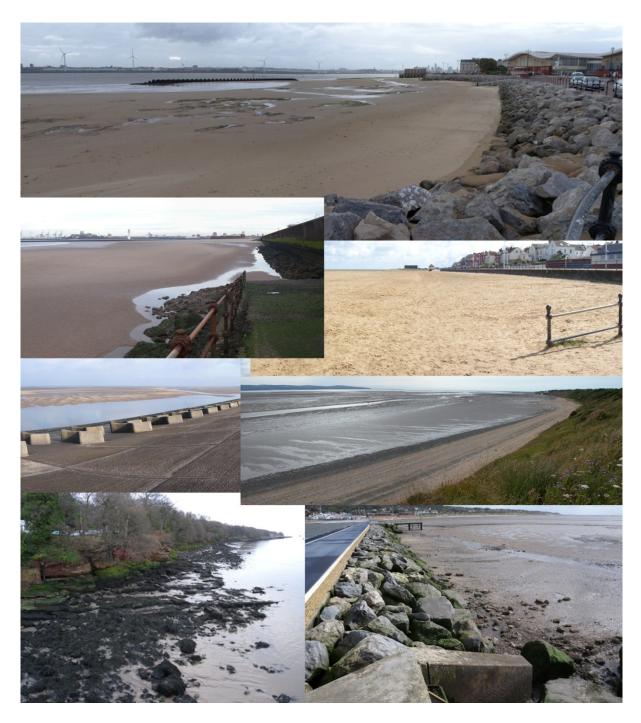


Wirral Coastal Strategy

Executive Summary



Prepared for: WIRRAL

Prepared by:

A J. Williams

Checked by:

Kevin Keating Associate Director

Approved by:

David Wells Regional Director

Technical Consultant

Wirral Coastal Strategy Executive Summary

Rev No	Comments	Checked by	Approved	Date
			by	
1	Draft Issue for Client Comment	KK	DW	27.02.2013
2	Final Issue for Client Review	KK	DW	19.04.2013
3	Final Issue	KK	DW	03.05.2013
4	Final Issue – minor amendments, Table ES 2	KK	DW	17.05.2013

Exchange Court, 1 Dale Street, Liverpool, L2 2ET

Telephone: 0151 331 8900 Website:http://www.aecom.com

Job No: 60216711 Date Created April 2013

This document has been prepared by AECOM Limited for the sole use of our client (the "Client") and in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM Limited and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM Limited, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM Limited.

Table of Contents

Wirral Coastal	Strategy; Executive Summary	1
1.1	Background to the Strategy	2
1.2	Guidance and Legislation	2
1.3	Strategy Implementation and Funding	3
1.4	Strategy Outputs	3
1.5	Future Studies and Other Actions	7
Table ES 1 Wir	ral Strategy Preferred Management Options	4
Table ES 3 Wir	ral Strategy Studies & Actions	7

List of Supporting Documents

Wirral Coastal Strategy Main Report

- A. Process Understanding and Behaviour
- B. Flood & Erosion Risk Assessment
- C. Stakeholder Engagement Plan
- D. Preliminary Option Appraisal
- E. SEA Report
- F. HRA Report
- G. WFD Assessment Report
- H. Wallasey Dunes Study
- I. Economic Appraisal
- J. Partnership Funding

Wirral Coastal Strategy; Executive Summary

1.1 Background to the Strategy

- 1.1.1 The coastline of Wirral is a place used for recreation, enjoyed for its natural beauty and provides valuable habitat for a variety of important plants and animals / flora and fauna. However, its beauty has attracted urban development and this development means that the coastline needs to be activity managed to ensure risk posed by tidal flooding and coastal erosion are acceptable. Management is needed and should be coordinated across the whole peninsula for a variety of reasons. Discrete lengths of the coastline do not exist in isolation coastal sand and mud is transported from one place to another sometimes creating issues that need resolving (e.g. silting of beaches at Hoylake) and other times bringing benefit. Development and land use on Wirral is also managed in coordinated way through local planning policy. Planners need a strategic level assessment of coastal hazards across Wirral, both present and future, in order to make better planning decisions. In summary, a coastal strategy is needed for Wirral and this document provides this.
- 1.1.2 During the 1970s and 1980s there was significant investment in providing improved coastal defence, particularly across the North Wirral and much of the shoreline now benefits from the provision of manmade defences. However, since 2001 there has been no major capital investment in coastal defence measures across the Wirral frontage, apart from refurbishment of the outer wall of the Marine Lake, West Kirby, which was carried out in 2008. There has however been on-going maintenance of existing coastal defence assets and ancillary infrastructure.
- 1.1.3 There is a need to identify sustainable arrangements for the future management of flood and coastal erosion risk and it is against the above background that the Wirral Coastal Strategy has been produced. Preparation of the Strategy commenced in May 2011. A draft Strategy document was consulted on from mid August to November 2012 and the Strategy document will, following Council approval, be finalised in June 2013. A Strategy Appraisal or StAR report, which provides the business case for government financial support for the Strategy, is due for consideration and sign off by the Environment Agency and Defra later in 2013.

