landowners. The project attracted substantial external funding from a wide range of sources.



**Figure 1. Alkborough Flats Managed Realignment - breach to the right.**

Copyright: Environment Agency

### Case Study 2 - Blakeney Freshes River Glaven Realignment and Cley to Salthouse Drainage Improvements

Located on the north Norfolk coast, the scheme included moving the existing channel, to protect and enhance a site, which is designated as part of the North Norfolk Coast Special Protection Area (SPA) and Ramsar site. The scheme was completed in 2007 at a cost of £1.5million. The key partners included, the Environment Agency, Norfolk Wildlife Trust, National Trust and Natural England. It was funded by Defra's Flood Defence Grant-in-Aid (FDGiA) however, part of this contribution was used as match funding to generate £854,000 external funding from the European Union's Objective 2 fund, the East of England Development Agency (EEDA) and the DTI.



**Figure 2. New sluices to allow more rapid floodwater evacuation (left) and the completed new channel (right).**

Photos courtesy of Environment Agency

### Case Study 3 - Cleveleys Coastal Defence Improvement and Promenade Enhancement Scheme

Located north of Blackpool in Lancashire this was a three phase coastal project which had to protect, enhance and create public amenities. It was completed in 2010 at a cost of £26million. Project partners include, Wyre Borough Council, Environment Agency, Northwest Regional Development Agency, European Regional Development Fund, Cleveleys Seafront Partnership and Rossall Beach Residents Association. The majority of the funding came from Defra's FDGiA (approximately) with the remainder from the Northwest Regional Development Agency (NWDA), the European Regional Development Fund (ERDF), Wyre Borough Council and the Environment Agency.



**Figure 3. During (left) and after (right) construction of part of the Cleveleys scheme.**

Images courtesy of Wyre Borough Council

### Case Study 4 - East Head Beach Recharge

East Head is situated at the far end of West Wittering in West Sussex. The site is owned and managed by the National Trust with the support of West Wittering Estate Plc. A phased coastal erosion management scheme has been carried out between 2003 and 2009 with conservation, harbour navigation and flood risk protection objectives. The long-term risks are now being managed by the East Head Coastal Issues Advisory Group.



**Figure 4. East Head.**

Image courtesy of the National Trust

### Case Study 5 - East Lane, Bawdsey

East Lane is situated on the Suffolk coast. It is subject to severe coastal erosion and flood risk. Unable to receive grant-in-aid a trust was formed supported by Suffolk Coastal District Council to protect a scheduled ancient monument, and residential properties. The Trust's initiative meant acquiring, and then selling land at development value, to fund the implementation of a coastal defence scheme, it included the use Section 106 planning agreements. Completed in 2009 the scheme involved a hard rock armour revetment providing a 50 year standard of protection.



**Figure 5. Erosion of Environment Agency flood defence embankment (Nov 2004).**

Source: Terry Oakes Associates Ltd



**Figure 6. East Lane, Bawdsey Coast Protection and Flood Defence Completed Scheme.**

Source: M Page

### **Case Study 6 - Happisburgh Emergency Works**

North Norfolk District Council and Coastal Concern Action Group jointly funded and developed a scheme that provided up to 10 years of cliff protection to protect properties from erosion. This allowed the community to adapt and prepare for long term coastal change. Completed in March 2007 at a cost of £250,000.



**Figure 7. View of dilapidated defences, post construction of rock revetment (2007)**

Photograph courtesy of North Norfolk District Council



**Figure 8. Rock revetment in place at southern end (2007)**

Photograph courtesy of North Norfolk District Council

### Case Study 7 - Kilnsea Flood Defence Scheme

Kilnsea is home to a small coastal community located in the East Riding of Yorkshire, situated in a low-lying area, at risk from flooding and erosion. The existing flood defence owned by the Environment Agency was at risk of failure and a plan was put in place to create a new flood bank behind to protect the community in the short term. The scheme was unable to secure grant-in-aid. To address the funding shortfall 'The Kilnsea and Spurn Flood Defence Group' was established to secure funding for the scheme. Completed in 2006 at a cost of £200,000 partners included the Environment Agency, Yorkshire Wildlife Trust and the local community.



**Figure 9. Kilnsea (foreground) and Spurn Head (background)**

### Case Study 8 - Lyme Regis Environmental Improvements

Lyme Regis is a coastal town in West Dorset, referred to as 'The Pearl of Dorset', it is a World Heritage Site heavily reliant on tourism. It has a long history of coastal erosion problems, and to tackle this has a five phase coastal defence programme of projects which started in the 1990's. There are a number of contributing partners including South West Water.



**Figure 10. Coastal Erosion 1962.**

Images courtesy of the Environment Agency

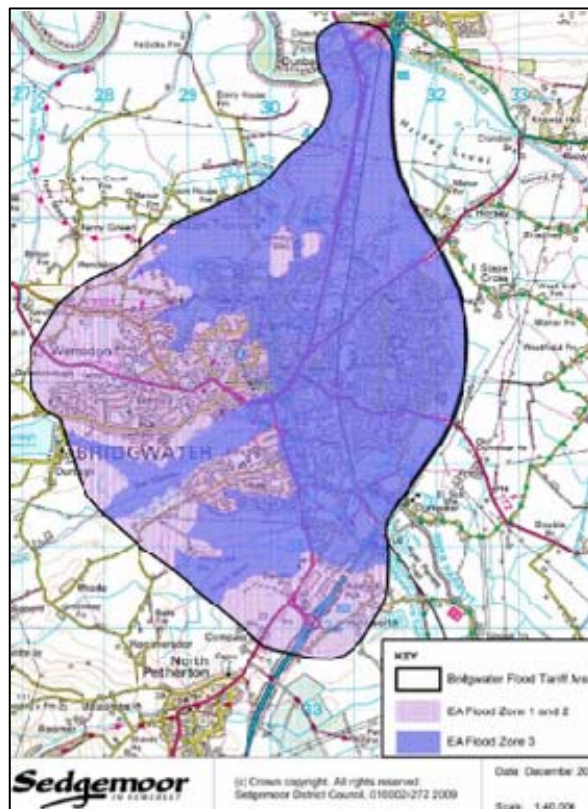


**Figure 11. Completed seawall, beach and jetties.**

Image courtesy of the Environment Agency

### Case Study 9 - Parrett Estuary Strategy

The Parrett Estuary Flood Risk Management (FRM) Strategy is now nearing approval, with the next stage implementation. It takes a partnership approach between the Environment Agency and Sedgemoor District Council. The Parrett Estuary Strategy is aligned with the spatial development proposals in the Local Development Framework (LDF) and proposes a linked and innovative funding mechanism to pay for the preferred FRM options. This is known locally as a new development 'roof tax' through Section 106 Agreements. Expected total FRM scheme cost is £24.6 million and developer contribution is anticipated to contribute £9 million over the next 20 - 30 years.



**Figure 12. Extent of Bridgwater area Flood Tariff to be imposed**

### Case Study 10 - Poole Bay & Swanage Beach Replenishment

A history of hard engineering works has prevented natural beach replenishment in Poole Bay and at Swanage on the Hampshire Coast. This affects the standards of flood and coastal protection. During the winter of 2005/2006, Poole Harbour Commissioners dredged locations and the dredgings were suitable for beach replenishment. Completed in 2006 the beach recharge project cost a total of £5million and included the following partners, Poole Harbour Commissioners, Borough of Poole, Bournemouth Borough Council and Purbeck District Council. The savings from the partnering approach were estimated to be between £8 Million and £15million.



