



# Lower Alt with Crossens Pumped Drainage Catchment

## Draft Flood Risk Management Strategic Plan

Environmental Report  
October 2011

We are The Environment Agency. It's our job to look after your environment and make it **a better place** – for you, and for future generations.

Your environment is the air you breathe, the water you drink and the ground you walk on. Working with business, Government and society as a whole, we are making your environment cleaner and healthier.

The Environment Agency. Out there, making your environment a better place.

**Published by:**

Environment Agency  
Horizon House, Deanery Road  
Bristol BS1 5AH  
Tel: 0117 934 4000  
Email: [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)  
[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

© Environment Agency

All rights reserved. This document may be reproduced with prior permission of the Environment Agency.

# Contents

<b>Non-technical summary</b>	iii
<b>1. Introduction</b>	
1.1 The strategic plan	1
1.2 Current flood risk management	1
1.3 Strategic environmental assessment	2
<b>2. SEA steps</b>	
2.1 Scoping	3
2.2 Assessment and reporting	3
<b>3. Key links with relevant legislation, policy and guidance</b>	
3.1 International and national context	4
3.2 Regional and local context	5
<b>4. Key environmental issues</b>	
4.1 Data gathering and environmental baseline	6
4.2 Environmental systems	6
<b>5. Environmental assessment</b>	
5.1 The draft strategic plan	7
5.2 Environmental assessment	7
5.3 Habitats Regulations Assessment	9
5.4 Water Framework Directive Assessment	10
<b>6. Next steps and monitoring</b>	
6.1 Monitoring	11
6.2 Next steps	11
<b>List of figures</b>	
Figure 1 National context, plan boundary and local authority boundaries	2
<b>Appendices – the appendices are included within a separate document</b>	

# Non-technical summary

## ***What is this document?***

This is the non-technical summary of the environmental report that accompanies the consultation on the Lower Alt with Crossens Pumped Drainage Catchment Strategic Plan. The consultation period ends on 16 December 2011.

## ***Strategic Environmental Assessment***

A strategic environmental assessment (SEA) is undertaken to ensure that environmental effects are considered during the development of a plan or strategy alongside technical, economic or other considerations. The environmental report sets out the findings of the Strategic Environmental Assessment (SEA).

Scoping was undertaken to ensure that the assessment focused only on the likely significant effects of the strategic plan. The strategic plan evolved considerably since the scoping stage and we carried out a 'high-level' environmental assessment to consider the broad environmental implications of our draft recommendations.

## ***Lower Alt and Crossens Pumped Drainage Catchment Strategic Plan***

Water management in the Lower Alt and Crossens pumped drainage catchments is complex. The area is low lying and requires considerable intervention to manage water levels. There are some areas at risk of flooding in Formby, Southport, Banks and Maghull. The agricultural land is valuable and particularly sensitive to how water levels are managed.

The area has a rich cultural heritage and is important for nature conservation. The Alt and Crossens river systems flow into the Ribble and Alt Estuary which is a Special Protection Area (SPA). Sefton Coast Special Area of Conservation (SAC) lies along the coast and the extensive sand dunes and intertidal area attract large numbers of summer tourists. There are also important recreation and tourism activities associated with Martin Mere Site of Special Scientific Interest (SSSI), which is a managed wetland, and Ainsdale Sand Dunes National Nature Reserve. The soils are dominated by peat, with a history of drainage by constraining larger watercourses within embankments, creating ditches and pumping water.

## ***Summary of significant environmental effects and mitigation / enhancement***

In themselves, the three draft recommendations made by the strategic plan are unlikely to have significant adverse effects on the environment (including population and human health, biodiversity, water, soil, landscape, air, historic environment, climate change).