1.2 Guidance and Legislation

- 1.2.1 To manage the risks to people and the developed and natural environment from flooding and coastal erosion, strategies for managing the coast are developed within a hierarchical framework. The strategic hierarchy comprises Shoreline Management Plans (SMPs), followed by Strategy Plans and finally detailed scheme appraisal. Each of these approaches becomes progressively more detailed and site specific, leading ultimately, provided sufficient funds are available, to the implementation of a management scheme that is considered appropriate for a specific length of coastline. The current North West England and North Wales Shoreline Management Plan (SMP2), was adopted by Wirral Council in September 2010 and defines a preferred shoreline management policy for each Policy Unit defined along the Wirral Frontage. Whilst the SMP identifies what policy should be adopted for future Coastal Defence management, the Wirral Coastal Strategy identifies how the policies would most appropriately be implemented.
- 1.2.2 The Strategy has been produced in accordance with current Flood and Coastal Erosion Risk Management (FCERM) Appraisal Guidance¹ and complies with the relevant provisions of the:
 - Strategic Environmental Assessment (The Environmental Assessment of Plans and Programmes) Regulations 2004 (SEA Regulations):
 - European Directive 92/43/EEC (The Habitats Directive), and;
 - EU Water Framework Directive (WFD)

¹ Environment Agency, March 2010. Flood and Coastal Erosion Risk Management appraisal guidance

1.3 Strategy Implementation and Funding

- 1.3.1 The Strategy provides an overall justification for desirable schemes. It then identifies potential funding sources, whether central government financial support might be available and the scale of any funding gaps.
- 1.3.2 Responsibility for managing potential central government funding of FCERM in England rests with the Environment Agency (EA), who receive a block grant from the Department of Food and Rural Affairs (DEFRA). This is called <u>Flood Defence Grant in Aid</u> (FDGiA). The total size of this funding source is of the order £100~200million per annum nationally.
- 1.3.3 Central government funding is accessed in accordance with DEFRA's "Partnership Funding" policy. The focus of this is to award funds to schemes that provide direct benefit to people, particularly in deprived areas, or that sustain the natural environment. This policy also encourages finding contributions from other sources as, if found, such contributions mean that FDGiA is more likely to be awarded for the remainder. Therefore, often the priority is to find local funds to support bids for FDGiA use the possibility of obtaining FDGiA to 'lever in' local funds. This requires engagement of the local people and businesses in order to seek direct financial support and also to create political support to prioritise local investment in coastal erosion and flood risk management. This is certainly the case for the Wirral coastline.
- 1.3.4 Linked to the FDGiA bid process, on an annual basis Wirral Council is required to submit a list of proposed schemes to the Environment Agency for potential funding, referred to as the Medium Term Plan (MTP). This is a list of potential schemes to be funded in the next 5 years. Wirral's MTP provides the key information needed for the Environment Agency to assess what FDGiA support is possible. A Sanctioned List is then published on the Environment Agency's website for each region determining the allocations. The Council's MTP is issued to the Environment Agency in June and the Sanctioned List is confirmed the following February.