**Figure 13. Before and after the beach replenishment at Poole.**

Source: David Robson, Borough of Poole Council, 2010

### Case Study 11 - Poole Quay Sea Defence Scheme

Poole is a tourist resort on the Hampshire coast, attracting visitors to its natural harbour, history, the Poole Arts Centre and Blue Flag beaches. It is susceptible to tidal inundation therefore flood defence was required. The scheme was completed in 2004, key partners in this scheme were the Poole Harbour Commissioners, Borough of Poole, Wessex Water and the Environment Agency. Total cost of the scheme was approximately £1.87million split between grant-in-aid and the Borough of Poole.



**Figure 14. Poole sea defences - long floodwall section.**

Photograph courtesy of the Environment Agency



**Figure 15. Poole sea defence - breakwaters.**

Photograph courtesy of the Environment Agency

### Case Study 12 - Redcar Flood Alleviation Scheme

Redcar situated on the North Sea Coast east of Middlesbrough. It attracts over one million visitors annually, it is an area vulnerable to flooding and coastal erosion. A new flood alleviation and coastal defence scheme is proposed with a total budget of £29.2 million which is provided by FDGiA and Redcar and Cleveland Borough Council. The scheme is closely aligned with local regeneration projects. The scheme involves close collaborative working between the Environment Agency and the council.



**Figure 16. Overtopping at Esplanade on 1 March 2006.**

Photograph courtesy of Dave Cocks, RNLI Redcar



**Figure 17. Defence Failure at Redcar.**

Photograph courtesy of Environment Agency

### Case Study 13 - Tywyn Coastal Defence Project

The scheme is financed jointly by the European Union European Regional Development Fund and Welsh Assembly Government flood defence grant-in-aid. The scheme aimed to reduce flood risk to a 1 in 100yr return. The new scheme cost is approximately £7.6 million and aims to manage flood risks and improve the amenity value of Tywyn. This scheme has an interesting partnership, utilising with Gwynedd Council internal consultancy services.



**Figure 18. New installed break-water part of unique feature.**

Photograph courtesy of Gwynedd Council



### Case Study 14 - Weston-super-Mare Seafront Enhancement

The Seafront Enhancement Scheme in Weston-super-Mare, Somerset started in 2007 and involved three phases. Funding for the £30million scheme came largely from the Flood Defence Grant in Aid for coastal defence works. External funding contributions of over £2 million for regeneration elements was sourced from the South West Regional Development Agency 'Civic Pride' Initiative, Commission for Architecture and the Built Environment (CABE) 'Sea Change' Programme, North Somerset's Local Transport Plan, and Wessex Regional Flood Defence Committee Local Levy.



**Figure 19. Phase 1 Marine Lake.**

Photographs courtesy of the Environment Agency

## 2. Multiple objectives

### 2.1 Introduction

This Section examines Case Study evidence relating to setting objectives and how multiple objectives are being delivered through partnerships. The following Case Studies provide relevant examples:

- Case Study 1: Alkborough Flats Tidal Defence Scheme;
- Case Study 2: 'Blakeney Freshes, River Glaven Realignment and Cley to Salthouse Drainage Improvements;
- Case Study 4: East Head Beach Recharge;
- Case Study 9: Parrett Estuary Strategy;
- Case Study 12: Redcar Flood Alleviation Scheme;
- Case Study 11: Poole Quay Sea Defence Scheme;
- Case Study 14: Weston-super-Mare Seafront Enhancement.

### 2.2 Summary of lessons learnt from Case Studies

**Local objectives are often more valuable if they are informed by higher level policies and plans (Case Study 2).**

**Significant time is required to align institutional objectives and policies (Case Study 9).**

**Seeking to balance the needs and objectives of a local community with national policies and priorities often creates tensions (Case Studies 4, 7, 10).**

**In the shorter term local community objectives often trump longer term policy objectives (Case Studies 5, 6, 7).**

**Defining absolute and desirable objectives early in the project's development is helpful (Case Study 1).**

**An 'adaptive' policy and management approach can provide a policy framework to resolve conflicting interests (Case Studies 2, 4).**

**Working on objective setting collectively, aligning partners' aspirations, objectives and timings are all critical activities to schemes success (Case Studies 1, 4, 11, 12).**

**Consideration of long-term maintenance needs and maintenance arrangements at the outset of the scheme development is helpful (Case Studies 2, 11).**

**FCERM strategies and schemes are not only useful vehicles in achieving an influence in the planning process but, they can also be a foundation for achieving objectives linked to regeneration, improving the economic prosperity of the area, environmental enhancement and nature conservation (Case Studies 2, 8, 9, 11, 12, 14).**

### 2.3 Findings

#### 2.3.1 Scheme drivers

Often objective setting is guided by wider coastal policies and priorities.

In the 'Blakeney Freshes' scheme (Case Study 2), the National Trust, guided by its 'Shifting Shores' policy<sup>1</sup>, stated that the scheme should be supported by the local community. At Alkborough (Case Study 1) Defra's 'Making space for water'<sup>2</sup> policy, which promotes the use of natural flood risk options, was a strong driver in shaping the scheme. A key objective at

<sup>1</sup> [http://www.nationaltrust.org.uk/main/w-shifting\\_shores.pdf](http://www.nationaltrust.org.uk/main/w-shifting_shores.pdf)

<sup>2</sup> <http://www.defra.gov.uk/environment/flooding/documents/policy/strategy/strategy-response1.pdf>

Alkborough was to provide flood storage that would mean that improvements to other flood defences both up and downstream could be deferred.

In several cases the completed schemes examined were not in the long term plans for the area, scored low in terms of national priorities, and differed from published Shoreline Management Plan (SMP) policy.

These schemes were often carried out as what were described as 'emergency works' due to the imminent risk from flooding and erosion. In general these types of schemes were developed to allow time for communities to plan, prepare for and adapt to coastal change in the longer term, for example:

*From Case Study 5 "... no funding could be secured from Defra Flood Defence Grant-in-Aid (FDGiA), the cost/benefit ratio was simply not high enough to justify government support for a combined long term approach, owing to the limited value of agricultural land, community benefits and properties at risk. Low cost, short-term emergency works, aimed at extending the life of the existing revetment by up to 5 years, were undertaken to provide time for another grant-in-aid solution to be identified. These emergency works could only delay the apparent inevitable loss".*

*From Case Study 6 "The agreed aim was to 'slow things down' while discussions could take place with the government and North Norfolk District Council (NNDC) so that the community had more time to prepare. Slowing down the rate of erosion provided time for the NNDC and the community to work together to identify sources of funding and mechanisms for adaptation in response to predicted climate change".*

*From Case Study 7, "The primary objective was to protect a small group of houses from immediate risk from flooding. Another objective for the Environment Agency was to buy time for the community to adapt to the changing coast and raise awareness and understanding of flood and coastal risks".*

### 2.3.2 Aligning objectives

Where multiple objectives were considered from the outset of a project the quality of these varied considerably. Whilst FCERM objectives might be specific (i.e. numbers of properties no longer at risk), the economic, social and environmental objectives were often aspirational rather than specific targets.

Aligning objectives to deliver multiple benefits is demonstrated well in the following Case Studies.