We will continue to invest in flood risk management where it is technically, economically and environmentally appropriate to do so. The strategic plan identifies a number of priority areas for these activities, which may be taken forward as projects or delivered through our capital works programme after the strategic plan is approved. Detailed environmental assessment will be carried out for each project when we consider different flood risk management options. Water voles, designated nature conservation and historic environment sites, and the opportunity to contribute to WFD objectives will be key issues to address. Flood risk management activities carried out through our maintenance programme are done in an environmentally sensitive manner and at an appropriate time of year.

The current water management regime is highly dependant on carbon and there are believed to be significant carbon emissions from peat wastage. Maintenance methods of the land drainage system can affect biodiversity, and there is little natural geomorphology or geomorphological processes occurring in the catchment. There are many environmental benefits associated with our draft recommendation to reduce pumping and re-wet areas of land, including reconnecting

watercourses to the floodplain, habitat creation, carbon sequestration, and improvements to water quality and water resources. There may also be opportunities for recreation and green infrastructure, which will be explored during the further work.

During the Transition Period we will maintain the existing pumping stations and undertake maintenance. It is difficult to predict the environmental impacts that may arise in the longer term from changing our current flood risk management practices as we have not yet discussed and debated the changes with the local community. However, we will provide support and advice to stakeholders on how to carry out land drainage maintenance in an environmentally sensitive manner through the catchment care officer and others. This will include advice on avoiding impacts on water vole and their habitat. The catchment care officer is the key mechanism to help mitigate any unforeseen environmental implications that may arise during the Transition Period.

### ***Monitoring***

The environmental assessment did not identify any significant environmental impacts from the draft recommendations. Environmental impacts may arise from any project or study taken forward once the strategy is approved, and we will develop monitoring indicators at that stage. One of the roles of the catchment care officer will be to ensure that no unforeseen impacts arise from our recommendations and to manage anything that does arise.

# Chapter one: Introduction

## 1.1 The Lower Alt with Crossens Pumped Drainage Catchment Strategic Plan

The draft strategic plan describes the current approach to flood risk management in the Lower Alt and the Crossens pumped drainage catchments and outlines the drivers for change before providing recommendations for the future.

The study area is north of Liverpool on the West Lancashire Coastal Plain, as shown in Figure 1. It encompasses Formby, Southport and the low-lying, high grade agricultural land to the east. It includes most of the Crossens catchment, together with the River Alt catchment from Maghull and downstream. Two Local Authorities are covered by the strategy area - Sefton Metropolitan Borough Council (SMBC) and West Lancashire Borough Council (WLBC). Lancashire County Council also have a lead flood authority role for the WLBC area.

Water management in the Lower Alt and Crossens pumped drainage catchments is complex. The area is low lying and requires considerable intervention to manage water levels.

The area is rural with centres of population at Formby, Southport, Banks and Maghull with some of these areas at risk from flooding. The agricultural land is valuable and particularly sensitive to how water levels are managed.

The area has a rich cultural heritage and is important for nature conservation. The Alt and Crossens river systems flow into the Ribble and Alt Estuary which is a Special Protection Area (SPA). Sefton Coast Special Area of Conservation (SAC) lies along the coast and the extensive sand dunes and intertidal area attract large numbers of summer tourists. There are also important recreation and tourism activities associated with Martin Mere Site of Special Scientific Interest (SSSI), which is a managed wetland, and Ainsdale Sand Dunes National Nature Reserve. The soils are dominated by peat, with a history of drainage by constraining larger watercourses within embankments, creating ditches and pumping water.

## 1.2 Current flood risk management

As described in chapter 2 of the draft strategic plan, the Environment Agency currently operates the two main pumping stations at Altmouth and Crossens at the tidal outfalls and a number of satellite pumping stations providing land drainage to rural areas of the catchment.

Only a proportion of the existing pumping contributes to flood risk management that benefits residential and commercial properties. The system primarily benefits rural land drainage. The Environment Agency also maintains over 26 km of raised flood defence embankments within the study area. Approximately 7 km protect the main urban areas; the majority of the remainder protect high grade agricultural land.