1.4 Strategy Outputs

- 1.4.1 This Coastal Strategy provides the following:
 - A more detailed understanding of the physical coastal processes applying (tides, waves and beach movement),
 - Improved definition of the flood and coastal erosion risks faced by shoreline communities both now and in the future,
 - Identification of the likely environmental impacts, and
 - Assessment of alternative approaches for the future management of the coastline of Wirral.
- 1.4.2 The Strategy then identifies a preferred set of management arrangements for Wirral, the scope of which may vary over time, as the risks change. This may be because of expected climate change or other issues. In addition the Strategy also provides a preliminary assessment of the amount of support that particular measures will receive from the public purse and the additional locally sourced funding that will be required for implementation of the measures. The Strategy considers future management approaches over a 100-year timeframe, with actions generally considered with the same three epochs as defined in the SMP2:
 - Short Term the next 20 years (plus a sub-division listing works in the next 5 years)
 - Medium Term 20-50 years from the present
 - Long Term 50-100 years from the present
- 1.4.3 The preferred management options identified by the Strategy for each of the frontage lengths are shown in Table ES1. The preferred management approaches have been derived following testing of various options against relevant objectives.
- 1.4.4 Table ES2 identifies those Capital works prioritised by the Strategy for implementation in the short term, the estimated FDGiA funding that they could attract, the balance that will be required from elsewhere.
- 1.4.5 Funding for maintenance of defences managed by Wirral Council will continue.

Table ES 1 Wirral Strategy Preferred Management Options

Strategy Unit		Preferred Approach				
No.	Length	Description	Comments			
1	Heswall and Gayton	Maintain existing defences where present during first two epochs with provision of individual property level protection (PLP) and improved defences to Target Road sewage treatment works in the second or third epoch. Elsewhere no active intervention.	Low FDGiA availability. Will require local Council, public or private contributions in the future.			
2	Thurstaston Cliffs	No active intervention.	Minimal tangible assets at risk. Allows cliff erosion to continue, with need for re-location of mobile homes in the future.			
3	Caldy Cliffs	Maintain existing defences during first two epochs and replace in third epoch (subject to private contributions).	Low FDGiA. Will require mostly private contributions from individual property owners and Caldy Golf Club in the future.			
		Possible extension to defences adjacent to Thurstaston Sailing Club in the medium or long term to mitigate against exposure of historic landfill site (to be informed by detailed assessment).	There is no long-term commitment to maintain current Council built defences in future.			
4	West Kirby	Maintain existing defences until life expired, including associated beach management, then renew and including Marine Lake Outer Wall. Provide secondary flood defence measures	Majority of funds should be available through FDGiA but additional Partnership (local) funding will be required. Beach Management Plan to be reviewed in			
		along promenade during first epoch.	2015			
5	Royal Liverpool Golf Club	No active intervention.	No need for any works identified at present. Beach Management Plan to be reviewed in 2015.			
6	Hilbre Island	Maintain subject to funds being available	Would attract little FDGiA funding and would require external funding from other sources to carry out works, otherwise strategic role of the Island may be compromised.			
7	Hoylake & Meols	Maintain and refurbish existing defences and associated beach management. Improved toe works to Meols Parade during first epoch.	Limited FDGiA funding available but additional Partnership (local) funding will be required. Beach Management Plan to be reviewed in 2015.			
8	Wallasey Embankment	Maintain existing defences for as long as is feasible until near life expired. Consider appropriate options to sustain a longer term hold the line policy, including public consultation. Continue to maintain and upgrade inland river defences as necessary.	FDGiA funding should be available for asset replacement or renewal works but major beneficiaries would be expected to contribute (e.g. golf clubs).			

Table ES 1 Wirral Strategy Preferred Management Options

Strategy Unit		Preferred Approach			
No.	Length	Description	Comments		
9	Wallasey Dunes	Maintain existing defences until life expired. Consider appropriate options to manage the coastline thereafter, given the long term SMP2 policy of no active intervention. This will need to include public consultation.	Limited benefits - Potential FDGiA funding limited to potential benefits of an alternative approach on the natural environment. Requires on-going liaison with relevant bodies e.g. Wallasey GC, Natural England etc, to develop appropriate management plan for area.		
10	Kings Parade	Maintain and refurbish existing defences, as necessary. Additional flood protection in third epoch.	Little capital expenditure expected in the short to medium term, but potentially could be available later due to increased risk. FDGiA should be available for such longer term needs.		
11	Mersey River Wall	Maintain and refurbish existing defences, as necessary. Additional flood protection in third epoch.	It is expected that the Council will sustain these assets as needed given the broad benefit provided in terms of recreation. Limited FDGiA may be forthcoming for future works, mainly at the New Brighton end.		
12	Birkenhead Docks	Assets owners will maintain and refurbish existing quay and dock walls and defences. Peel Ports (the owners of the dock estate), provide improved flood defence in the future as expected redevelopment occurs.	Low risk at present. Frontage largely privately managed by third parties e.g. Peel Ports, Cammell Lairds etc. Some FDGiA funding may be available to support improved flood defence as part of redevelopment initiatives, but the bulk of any funding / improved flood management will need to be provided by the Council or developers themselves (e.g. for Wirral Waters)		
13	Rock Park & New Ferry	Maintain and refurbish existing defences, as necessary. Refurbishment of existing wall at Rock Park during first epoch.	There is potential for FDGiA contribution towards estimated £1.7 million capital cost of Rock Park Esplanade Improvement Works during first epoch. Heritage Lottery funding or other sources may also be accessible.		
14	Bromborough & Eastham	Maintain and refurbish existing walls and defences. Provide improved flood defence, as necessary (future).	Low risk at present. Frontage largely privately managed by third parties e.g. Peel Ports. Limited FDGiA funding available based on current arrangements.		