The Redcar Flood Alleviation Scheme (Case Study 12) shows how objectives to protect the coastline, reducing flood and erosion risk to residential and commercial properties, can be linked to the wider Local Authority objectives to enhance the beach frontage and stimulate further regeneration of the town, create more jobs and attract new businesses.

Sedgemoor District Council (SDC) aimed to regenerate parts of the town and sought Flood Risk Management (FRM) solutions that satisfied planning guidance (Planning Policy Statement 25: Development & Flood Risk<sup>3</sup>). Consequently, the Parrett Estuary FRM Strategy (Case Study 9) was developed to align with the spatial development proposals of the Local Development Framework (LDF). The LDF provides the means to part fund the FRM Strategy.

The 'Blakeney Freshes' scheme (Case Study 2) and the East Head Beach Recharge scheme (Case Study 4) are Case Studies that describe what partners call 'adaptive management' and examples of long-term sustainability, where nature conservation and the protection of environmentally designated sites are core project objectives alongside those of flood risk reduction.

Whilst the short term objectives and the scheme option implemented at Kilnsea (Case Study 7) satisfied most partners Yorkshire Wildlife Trust (YWT) would have liked to have seen longer term objectives informing the choice of option for Kilnsea. They would have preferred a full realignment of the area and creation of a wetland and salt marsh grazing habitats, but

<sup>3</sup> <http://www.communities.gov.uk/publications/planningandbuilding/pps25floordrisk>

recognised that the bank failure was imminent and time was a constraint so something had to be done for the local community immediately.

A number of Case Studies highlighted the importance of considering long-term maintenance arrangements to ensure partner objectives remain aligned (Case Study 2 and 11).

From Case Study 2. *"Post scheme responsibilities are an important issue to consider at the outset of a project and in particular, the long term maintenance costs"*

The partners in the East head Scheme (Case Study 4) felt that post scheme maintenance and responsibility was not always a well considered issue during the early phases of scheme development.

All the Case Studies demonstrated some added value, economic, social and environmental beyond simply the management of flooding and coastal erosion risks through aligning objectives between partners.

### 2.3.3 Meeting Multiple Objectives

#### 'Adaptive' management

The development and use of an innovative shared 'adaptive' management policy for East Head was a key vehicle in bringing the very different interests of parties together into a partnership.

The partners involved in the East Head Beach Recharge scheme initially had quite different and opposed objectives. In 2000, the National Trust proposed a management plan for East Head that aimed to work with natural processes. The Chichester Harbour Conservancy (CHC) felt the policy of 'Hold the Line' was more appropriate. They considered that working with natural processes might damage navigational access due to sand filling the main channel. The Local Authority (responsible for the defences at East Head) was also unclear as to what to do with regard to this and the implications for the maintenance and management of the groynes.

To overcome these challenges and to align the partner objectives the East Head Working Group (EHWG) formed and agreed a draft Terms of Reference. This document set out objectives, constraints and more importantly the 'triggers' for management interventions (i.e. the point in time and type of management actions that should be followed).

In 2008 the Environment Agency published a Coastal Defence Strategy for the East Head area which proposed an 'adaptive' management approach, aiming to preserve the environmental amenity and socio-economic value of the location and including the management of effects on the wider harbour. This now provides the agreed policy framework in which the partners and other stakeholders work together to develop appropriate management interventions.

#### Flood risk management and spatial planning

The Parrett Estuary Strategy demonstrates that FRM strategies are not only useful vehicles to shape investment in FRM and influence the planning process but can be essential in supporting the development aspirations of a Local Authority (Case Study 9). In return the Local Authority through its planning functions can support the funding of FRM investments. Significant time is however required to both align institutional objectives and processes to develop such deployment strategies and even when this occurs in the short term, longer term issues remain to be faced. For example, the Parrett Estuary Strategy tidal barrier is a 30-year proposal, 10 years beyond the Districts normal 20-year spatial planning cycle.

## 2.4 Guidance

When 'a partnership approach' is being considered partners should accept that additional time will be required, including extensions to the programme, to align both scheme objectives and their own organisational policies and aspirations.

In 'local partnerships' partner organisations will need to accept that 'local' objectives will be seen to have greater importance than wider regional or national objectives.

Emerging partnerships should spend time defining absolute and desirable objectives for a project and/or the locality and associated with this partners should understand each other's reasons why these objectives are important and being pursued.

Partners should accept that they may have to reframe how they express their objectives to achieve a collective partnership aim.

Partners should recognise where they have conflicting interests, which could slow progress or radically alter the shape and form of a project and scheme. The reasons for the conflict need to be understood across the partnership. The partnership should seek to develop a framework for continued working and the resolution of these conflicts. It should also accept that some conflicts of interest can be so fundamental that a partner has to withdraw from the partnership.

## 3. Partnership Building and Governance

### 3.1 Introduction

This chapter examines the Case Study evidence in relation to partnership and governance arrangements that impact on the development of coastal schemes. It describes the opportunities and constraints of working in partnership, developing partnership strategies and governance arrangements. Where there are appropriate commonalities across the Case Studies, these are highlighted. This section is informed by all Case Studies, the following are of particular relevance:

- Case Study 1: Alkborough Flats Tidal Defence Scheme;
- Case Study 2: Blakeney Freshes River Glaven Realignment and Cley to Salthouse Drainage Improvements;
- Case Study 7: Kilnsea Flood Defence Scheme;
- Case Study 9: Parrett Estuary Strategy;
- Case Study 10: Poole Bay & Swanage Beach Replenishment.

### 3.2 Summary of key lessons learnt from the Case Studies

**Partners are often required to commit to compromise and flexibility in order to form effective partnerships (Case Studies 4, 11).**

**Partner Terms of Reference and Memorandums of Understanding (MoU) are useful tools in partnership working (Case Studies 1, 4, 10).**

**Partnership working takes time to develop (see Case Studies 4, 5, 11, 9).**

**Confidence, trust and open dialogue are all key to successful partnership schemes (Case Studies 6, 9, 12, Workshop 21st September 2010).**

**Success often requires partners with a positive, pragmatic and 'can do' attitude (Case Studies 7, 9).**

**Partners understand each other's needs, objectives and requirements much better through previous experience of working together (Case Studies 2, 9, 10, 11).**

**Continuity of personnel/staff was important in scheme success. Continuity builds trust and helps maintain local understanding.**

**Engaging people and partners in activities which are most relevant to their skills, expertise and responsibilities is important (e.g. finance, biodiversity and in specific technical areas) (Case Study 10).**

**Early engagement with local community organisations, local people and other key stakeholders in plans and programmes of works helps build trust and sometimes helps to progress a project. (Case Studies 8, 9).**

**Community ownership of issues can lead to innovative solutions and significant improvements have been made to schemes through engaging local people (Case Study 5).**

**The 'Working with others, building trust with communities' approach is considered an essential way forward for working with communities in areas where there are important and difficult schemes that need to be delivered (Case Studies 1, 7, Workshop 21st September 2010).**

## 3.3 Findings

### 3.3.1 Reasons for working in partnership

The benefits and reasons for working in partnership include:

- Informed objective setting;
- Multiple skills and wider range of knowledge introduced into projects;
- Increased capacity to deliver;
- Improved stakeholder and community consultation and engagement;
- Sharing risks, responsibilities, accountability, issues and problems;
- Improves cooperation and coordination
- Helps secure funding and approvals (see Section 5);
- Raises profile of the scheme and improves chances of some form of Government intervention or support;
- Assists manage the complex approvals process (Case Studies 1, 2, 5 and 9);
- Helps meet wider organisational policy requirements across partners.