Sustaining the current pumping stations (PS) and flood defences currently costs the Environment Agency typically three million pounds per annum. Approximately 1.5 million is on operation and maintenance and the rest is on capital investment.

Our funding, is limited and our ability to continue to invest in this system will be severely limited unless significant contributions by those that benefit are secured. Because of historical reasons and the natural land form, the pumped drainage catchment can be considered as two systems: The **Lower Alt System** which drains via the River Alt to Altmouth pumping station, and The **Crossens Pumped Drainage System** which drains via a number of large ditches to Crossens pumping station.

Sections 2.2 and 2.3 of the draft strategic plan describe the current levels of flood risk within the two systems and how it is currently managed. They also provide further information on the flood risk management assets within the study area.

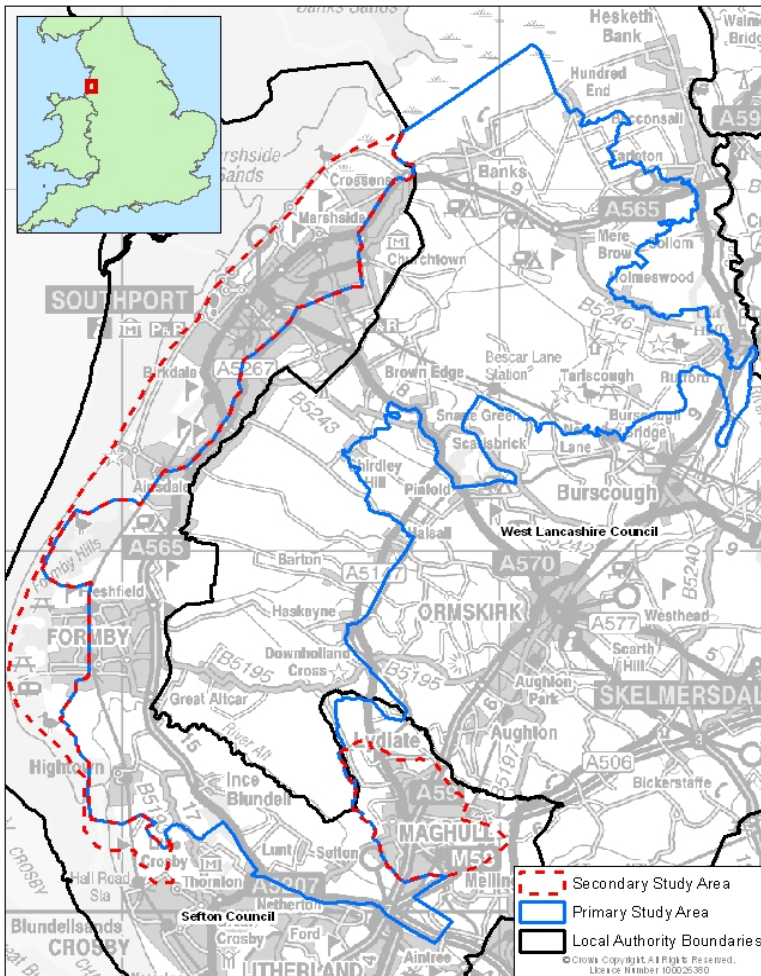


Figure 1: National context, plan boundary and local authority boundaries

### 1.3 Strategic environmental assessment

Strategic environmental assessment (SEA)<sup>1</sup> helps us make sustainable decisions during plan-making by ensuring that environmental issues and opportunities are identified and considered in parallel with technical and economical considerations. SEA also highlights the strategic environmental issues that will require consideration and mitigation in greater depth at project level

<sup>1</sup> SEA is required by the European Directive (2001/42/EC), which is transposed into English and Welsh Regulations (SI 1633/1656, 2004). A statutory SEA is not required for flood risk management plans, but we apply it in accordance with Defra guidance and, as far as possible, follow the statutory requirements.

via the Environmental Impact Assessment (EIA) process. This environmental report describes the environmental assessment of the draft strategic plan.