Table ES 2 Wirral Strategy Prioritised Works

Strategy Unit	Proposed Works	Type of Works	Potential Earliest Implementation (years from present) ¹	Urgency of Issue	Est. Cost (£k)	Est. max Government Contribution (£k)	Comment
West Kirby	Provision of new flood prevention measures	New construction works	2-3	Moderate	1,800	1,000	Local / Council contribution essential to implement ²
Rock Park	River wall refurbishment works	Refurbishment	3-4	Low	1,700	700	External / Local / Council contribution essential to implement. ³
Meols Parade	Sea wall toe and refurbishment works	Reinforcement of existing defence	2-6	Moderate	3,750	1,000	Local / Council contribution essential to implement ⁴
Wallasey Embankment	Additional embankment toe protection	Reinforcement of existing defence	11-20	Low	700	700	FDGiA funding likely to be available but contributions from beneficiaries are likely to be expected.

Notes

¹ Timing of works is subject to EA approval and obtaining required external contributions, where appropriate

² Potential contribution from the Highways Capital Programme and other potential funding sources to be identified.

 $^{^{\}rm 3}\,\text{Potential}$ Heritage Lottery Grant of up to £1.4 million identified.

⁴ Potential contribution from the Highways Capital Programme and other possible funding sources to be identified.

1.5 Future Studies and Other Actions

- 1.5.1 There is a requirement for the following to be undertaken, in order to support development of the intervention measures identified:
 - Collection of information and preparation of detailed assessments to support production of individual scheme Project Appraisal Reports (PARs)
 - Carry out scheme specific WFD, Habitats Regulation Assessments (HRA) and Environmental Impact Assessments
 - Obtaining support for and development of formal Partnership funding arrangements
 - General collection of data and information to support and develop detailed designs
- 1.5.2 In addition to proposed intervention actions, on-going collection of coastal process, shoreline response and asset condition will be carried out through the North West Regional Monitoring Strategy with current funding arrangements in place to 2016. Regular (annual) review of data collected and the production of reports will be carried out to ensure that the information collected is appropriate to inform proposed strategy actions.
- 1.5.3 Finally, the Strategy has identified that a number of specific studies and actions that will inform on-going FCERM across the Wirral frontage. These are presented in Table ES3:

Table ES 2 Wirral Strategy Studies & Actions					
Strategy Unit	Description	Timing (years)	Est. Cost (£k)		
2 & 3	Detailed investigation of future options for managing exposure of historic landfill tip at Thurstaston ¹	0-20	10-25		
6	Development of detailed management plan for Hilbre Islands	1-5	5-10		
4, 5 & 7	Review of Hoylake and West Kirby Beach Management Plan	0-5	5-15		
9	Setting up of a Wallasey Dunes Steering group consisting of Council staff, representatives from the golf clubs, Nature conservation bodies e.g. Natural England, RSPB etc.	1-5	Nominal		
9	Production of an evolving dune management plan for the Wirral Dunes frontage, aimed at promoting actions that accord with the long term management aspirations for the frontage.	1-5, on-going review	Initial 10-20		
12, 13 & 14	Regular asset inspection of defences in the River Mersey, upstream of Seacombe Ferry	Start year 1, maximum 5 yearly frequency	5-10		

Notes

¹ This will be carried out as part of a Dee wide investigation, led by the Environment Agency and Welsh Assembly Government, with contributions to be made by other interested parties. Timing to be confirmed.