#### **Partnership and Immediate Funding Needs**

Partnership arrangements and landowner agreements can lead to access to a wider range of funding mechanisms e.g. Heritage Lottery Funding (HLF) (Case Study 1), the European Union's Objective 2 fund and the East of England Development Agency funding (EEDA) (Case Study 2). Interestingly, one of the key partners of the Happisburgh Emergency Works scheme (Case Study 6), the Coastal Concern Action Group (CCAG) formed a limited company, they became the charitable arm of the organisation with a very specific aim of raising money for the placement of a temporary rock defence (Case Study 6). The formation of the limited company enabled CCAG to lobby for change in government policy, which would not have been possible as a charity. This model is becoming increasingly common.

#### **Partnership and Long Term Funding Needs**

The partnership between Sedgemoor District Council (SDC) and the Environment Agency was described as a happy accident of timing. The joint working arose from the simultaneous needs of SDC, to have an acceptable Flood Risk Management (FRM) solution for its Local Development Framework (LDF), and the Environment Agency's requirement to complete an FRM asset review along the Parrett Estuary. SDC required an evidence base and a development policy framework, which fitted planning guidance, so working closely with the Environment Agency's Development Control and Planning Liaison teams was considered by both partners as advantageous (Case Study 9).

#### **Partnership and Cost Savings**

Partnership working also led to considerable cost savings, estimated at between £8million and £15million for the Poole Bay & Swanage Beach Replenishment scheme (Case Study 10). For example, the Borough of Poole, Bournemouth Borough Council and Purbeck District Council required the sand to recharge the beaches. The purchase and transportation of sand from licensed dredging sites, such as the south of the Isle of Wight or at the Thames Estuary can be very expensive. An opportunity arose to utilise sand from local dredging operator Poole Harbour Commissioners (PHC). This 'supply and demand' relationship demonstrated mutual benefit for all parties. PHC could meet its own business needs by depositing large amounts of dredged material.

Another example of cost saving benefits from partnership working can be found in the Lyme Regis scheme (Case Study 8). In this project utility companies were involved in the phased programme of works, as a consequence repairs, replacement and rehabilitation of their systems were undertaken in parallel with the Phased defence works and delivered longer term efficiencies.

## The Value of Partners

The value and relative strengths of different partners was often described. For example it was felt that Natural England was an important partner in providing advice on interests in conservation and biodiversity (Case Study 2), the Environment Agency was helpful with funding advice and the local authorities were described as having very detailed understanding of the local coastal processes. These lead to more effective designs.

### 3.3.2 Partnership Governance

Case Study evidence demonstrates that approaches put in place to govern and promote partnership working within these multi-partner schemes should include; bringing partners together into schemes early and involving them at every stage to develop a long term relationship and joint approaches (Case Studies 8, 9). The setting up of groups, such as expert panels and smaller workings groups to address specific project development and implementation issues is valuable (Case Studies 1, 4, 12). The key to success is often regular and effective communication between partners and wider stakeholders through regular phone calls, emails and face-to-face meetings.

Memorandum of Understanding agreements and legal agreements proved to be fundamental to many successful projects in setting project boundaries and in helping to keep the contractual arrangements simple (Case Studies 1, 4, 7, 10). However, it is recognised by the partners of the Alkborough Flats Tidal Defence Scheme and by those involved in the Poole Bay and Swanage Beach Recharge Scheme, that these agreements can be complex, often requiring specialists legal input (Case Studies 1, 10).

#### Partnership Communication

From the outset of any scheme it is important to consider and understand fully the resources likely to be needed for communications both internal, between partners and externally with stakeholders.

The language used in communication activities should be appropriate for the audience and not vague or misleading (Case Study 7).

Face to face communication, one-to-one contact to inform local communities about schemes and progress was often critical to scheme success (Case Studies 7, 2). Local community groups such as the Coastal Concern Action Group proved to be locally trusted communicators during the development Happisburgh Emergency Works scheme, with an informative website.

#### Partnership Continuity

The majority of Case Studies demonstrated the benefits of staff continuity amongst partnerships and stakeholders as the project develops. This was particularly notable in one or two projects which faced difficulties during their development (Case Studies 7, 9, 14). Continuity builds trust, maintains technical and local community understanding.

### 3.3.3 Barriers/constraints

#### Public Reaction

Across all the Case Studies barriers and constraints associated with partnership working and community consultation were regularly identified. For example, in the development phases of the Alkborough Scheme (Case Study 1) it was evident that there was some negative public reaction towards the options being put forward. The older members of the local community were the 'most adverse to change'. As the scheme progressed it was recognised that different approaches were needed to address the different perspectives of stakeholders. Approaches and tools such as those now found in 'Working with others, building trust with communities'<sup>4</sup> was found to be of particularly use to address the multiple stakeholder concerns.

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<sup>4</sup> Environment Agency. Working with others - Building trust with communities, a guide for staff. Environment Agency [Online] <http://www.ncl.ac.uk/ihs/research/environment/rehmarc/pdfs/workingwithothers.pdf> (Accessed 17 August 2010).



Often it was felt that coastal communities did not understand what was meant by the term 'coastal adaptation' and that more should be done to communicate this locally (Case Study 2). However for Case Study 6 North Norfolk District found that the Coastal Management Plan was playing an important role in assisting the community understand the need for adaptation.

### **Political Support**

Political as well as stakeholder support particularly in the early stages of projects can impact on progress. On the Parrett Estuary Strategy (Case Study 9) an evidence base ('Parrett Tidal Flood Defence Report') and engagement strategies such as the use of an independent chairperson for meetings, successfully achieved political and stakeholder support for the tidal barrier option.

### **Timescales**

The long timescales involved in developing and delivering some projects often impacts on the success of engagement with wider stakeholders.

At Alkborough (Case Study 1) it was difficult to keep the partners and stakeholders focused, at East Head (Case Study 4).the agreement over the appropriate management policies took over seven years of meetings and partnership working

### **Conflicts**

Disagreements between partners were not uncommon and the subjects varied, some related to flood risk management approaches softer more natural management versus harder defence approaches. Others were process related and concerned matters such as working practices, procurement and contractual arrangements between partners.

### **Risk Sharing**

Two elements of risk can be distinguished from the Case Studies, risks associated with project development and delivery and risks related to long term liability and responsibility for defence assets.

Across the Case Studies methods and processes were put in place to manage risks during project development. For example, as part of the development of the Lyme Regis Environmental Improvements scheme (Case Study 8) risk owners were nominated for specific aspects of the scheme development such as health and safety and environmental risks. Risk workshops and joint risk registers were used for the Redcar Flood Alleviation Scheme to ensure that all risks and concerns were recorded and dealt with. Frequently the identified funding related risks did not predict events and incidents that later materialised which then had to be managed.

The Kilnsea scheme (Case Study 7) demonstrates most clearly the passing on of long term liabilities and responsibilities from one organisation to another and in this case from a governmental agency to local community organisation. The local community at Happisburgh went to elaborate lengths to ensure that long term liabilities were not shared with contributing parties to the scheme (Case Study 6).