## Chapter two: SEA steps

SEA is an iterative process. As the strategic plan developed, we carried out the following activities:

- environmental scoping
- assessment and reporting

### 2.1 Scoping

Scoping involved:

- Collecting initial baseline information about a range of environmental receptors (e.g. water, landscape, biodiversity, cultural heritage etc.)
- Reviewing the plans and programmes that could influence, or be affected by, the strategic plan
- Deciding which environmental receptors were most likely to be affected by the strategic plan and 'scoping out' from the assessment the environmental receptors unlikely to be affected
- Developing assessment criteria to identify the environmental impacts
- Consulting on the environmental scoping report

We sent the scoping report to a range of organisations in October 2010 and published it on our website. We accepted comments on the report until the end of January 2011. Appendix A summarises the key issues identified by consultees and shows how we have taken them into account during the development of the strategic plan and the environmental assessment.

### 2.2 Assessment and reporting

Assessment and reporting included the following activities:

- Reviewing our decision to scope environmental receptors in or out of the assessment on the basis of scoping consultation comments and the scenarios being developed by the strategic plan
- Collecting more information following comments from the scoping consultation
- Altering our assessment approach on the basis of scoping consultation comments and the strategic nature of the plan
- Carrying out a fit for purpose strategic environmental assessment
- Identifying appropriate mitigation measures
- Looking for opportunities to improve the local environment
- Identifying measures to monitor the environmental impacts of the strategic plan
- Reporting and consulting on the findings of the SEA in this Environmental Report

## Chapter three: Key links with relevant legislation, plans and guidance

We reviewed numerous policies, plans and strategies as we prepared the strategic plan. The findings of the review are detailed in Appendix B. The key environmental points are summarised below.

### 3.1 International and national

- Under the relevant sections of the **Environment Act 1995** and the **Land Drainage Act 1994**, we are required to contribute to the conservation and enhancement of flora and fauna, natural beauty, geological and physiographical features, heritage and recreation when carrying out flood risk management functions under the relevant Acts.
- **The Water Framework Directive (WFD) (2000/60/EC)** aims to protect all elements of the water cycle and enhance the quality of our groundwaters, rivers, lakes, estuaries and seas. It was implemented in England and Wales by The Water Environment (Water Framework Directive) (England and Wales) Regulations 2003. Chapter 5 explains how we have taken WFD into account during the development of the strategic plan.
- Due to the presence of environmentally sensitive sites and species within its study area, the strategic plan falls under the **Conservation of Habitats and Species Regulations 2010<sup>2</sup>**. The regulations require the assessment of the impacts of plans and projects on European Sites (Special Protection Areas (SPA) and Sites of Community Importance (SCI) /Special Areas of Conservation (SAC)). Defra policy widens this to include Ramsar Sites. Chapter 5 and Appendices D and E describe the Habitats Regulations Assessment.
- The **Wildlife and Countryside Act (1981)** and **Countryside and Rights of Way Act (2000) (CRoW)** provide for the protection of species and habitats designated as Sites of Special Scientific Interest (SSSIs). We assess the potential for damage to protected species and habitats when assessing permit applications and our own works.
- The **European Landscape Convention (ELC)**, signed by the UK government on 24 February 2006, was ratified by the Council of Europe on the 21 November 2006. The Convention became binding on the UK from 1 March 2007. The ELC recommends that the protection, management and planning of all landscapes in Europe is a task not just for governments but for all sectors of civil society, entailing 'rights and responsibilities for everyone'. It encourages a joined up approach through policy and planning in all areas of land-use, development and management, including the recognition of landscape in law. The Convention promotes landscape protection, management and planning.
- The **Climate Change Act 2008** creates a new approach to managing and responding to climate change in the UK, by:
  - setting ambitious, legally binding targets
  - taking powers to help meet those targets
  - strengthening the institutional framework
  - enhancing the UK's ability to adapt to the impact of climate change

---

<sup>2</sup> These regulations replaced the Conservation (Natural Habitats &c) (Amendment) Regulations 2007 which implement the EC Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the **Habitats Directive**) in the UK on the 1st of April 2010. Note that the Regulations were amended in March 2011 in The Conservation of Habitats and Species (Amendment) Regulations 2011.