## **3.4 Guidance**

Project proposers and managers should consider from the outset the potential benefits and disbenefits of progressing projects and schemes through a 'partnership approach'.

If a partnership approach is proposed then the following should apply:

- Partners need to acknowledge the likelihood of having to compromise on issues.
- Additional time is likely to be required to accommodate partnership working and in all probability additional time added to the programme.
- All meetings and events involving partners should be planned to inspire confidence, trust and openness in and between partners and between the partnership and wider stakeholder interests.

- Formalise working arrangements between partners with partner Terms of Reference or Memorandums of Understanding.
- Ensure partners agree to provide sustained support with a consistency of personnel. Partners need to make long-term commitments to the partnership and working arrangements.
- Ensure partners agree to support the partnership with appropriately skilled and empowered individuals.
- Ensure that the project partnership and its working arrangements includes at least some individuals with positive experiences of working together on partnership schemes.

Where the partnership approach to delivery can build upon the successful working arrangements of an earlier scheme then consider adopting and adapting these arrangements rather than starting entirely afresh. Build upon successful working arrangements.

Provide opportunities to engage local communities and local stakeholders as early as possible in project planning and actively seek solutions and ideas for scheme improvement from the outset.

Encourage local communities and stakeholders to take ownership of issues and specific aspects of a project. This should be part of a wider risk sharing approach. Project partners should be encouraged to take on risks associated with developing the project, delivering the project and long-term maintenance and other liabilities. These risk responsibilities have to be appropriate to an organisation or individual's abilities to undertake these tasks.

In the early stages of partnership working, partners should identify requirements for training and capacity building and seek to support each other's needs to improve the overall partnership performance. Specific training might be required and networking with other successful partnerships should be encouraged.

## 4. Funding and contributions

### 4.1 Introduction

This chapter examines the Case Study evidence in relation to funding and financial contributions. It considers process of identifying funding opportunities, how well equipped the partners are in securing contributions and local participation in schemes. It also considers the findings relating to long term scheme maintenance costs and financial risk sharing.

- This section is informed by all Case Studies.

For definition purposes, funding is defined by this study as finance (cash, in-kind or otherwise) derived from the public sector whether this is FDGiA or another source. Contributions are defined as finance (cash, in-kind or otherwise) derived from the private sector (including householders and the community).

### 4.2 Summary of lessons learnt from Case Studies

**The majority of funding for flood and coastal erosion schemes is derived from Defra FDGiA.**

**FDGiA can act as a catalyst to external funding and create a 'multiplier effect' for the development of other schemes or works (Case Studies 1, 2), however private sector funding is more difficult to achieve.**

**Securing finances from partners early on in the process is particularly helpful in progressing schemes; however internal approval for funding can take time (Case Study 1).**

**Communities are keen to participate, when property is at risk (Case Studies 5, 6, and 7).**

**Local community participation and contribution towards scheme costs is often required for schemes to progress (Case Studies 5, 6, and 7).**

**In kind contributions were common across all of the Case Studies.**

**It is important to have a contingency budget to cover any unforeseen costs, caused by delays, additional work etc. (Case Studies 1, 5, 6, 8, 13, 14).**

**The long term maintenance liabilities are important and should be considered at the outset of a project (Case Studies 2, 7, 11).**

**Success in winning contributions from both public and private sectors often lies in making the funding contributors key decision making partners (Case Study 8).**

**Integrating flood and coastal erosion risk management with local plans such as through Supplementary Planning Guidance, can provide innovative opportunities for funding through Tariffs, Section 106 Agreements and land transfers (Case Studies 5, 8, 9).**

**Market values of third party assets being sold to raise funds can fluctuate during the development of a scheme. These risks should not be underestimated (Case Study 5).**

**It is difficult to clearly understand and evaluate the economic and social impacts post-scheme. Post scheme evaluation is often limited to photographic records, visitor numbers and spend per head (Case Study 14). Evaluation costs should be included in project planning stages.**

**The benefits of rural schemes and urban schemes are scored similarly for FDGiA and often rural schemes fail to progress (Workshop 21st September 2010).**

## 4.3 Findings

### 4.3.1 Funding identification and opportunities

The majority of funding for flood and coastal erosion schemes is derived from FDGiA, however, there is evidence that non-FDGiA (funding or contributions) can be secured. Examples have been derived from:

- Local Authority maintenance budgets such as Highways Departments to protect local infrastructure;
- Regional Development Agencies (such as the 'Civic Pride' initiative);
- European Union funding programmes such as ERDF or Interreg;
- The Commission for Architecture and the Built Environment;
- The Heritage Lottery Fund.

In kind contributions are common with schemes benefiting from local knowledge held by the partners (Case Studies 4, 8). Land is also often given to allow the schemes to progress (Case Study 1, 7). In the instance of the Tywyn scheme (Case Study 13), in-kind contributions included staff time provided by Gwynedd Consultancy, an internal consultancy of Gwynedd Council. The council claimed salary pensions and National Insurance contributions (offering reduced staff multipliers) to cover the individual costs, in addition the administration costs were not charged to scheme.

The Alkborough (Case Study 1) and the Blakeney Freshes schemes (Case Study 2) demonstrate that Defra FDGiA acts as a catalyst for other external funding sources, creating a 'multiplier effect' for future projects or works (Case Study 12).

Opportunities for contributions from Planning Agreements and regeneration initiatives are common:

*"Through the use of a Planning Agreement (Section 106) Suffolk Coastal District Council (SCDC) were assured of receiving profits from the sale of land and therefore, had the confidence to pursue the design and necessary approvals for the scheme" (Case Study 5);*

*"West Dorset District Council have committed a lump sum of £600,000, which it expects, over a period of several years to be recovered in S106 developer contributions" (Case Study 8);*

*"North Somerset Council put together an integrated and joined-up bid proposal to Defra, linking coastal protection with future regeneration...making use of regeneration funds which might otherwise be lost" (Case Study 14).*

*"The Parrett Estuary Strategy links to Supplementary Planning Guidance which includes a funding mechanism to deliver strategic flood defences for Bridgwater. It provides the basis for Sedgemoor District Council (SDC) to levy the Bridgwater Strategic Flood Defence Tariff on new development to contribute to capital cost of the flood defence barrier. The anticipated cost of the tidal barrier is £24.6 million, the Tariff aims to raise about 40% of the cost over the next 20 - 30 years" (Case Study 9).*

Other sources of funding are identified as part of the Parrett Estuary Strategy<sup>5</sup> and include:

- Public funding to support regeneration by facilitating infrastructure (e.g. Regional Funding Allocation (RFA) / Homes and Communities Agency (HCA) / national infrastructure projects);
- Public sector funding to protect existing development in Bridgwater from future flood risk (e.g. possible future capital bid to the Environment Agency);
- Innovative financial proposals such as the accelerated development zone / tax incremental funding scheme.

Funding and approvals are more likely to be secured if the scheme and its effects are identified in the Environment Agency's defined Medium Term Plan (MTP) (a five year programme for flood and coastal risk management schemes):

<sup>5</sup> For more details see Case Study 9.