- establishing clear and regular accountability to the UK Parliament and to the devolved legislatures.
- The **Eel Regulations 2009** ('The Eel SI') came in to force in January 2010, allowing the UK to implement EC Council Regulation (1100/2007). Under this, we must take actions to halt and reverse the decline in the European eel stock.

## 3.2 Regional and local

There are numerous environmental and biodiversity plans relevant to the strategic plan, including:

- **Local Biodiversity Action Plans (LBAP)** for North Merseyside and Lancashire. In addition the **Northwest Biodiversity Strategy** sets out how biodiversity aims are to be integrated into regional and national policy within the area.
- **Wetlands Vision Project (WVP)** – a national project led by Natural England, the RSPB, the Environment Agency, English Heritage and local wildlife trusts. The aim is to increase the coverage of wetland habitats throughout the UK over the next 50 years.
- **North West Regional Habitat Creation Programme** – our programme for delivery of BAP habitat creation in the North West region.
- **Mosslands Project** – aiming to be a major contributor to national and local BAP targets for mossland conservation through purchase and restoration of key sites. Also focuses on carbon sequestration opportunities, challenging peat extraction and promoting alternatives to peat.
- **Water management plans** including the Lower Mersey and Alt **Catchment Abstraction Management Strategy (CAMS)** and the Crossens CAMS and the **Water Resources Strategy** regional action plan for the North West. These have developed policies which seek to manage water resources and preserve and improve water quality.

## Chapter four: Key environmental issues

### 4.1 Data gathering and environmental baseline

We collected baseline data at the scoping stage to identify key environmental issues and trends for the plan area. This information was collected for each of the environmental receptors included in the SEA legislation. Our review of plans and programmes also provided baseline information. We reviewed and updated the information before carrying out the environmental assessment. This allowed us to take account of consultation comments and helped focus the assessment on the baseline features that could be affected by the strategic plan. Appendix C describes the environmental baseline in the plan area for each receptor.

### 4.2 Environmental systems

Although we describe the environmental baseline in terms of individual receptors, it is important to recognise a number of issues that are inextricably linked. Key “systems” that operate in the catchments are:

- **Sustainability** - the current system of flood risk management and land drainage in the Lower Alt and Crossens catchments enables the present agricultural land use. The agricultural landscape is subject to a number of pressures, such as market forces, food policy, land use policy and environmental management, including carbon accounting. The provision of public goods and services from land, including countryside amenity and ecosystem services such as biodiversity, water regulation and carbon sequestration is increasingly important.
- **Climate change mitigation and adaptation** - the land drainage and intensive agriculture is thought to cause the large peat soil deposits in the area to degrade. This results in gradual lowering of ground levels, which impedes effective land drainage, but also results in large greenhouse gas emissions, and degradation of the archaeological resource within the peat. Land use can play a pivotal role in both mitigation of and adaptation to climate change.
- **Integrated water management** - there are significant pressures on water use in the catchments and this will increase if climate change results in warmer and dryer summers. Increased use of water storage is likely to be important in future. Wetter winters are also likely in the future. The most appropriate way of managing increased winter flows is also likely to involve more water storage within the catchment.
- **Biodiversity** - the ditches and channels are ideal water vole habitat, and surveys have shown that water voles are present in significant numbers throughout the strategy area. A sensitive approach is needed to flood risk maintenance activities as they can damage this habitat, and can undermine Water Framework Directive objectives.
- **Water Framework Directive** – the water bodies within the system are all classified as heavily modified. There are few natural geomorphological features and the current management of the catchment provides limited opportunity for natural geomorphological processes. However, there are real opportunities to reconnect the watercourses with the floodplain and have significant morphological and ecological benefits.
- **Organic farming** - although it has clear environmental benefits, organic farming has not been chosen by most growers in the area. The land is not particularly suited to organic production as the typically peaty soils are fertile and carry a very high weed burden that, without chemical control, would swamp the crops. Organic production remains a relatively “niche” market in this area.

## Chapter five: Environmental assessment

### 5.1 The draft strategic plan

The current system is unsustainable on a number of levels. The system is largely managed through artificial means that is contrary to the natural processes of the catchment and is largely achieved through expending non-renewable energy through pumping. Whilst intensive drainage provides short term productivity benefits, the longer term impact on ground levels and associated drainage impairment will reduce the effectiveness of the drainage system and may reduce agricultural productivity overall. In the process, extensive peat shrinkage will result in carbon dioxide emissions. It is likely that future water demand will exceed supply and the current system is not effective at providing either flood storage, when needed, or a reliable supply of water in dry periods.

The strategic plan makes the following draft recommendations:

#### A) Maintain Tidal Defences

With others, we will continue to maintain tidal defences where economically, technically and environmentally appropriate to do so.

#### B) Continue to invest in fluvial flood risk management in areas where it is economically, technically and environmentally appropriate to do so. This will include:

- i. reducing the amount of pumping by investigating other flood risk management options such as increased flood storage
- ii. carry out an appraisal study of potential flood storage areas
- iii. exploring the potential for further habitat creation
- iv. exploring other ways to reduce costs and / or generate other funding

#### C) By Spring 2015 the Environment Agency will make a significant change from current practice, by either reducing or stopping Land Drainage work within the catchment. To implement this major change we will:

- i. launch a Debating Period with the local and farming communities until Spring 2013, focussed on the best way forward for land management and subject to Government policy
- ii. implement a Transition Period whereby we will continue to undertake land drainage activities with the reducing level of funding allocation until Spring 2015.
- iii. implement the outcomes discussed and agreed / accepted from Spring 2013 to Spring 2015 We anticipate that in the first 18 months this will be to debate and determine the best way forward within the Lower Alt and Crossens catchment and a further 2 years to implement any agreed actions.
- iv. continue to undertake land drainage where legally required to do so.
- v. maintain existing pumping stations to a working and safe standard
- vi. establish a River Alt with Crossens Pumped Drainage Catchment Care Officer to assist and provide some support to stakeholders through the Transition Period.

### 5.2 Environmental assessment

In the scoping consultation we explained that we would use assessment criteria to carry out the environmental assessment in two stages:

- a high level assessment of the full range of flood management options
- a detailed assessment of the shortlisted options

The strategic plan has evolved considerably since the scoping stage. It does not include detailed information on flood risk management options, either spatially or temporally, rather it proposes a series of very strategic recommendations. Given this, we carried out a 'high-level' environmental assessment to consider the broad environmental implications of our recommendations. More detailed environmental assessment will be carried out as the draft recommendations are progressed and further information is available. We do not consider that there is value in trying to carry out a more detailed assessment at this stage as any future FRM schemes or alternative ways of managing water within the catchments are uncertain. We will carry out an appropriate level of environmental assessment at project level through the EIA process.

The draft recommendations reflect our current position on funding flood risk management activities, and there are no reasonable alternatives to consider in the assessment.

A discussion of the likely environmental implications of our draft recommendations is provided below.

### **A) Maintain Tidal Defences**

Without the tidal defences some 20,000 properties would be at high risk of flooding. The tidal defences are largely the responsibility of Sefton Council, and there is currently no need to replace the defences. The tidal gates at Altmouth Pumping Station form part of the tidal defences, along with some earthen raised defences and Crossens pumping station, and are currently our responsibility. The tidal gates have recently been repaired and refurbished as part of the works at Altmouth Pumping Station.

In the short term there are likely to be no environmental impacts from this recommendation. The tidal gates may need to be refurbished or replaced in the future and we will assess the environmental impacts at that stage.