*"Government money to support this work was not programmed in the South West Region's MTP. A Defra Minister intervened to ensure this opportunity to save on tax payer funds could be acted upon" (Case Study 10).*

Partners often made use of internal knowledge and showed a flexible approach to securing funding:

*"Being in the right place at the right time, making use of internal knowledge of funding streams and overlapping project opportunities" (Case Study 2);*

*"To attract funding you need to be in the right place at the right time and be flexible with the approach" (Workshop 16th September 2010).*

As well as the improved likelihood of securing funding from a range of sources there was evidence of partnership working delivering substantial savings on public investment. The Poole Bay & Swanage Beach Replenishment scheme demonstrates significant cost savings (Case Study 10). The cost/benefit ratio of the scheme for Poole, Bournemouth and Swanage increased due to a contribution of raw materials i.e. 'sand' donated by Poole Harbour Commissioners (PHC). By recycling the sand from the dredging of the harbour, scheme costs reduced significantly and estimates suggest savings of between £8-15million.

#### 4.3.2 Experience of partners and securing contributions

Across all Case Studies, private sector funding was difficult to achieve. South West Water contributed to the Phase I Lyme Regis Environmental Improvements scheme (Case Study 8). The utility companies were also asked to coordinate work on their assets within Phase IV of this scheme and to consider making a financial contribution reflecting the value of their assets protected. Initial responses from utility companies indicated that contributions are unlikely because their risk management and asset management planning systems appear to provide no means for them to assess and recover such payments.

The eligibility of projects for various funding streams varied across Case Studies and often relied on a particular funding programme coinciding with a particular stage of project development: The European Union's (EU) Interreg programme promoted new approaches to reduce the impacts of sea level rise with a particular relevant call for submissions in 2002. The Alkborough scheme partners (Case Study 1) were well placed to take advantage of this opportunity and made a submission. As a result they secured substantial capital funding towards the project from both the EU and the Office of the Deputy Prime Minister.

During the study stakeholders workshop held on the 16th September at Scarborough, there was a lot of discussion around the Environment Agency's beneficiary contributions approach to funding FCRM. All the stakeholders felt that securing funding contributions from private beneficiaries will continue to be difficult:

*"The problems are that the private sector will not contribute. We cannot get private money. There is no private leverage".*

*"We could not get private beneficiaries when times were good";*

*"We have put forward novel solutions to maintain the area for another 30 years. Then we know that investment is needed. £30 million can be raised now through Section 106 agreements and for this we need private sector buy in".*

#### 4.3.3 Community participation and funding

A number of Case Studies involve communities participating and contributing funds toward scheme development, these include Case Studies 5, 6 and 7. Often community action was generated when the community felt:

- Under threat;
- Not satisfied with proposed 'corporate' action;
- Sufficient FDGiA funding was not available;
- Lobbying politicians may be beneficial.

Some communities were more able and successful than others in influencing and managing schemes. Aware of the funding shortfall and the difficulties in implementing a scheme at East Lane, Bawdsey, a group of local landowners and residents formed the East Lane Trust (ELT) (Case Study 5). ELT was set-up as 'not for profit' charitable trust, whose purpose was to acquire and then sell land at development value to raise the required funds for the rebuilding and maintenance of local flood protection and coastal defences. As a result the ELT raised £1.8million private contributions towards the scheme.

As part of the Happisburgh Emergency Works scheme (Case Study 6) the community formed a charity, the Coastal Concern Action Group (CCAG) to work with the local authority to raise money for the placement of temporary rock defences. To ensure they were fully protected, the community decided the best course of action was to set up Coastal Concern Ltd, a company limited by guarantee which safe guards against liability. The charitable arm of the organisation was retained to continue its fund raising activities.

The Kilnsea and Spurn Flood Defence Group a local community group secured £50,000 towards the Kilnsea Flood Defence Scheme (Case Study 7). This was obtained through two local funding streams, the Easington Parish Enhancement Fund and the Langed Rural Community Development Fund. The Environment Agency assisted the Group with the applications to access these funds.

#### 4.3.4 Costs of long-term maintenance

Commonly successful partnership agreements specify:

- Who will own which assets on completion of the project;
- How long-term maintenance works will be funded;
- Who will undertake long-term maintenance works.

The responsibilities for long-term maintenance are often split between the operating authority and land owners. For example, in the 'Blakeney Freshes' scheme (Case Study 2) the Environment Agency is held responsible for the maintenance of the flood defences and sluices and the landowners, Norfolk Wildlife Trust and the National Trust are responsible for land management. Similarly, in the Poole Quay Sea Defence Scheme (Case Study 11), the Environment Agency is responsible for the long-term maintenance costs of the floodwalls, the Poole Harbour Commissioners (PHC) are responsible for maintenance of their long-term assets (the quay and the wooden timbers) and the flap valves installed on gravity outfalls are the responsibility of Wessex Water (WW).

For the Kilnsea Flood Defence Scheme (Case Study 7) a legal agreement was put in place between the Environment Agency and the Kilnsea and Spurn Flood Defence Group to ensure ownership and maintenance of the flood banks was devolved. The agreement suggests that the Environment Agency will not now invest in maintenance or improvement, and there is no mechanism in place for the community to recover the costs of any emergency works that are needed. The responsibility for maintenance falls securely on the community.

#### 4.3.5 Financial Risk Management

Financial risks and related incidents were common across all the Case Studies.

In Case Study 1, as a result of delayed payment by the European Regional Development Fund (ERDF) the Environment Agency took on additional risk *"delays in final payment from the EU were particularly challenging for the Environment Agency"*.

In Case Study 5, a downturn in the housing market meant that the land sale produced insufficient funds to construct the scheme and no contingency sum was available. As the site was extremely exposed and there was a risk that works may extend into the winter, the Environment Agency agreed to provide a contingency sum as a risk pot.

In Case Study 6, North Norfolk District Council made the decision to accept the financial risk and fund emergency works, without the certainty that grant-in-aid would be approved.

In Case Study 13, ERDF funding was granted through the Welsh Assembly Government in March 2008, the letter of agreement didn't actually arrive until May 2009. Due to contractor

constraints Gwynedd Council took a risk and started work in April 2009. The team felt confident enough to go ahead as all of the approvals had been granted (e.g. FEPA licence).

In Case Study 14, to establish the scheme's requirements, feasibility, and economic appraisal, work was under taken 'at risk' by the council with some support from the Wessex Regional Flood Defence Committee. The Council reimbursed these costs (£600,000) when the £29.1 million funding was obtained from Defra's FDGiA for implementation of the approved scheme.

Within partnerships it was appreciated that seemingly medium to high financial risks are not the ideal situation, but it is essential that one or more of the partners takes an ownership of the risk and plans for this sufficiently to allow the scheme to develop and progress. The partners on the Alkborough Flats Tidal Defence Scheme describe how it is important to have a contingency budget to cover any unforeseen costs, caused by delays and unplanned work (Case Study 1). During initial engineering land-forming works within the Humber, over 800 World War II bombs were discovered which were not evident at site survey stage. This caused significant delay and cost to the project. The Environment Agency's standard practice is 60% of the total costs should be allocated at the outset as a 'risk pot' then reviewed regularly.

## 4.4 Guidance

Identify early where Grant in Aid can act as a catalyst for further investment into the scheme or the locality.

Identify early the opportunities where the above potential contributors could be brought into the partnership.

Identify where potential 'partners' are able to contribute 'in kind' to the project and where they might contribute funds and over what timescales.

Identify longer term funding opportunities through alignment of investment in FCERM with local development plans and the investment cycles of major utilities and infrastructure providers.

With all funding opportunities examine the risks associated with shortfalls and delays.

Where investment in FCERM is part of a partnership delivering wider benefits, ensure partners undertake pre and post evaluations to understand what has actually been delivered.

## 5. Approvals

### 5.1 Introduction

This chapter considers the issues surrounding the process of obtaining approvals and consents necessary to implement a flood and coastal defence scheme. It highlights lessons learnt from a review of the following Case Studies:

- Case Study 1: Alkborough Flats Tidal Defence Scheme;
- Case Study 2: Blakeney Freshes River Glaven Realignment and Cley to Salthouse Drainage Improvements;
- Case Study 4: East Head Beach Recharge;
- Case Study 6: Happisburgh Emergency Works;
- Case Study 7: Kilnsea Flood Defence Scheme;
- Case Study 9: Parrett Estuary Strategy;
- Case Study 10: Poole Bay & Swanage Beach Replenishment;
- Case Study 11: Poole Quay Sea Defence Scheme;
- Case Study 12: Redcar Flood Alleviation Scheme;
- Case Study 14: Weston-super-Mare Seafront Enhancement.

### 5.2 Summary of lessons learnt from Case Studies

**A large number of approvals and consents are required before schemes can proceed to implementation.**

**The approvals process is complex, requiring statutory and non-statutory consents, scheme specific approvals, organisational approvals and, in most cases, informal community support.**

**Obtaining approvals and consents is expensive and time consuming (Case Studies 1, 6, 10). It can also be a lengthy process, particularly in sensitive areas when a full Environmental Impact Assessment and wide public consultations are required.**

**Early consultation leading to support from interested/non-statutory organisations facilitates the approvals process.**

**Most schemes required a set of 'enabling' approvals and consents before they can be taken forward for formal approval and implementation. These approvals and consents are required prior to scheme development and are usually non-scheme specific.**

**Sufficient time must be allocated to obtaining the necessary approvals and consents if costly delays are to be avoided.**

**Good partnership working aids the approvals process. Partnership working also provides more capacity and knowledge to assist thereby enabling a well-informed dialogue at objective setting stages and allowed specialist working groups to be formed to facilitate the approvals process. MoU and partnership agreements can reinforce partner commitment (Case Study 4).**

### 5.3 Findings

#### 5.3.1 Approvals and consents that affect schemes

Non-scheme specific approvals and consents were a common requirement across all the Case Studies. These were often needed to enable project specific formal approvals to be progressed. Examples included Shoreline Management Plans (SMP), Flood Risk Management Strategies and area-wide planning policies. (Case Studies 1 and 7):



In Case Study 4 the Environment Agency prepared a new draft Coastal Defence Strategy for Pagham Harbour to East Head, which formed the basis for actions arising from the Shoreline Management Plan. It provided the agreed policy framework in which the partners and stakeholders could work to develop appropriate management interventions at East Head.

In Case Study 6 North Norfolk District Council (NNDC) developed a Coastal Management Plan to involve people, businesses, local organisations, government agencies other stakeholders with knowledge of the local area and experience in resolving the complex issues. The aim was to establish a consensual vision and common objectives for the coast.

In Case Studies 12 Redcar Borough Council commissioned a feasibility study 'The Redcar Coastal Defence Strategy' to identify defence options at Redcar. Defra accepted its findings as a basis for further work. The SMP for the North East England confirmed the proposed defence policy and supported project progress.

Early support from a wide range of interested groups and organisations facilitated the approvals process at Alkborough Flats, Blakeney and Kilnsea. In particular, partnership working provided more capacity and knowledge to facilitate the approvals process (Case Studies 1, 2 and 7).

### 5.3.2 Scheme specific approvals

Seeking statutory approvals can be a lengthy and complex process, particularly in sensitive areas when a full Environmental Impact Assessment and wide public consultations are required. For example in Case Study 4, 15 licences were required for the East Head Beach Recharge (including Environment Agency licences, Planning Consent from Chichester DC, Coastal Protection Act (CPA) licence). A wide range of different people were employed to assist.

Approvals are required when schemes were considered to have a possible adverse impact on internationally and nationally important environmental habitats. *At Alkborough Flats environmental designations managed included:*

*"Sites of Special Scientific Interest (SSSI), international designations such as Ramsar Wetlands, Special Areas of Conservation (SAC) and a Special Protection Area (SPA) for birds, commonly known as the Natura 2000 series" (Case Study 1).*

At Blakeney, Natural England was an important partner in providing advice in the interests of conservation and biodiversity, particularly in relation to the designated sites.

#### Statutory approvals

Statutory approvals are required, these include:

- Consents under Sections 5 and 34 Coast Protection Act 1949 (Case Study 5, 11);
- Food and Environmental Protection (FEPA) licences. At Weston-super-Mare (Case Study 14), two were required. This application process was described as, "tricky", this was due to the long timescales and the need for a full resubmission when an extension of time was required
- Preparation of an Environmental Action Plan or Environmental Impact Assessment leading to Habitats Regulation consent by Natural England (Case Studies 1, 2, 7 and 14);
- Planning permission approvals were required for all Case Studies;
- Highway diversions and closures (Case Study 4).

Statutory approval may also require the provision of compensatory habitat if approval for the project is to be obtained, for example, the proposed Redcar Flood Alleviation Scheme works will cause indirect loss of SSSI, SPA and Ramsar designated habitats. As part of the draft Tees Strategy the proposed managed realignment compensatory site will incorporate 7ha of mudflat and saltmarsh to compensate for the works at Redcar (Case Study 12). Funding is highlighted in the Environment Agency's medium-term plan to create this habitat within the next five years.

### Non-statutory and internal approvals

There are also essential approvals that are non statutory and often internal to the partners involved.

Non-statutory approvals include:

- Landowner agreements (Case Studies 1, 5 and 7);
- Memorandum of Understanding (Case Study 2);
- Navigation impact assessment and approval (Case Study 1);
- Land drainage consent (Case Study 7).

The North Norfolk District Council (NNDC) elected members approved revenue funding support to undertake the construction of the Happisburgh scheme (Case Study 6).

The Weston-super-Mare scheme (Case Study 14); was the first scheme to go through the Environment Agency National Review Group (now known as the Large Projects Review Group) scrutiny process. Eight iterations were needed, and there were long delays due to size of scheme, taking nine months to be finally approved in July 2007.

The Poole Quay Sea Defence Scheme (Case Study 10) required ministerial approval.

### Community approval

Community support was essential for most of the Case Studies. The form this took varied greatly from informal local support to formal statutory consultation. Community objection was also a feature of project progress for many Case Studies. For example, the Kilnsea and Spurn Flood Defence Group was established in the first instance to fight the Environment Agency's decision on defence maintenance. It later became a more positive relationship when the local people worked with the Environment Agency to find a way forward (Case Study 7).

At Weston-super-Mare (Case Study 14) the preferred option was for a new wall along the promenade. This was described on the front page of the local press as the 'Wall of Death'. The negativity expressed by a community lobby group was described as "impossible to overcome". At the planning committee meeting over 300 objections were presented against the proposals.

## 5.3.3 Constraints on approval

### Time constraints and delays

Obtaining full approvals and consents is time consuming and expensive. Delays and increased costs are common (Case Study 1, 6, 10).