### **B) Continue to invest in other flood risk management where it is economically, technically and environmentally appropriate to do so. This will include:**

- i. reducing the amount of pumping by investigating other flood risk management options such as increased flood storage
- ii. carry out an appraisal study of potential flood storage areas
- iii. exploring the potential for further habitat creation
- iv. exploring other ways to reduce costs and / or generate other funding

The strategic plan identifies a number of priority areas for these activities, and these may be taken forward as projects or delivered through our capital works programme once the strategic plan is approved. Detailed environmental assessment will be carried out for each project when we start to look at the different flood risk management options. Key issues to consider at that stage will be water voles, designated nature conservation and historic environment sites and the opportunity to contribute to WFD objectives. Any work that is carried out through our maintenance programme is subject to our internal environmental management procedures to ensure that the work is done in an environmentally sensitive manner and at an appropriate time of year.

The current water management regime is highly dependant on pumped drainage which has associated carbon emissions. There are also believed to be significant carbon emissions from peat wastage. Maintenance methods of the land drainage system can affect biodiversity, and there is little natural geomorphology or geomorphological processes occurring in the catchment. There are many environmental benefits associated with reducing pumping and re-wetting areas of land, including reconnecting watercourses to the floodplain, habitat creation, carbon sequestration, and improvements to water quality and water resources. Creating flood storage areas does need to be done in an environmentally sensitive manner to avoid highly engineered structures. This will be considered in detail when we carry out the appraisal of possible flood storage areas. There may also be opportunities for recreation and green infrastructure, which will be explored during the further work.

Any changes to the pumping and drainage regime will need to reflect the water level management plans for Martin Mere SPA and Mere Sands Woods SSSI.

**C) By Spring 2015 the Environment Agency will make a significant change from current practice, by either reducing or stopping Land Drainage work within the catchment. To implement this major change we will:**

- i. launch a Debating Period with the local and farming communities until Spring 2013, focussed on the best way forward for land management and subject to Government policy
- ii. implement a Transition Period whereby we will continue to undertake land drainage activities with the reducing level of funding allocation until Spring 2015.
- iii. implement the outcomes discussed and agreed / accepted from Spring 2013 to Spring 2015 We anticipate that in the first 18 months this will be to debate and determine the best way forward within the Lower Alt and Crossens catchment and a further 2 years to implement any agreed actions.
- iv. continue to undertake land drainage where legally required to do so.
- v. maintain existing pumping stations to a working and safe standard
- vi. establish a River Alt with Crossens Pumped Drainage Catchment Care Officer to assist and provide some support to stakeholders through the Transition Period.

During the Transition Period we will maintain the existing pumping stations and undertake maintenance in accordance with the 5 year plan. This is a short term recommendation and there are likely to be few environmental implications during the Transition Period. Our maintenance work is carried out in an environmentally sensitive manner in accordance with our internal environmental management guidance. It is not anticipated that major works will be required on the pumping stations during the Transition Period, however environmental assessment would be carried out if any works were needed.

Our studies have shown that a large proportion of our activity is in on rural flood risk management and land drainage. Reducing our activities may affect the current agricultural land use and food production. Debate will be held with the farming community during the Transition Period to discuss the best way forward for land management. We will provide support and advice to stakeholders on how to carry out land drainage maintenance in an environmentally sensitive manner through the catchment care officer and other guidance. This will include advice on avoiding impacts on water vole and their habitat. The catchment care officer is the key mechanism to help mitigate any unforeseen environmental implications that may arise during the Transition Period.

### 5.3 Habitats Regulations Assessment

The strategic plan, and any projects that are recommended from it, have the potential to fall under the Conservation of Habitats and Species Regulations 2010 which implement the EC Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (The Habitats Directive) in the UK.

The Habitats Directive is a major European initiative that aims to provide better protection of important, rare and endangered plants, wildlife and natural habitats. The UK government was required to designate Special Areas of Conservation (SAC) and Special Protection Areas (SPA), also known as 'Natura 2000' sites.