It took over five years to obtain the approvals for the Alkborough Flats Scheme (Case Study 1). Obtaining planning permission can be a lengthy process, particularly in sensitive areas when a full Environmental Impact Assessment (EIA) and wide public consultations are required. For the Poole Bay & Swanage scheme (Case Study 10), the production and approval of the EIA took about 12 months longer and cost far more than anticipated.

Obtaining the approvals for the Poole Bay & Swanage Beach Replenishment Scheme was described as "*difficult and challenging*", there were numerous duplications across the three councils involved, for example Purbeck Council support required 16 approvals and the Boroughs of Poole and Bournemouth required 26 approvals.

The local authorities commented to partners "*the process of developing a scheme, gaining approvals and securing funding is very complicated and without full buy-in to the scheme huge problems can be created*" (Case Study 10).

At Happisburgh it took a long time to reach agreement on scheme proposals and details. In the time it took to resolve objections, the coastline actually eroded further such that the potential benefits and the opportunity to defend was lost (Case Study 6).

Different objectives, cultures and administrative procedures can create delays and frustrations between partners:

"Natural England need to understand that the process of developing a scheme, gaining approvals and securing funding is very complicated and without their full buy-in to the scheme it can create huge problems" (Case Study 10);

"There were cultural and operational differences between the Council and Environment Agency" (Case Study 12);

From Borough of Poole's perspective "the Environment Agency's systems and processes were complicated, taxing and difficult to get to grips with" (Case Study 11).

All the Case Studies reveal the challenges of project delays and often associated increased costs

Given the time needed for full approvals, it was considered important to have a contingency budget to cover any unforeseen costs, caused by delays and additional work etc (Case Study 1).

### Administrative and legal procedures

Administrative and legal procedures often appear unduly challenging and wasteful to partners. An extreme example required a partnership of local authorities to seek approval individually, rather jointly for their project. The Councils of Purbeck DC, Borough of Poole and Bournemouth Borough Council each had to apply individually for funding from Defra for FDGiA. This meant three applications had to be submitted (Case Study 10). Also on the same project required a disposal licence from Defra to replenish the beach. Defra did not consider this as one application but instead three applications had to be made. Approvals took a number of weeks and were obtained just before the proposed date for the commencement of the works.

## 5.4 Routes through the approval process

A comprehensive guide for all those working on the coast entitled 'The Coastal Handbook', was published in June 2010, following a collaborative project between the Environment Agency and Maritime Local Authorities. The handbook brings together the information most relevant to coastal practitioners planning or undertaking work on the coast. Chapter 9: Approval Process for Studies, describes the project appraisal process for all flood and coastal risk management projects. It summarises the steps from project approval through to funding approval and payment of grants<sup>6</sup>.

The Handbook directs users to information and advice for local authorities and Internal Drainage Boards on funding on the Environment Agency's website<sup>7</sup>.

How the Environment Agency, local authorities and Internal Drainage Boards should comply with the relevant legislation is set out in:

- Grant Memorandum - Flood Risk Management under the Water Resources Act 1991 and the Land Drainage Act 1991<sup>8</sup>;
- Grant Memorandum Coastal Erosion under the Coast Protection Act 1949. (Coastal Erosion<sup>9</sup>).

There is a lot of information on the Environment Agency Easinet (internal access only and referred to in the Coastal handbook) related to the approvals process. In particular, two operational instructions (internal guidance) that show the different decision stages for Environment Agency projects are:

<sup>6</sup> <http://publications.environment-agency.gov.uk/pdf/GEHO0610BSUE-e-e.pdf>

<sup>7</sup> <http://www.environment-agency.gov.uk/research/planning/33700.aspx>

<sup>8</sup> [http://www.environment-agency.gov.uk/static/documents/Research/gmfrm\\_1970576.pdf](http://www.environment-agency.gov.uk/static/documents/Research/gmfrm_1970576.pdf)

<sup>9</sup> [http://www.environment-agency.gov.uk/static/documents/Research/gmcp\\_1970582.pdf](http://www.environment-agency.gov.uk/static/documents/Research/gmcp_1970582.pdf)

- **Gateway review process for ncpms: Operational instruction 209\_07 Issued 31/03/10** which is based on good practice by the Office of Government Commerce. It contains a suite of Environment Agency project review points (gateways) under its project management procedures. Of particular interest in this document is Gateway 1, when the process expects the preferred option to be determined from a detailed appraisal. This is the stage at which the Large Project Review Group (formerly National Review Group) determines whether or not the technical, environmental and economic approach is sound and that relevant Government/Environment Agency policies and approaches have been applied. From an alternative funding perspective, the Environment Agency would have expected all arrangements for contributions and partnerships to be agreed in principle, at least, at this stage. Financial approval usually follows from Gateway 1, with the remaining control stages acting as potential break points in detailed planning and delivery. A similar approach applies for projects seeking approval from the Regional Project Appraisal Boards.
- **Starting up a capital project: Operational instruction 401\_10 Issued 23/12/2010.** This document outlines the procedures to be observed in starting up a capital project. The document applies to all Environment Agency staff managing capital projects, including FDGiA and local levy schemes. It should be noted that the annual FDGiA allocation process is linked to the approvals process, in that an allocation does not automatically mean the money can be spent - it acts as a planning tool for projects that have yet to be approved. Different delegated financial authorisation will be required depending on the value and type of spend required, which could include Defra and/or ministerial approval.

## 5.5 Guidance

When a 'partnership' approach is being developed ensure all the partners understand the extent of the approvals likely to be required. Identify where existing or potential partners could assist in the preparing for these approvals.

The approvals and consenting process can be complex and time consuming, however, time spent by partners planning the consenting process early in project development strengthens partnerships through sharing knowledge and workloads and can minimise later delays.

## 6. Recommendations for future work

The study has revealed that there are still gaps in our understanding which limits the opportunities to deliver multiple objectives thorough FCERM projects and successfully engage multiple funding stream delivery.

The following areas of further work should be considered as priority on the basis that they are likely to produce the greater return for further investment in research and training.

1. The opportunities to align closely future FCERM Investments with Local Development Plans requires some further definition on applicability and alternative approaches and capacity building for both flood risk professionals and planning professionals.
2. A simple and standardised approach to pre and post scheme evaluation of the wider benefits from FCERM investment should be developed.
3. A toolkit for flood risk managers who are developing partnership approaches should include reference templates and support documents on the specific topics. These should include:
  - a. Applying an 'Adaptive Management' Policy approach;
  - b. Distributing Project Risks
  - c. Funding Agreements

## Further reading

Coastal Futures. (No date); Humber Community Project. Lessons learned and best practice in community engagement on changing coasts. [Online] [http://www.coastalfutures.org.uk/pdfs/community\\_engagement\\_report.pdf](http://www.coastalfutures.org.uk/pdfs/community_engagement_report.pdf) (Accessed 17 August 2010);

Environment Agency. Working with others - Building trust with communities, a guide for staff. Environment Agency [Online] <http://www.ncl.ac.uk/ihs/research/environment/rehmarc/pdfs/workingwithothers.pdf> (Accessed 17 August 2010);

Fernández-Bilbao, A. Woodin, S. Richardson, J. Zsomboky, M. Bose, S. Orr, P. Twigger-Ross, C and Colbourne, L. (2009) Understanding the Processes for Community Adaptation Planning and Engagement (CAPE) on the Coast, R&D Technical Report FD2624/TR, Joint Defra/EA Flood and Coastal Erosion Risk Management R&D Programme.

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