The strategic plan area wholly contains Martin Mere SPA and also partially falls within the Ribble and Alt Estuaries SPA and Sefton Coast SAC. We have carried out an initial assessment to consider whether the recommendations are likely to affect these sites. At this stage, our view is that the strategic plan is not likely to have a significant effect, either alone or in combination on the coastal sites or on Martin Mere.

### 5.4 Water Framework Directive Assessment

As outlined in chapter 3 and Appendix C, the WFD introduces a strategic planning process for the purposes of managing, protecting and improving the water environment. The WFD requires all water bodies to meet good overall status within a defined timescale.

We have a legal duty to ensure that all existing and new modifications or sustainable development activities do not pose a risk to deterioration or failure to achieve the overall ecological status or potential objectives of water bodies. Given the strategic nature of the draft recommendations we have not carried out a detailed WFD assessment for each water body. Instead we have considered whether the draft recommendations are compliant with the environmental objectives of the WFD. A detailed WFD assessment will be carried out for any projects that come forward as the strategic plan is implemented.

The main environmental objectives from article 4 of the WFD are:

- no deterioration of status for surface and groundwaters and the protection, enhancement and restoration of all water bodies
- achievement of good status by 2015 i.e. good ecological status (or potential) and good chemical status for surface waters and good chemical and good quantitative status for groundwaters
- progressive reduction of pollution from priority substances and phase-out of priority hazardous substances in surface waters and prevention and limitation of input of pollutants in groundwaters
- reversal of any significant upward trend of pollutants in groundwater
- achievement of standards and objectives set for protected areas in community legislation

All of the water bodies within the catchment, apart from Three Pool's Waterway, are heavily modified for flood protection reasons. The water bodies all currently have moderate ecological status/potential largely due to poor water quality and hydromorphological constraints. The 3 draft recommendations are not likely to cause a deterioration in status, or prevent achievement of good status for the water bodies within the study area. As noted in the geomorphological audit, there is considerable potential to improve natural geomorphological process within the study area by re-wetting areas of land and reconnecting the water bodies to the floodplain. This will be explored during the appraisal study of flood storage areas and opportunities to deliver WFD mitigation measures will be considered. A number of mitigation measures are related to providing landowner

education on sensitive management practices and techniques, which will be provided by the catchment care officer.

The 3 draft recommendations will have no effect on the environmental objectives related to pollution. Impacts on protected areas are considered in the Habitats Regulations Assessment.

## **Chapter six: Next steps and monitoring**

### **6.1 Monitoring**

Monitoring helps us to:

- compare the actual impacts of the strategy with the predicted impacts
- ensure that mitigation is effective
- ensure that no unforeseen impacts occur and that existing arrangements for monitoring are not duplicated
- address gaps in data, or uncertainty highlighted by the assessment

The environmental assessment described in chapter 5 did not identify any significant environmental impacts from the draft recommendations. Environmental impacts may arise from any project or study taken forward once the strategy is approved, and so we will develop monitoring indicators at that stage.

One of the roles of the catchment care officer will be to ensure that no unforeseen impacts arise from our recommendations and to manage anything that does arise.

### **6.2 Next steps**

The consultation on the strategic plan closes on 16 December 2011. Following the consultation period, we will review feedback with the Steering Group and make any appropriate revisions to the plan. We expect to publish our finalised Strategic Plan by Summer of 2012.

**Would you like to find out more about us,  
or about your environment?**

**Then call us on**

**08708 506 506\*** (Mon-Fri 8-6)

**email**

**enquiries@environment-agency.gov.uk**

**or visit our website**

**www.environment-agency.gov.uk**

**incident hotline 0800 80 70 60** (24hrs)

**floodline 0845 988 1188**

\* Approximate call costs: 8p plus 6p per minute (standard landline).  
Please note charges will vary across telephone providers



Environment first: This publication is printed on recycled paper.