

LOCAL ENVIRONMENT AGENCY PLAN

**ALT / CROSSENS ACTION PLAN
2000 – 2005**

SEPTEMBER 2000

ENVIRONMENT AGENCY



077233

**Alt/Crossens
Local Environment Agency Plan
Map 1**



**ENVIRONMENT
AGENCY**

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**Alt Crossens Infrastructure
Showing Local Authority
Boundaries**

KEY

- LEAP boundary
- Main watercourse
- Minor watercourse
- Canal
- Built up areas
- Motorway
- A road
- Railway line
- Local Authority boundary

Foreword

I am pleased to introduce the River Alt and Crossens LEAP area Action Plan. Following extensive consultation we have stated what we feel are the environmental issues that need to be resolved in the River Alt and Crossens area.

This plan states that we are committed to working with local people and organisations to improve the environment of the Alt and Crossens area.

We will also be protecting the environment by regulating industry firmly and fairly.

I express my thanks to all those people that took part in the consultation process, particularly Central Area Environment Group. I would encourage people to explore and enjoy their local environment.

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Key Details

Flood Defence Length of Main River (River Alt)						28km
Planning Authorities Total number of planning authorities within the plan area.						4
Conservation and Recreation Total number of Sites of Special Scientific Interest (SSSIs) National Nature Reserves (NNR) candidate Special Areas of Conservation (SAC) Special Protection Areas (SPA) and RAMSAR site						10 3 1 2
Waste Management Licensed waste management operations in the area: Number of landfill sites. Number of transfer stations. Number of metal recycling facilities.						2 ¹ 26 10
Estimates of controlled wastes (1998/1999) Waste to landfill (tonnes)						1829.50
Length of fishery Length of coarse fishery						28km
Number of pollution incidents (Jan-Dec 1999).		Category 1	Category 2	Category 3	Category 4	Category Totals
Oil		0	0	18	9	27
Chemical		0	0	0	1	1
Sewage		1	0	12	1	14
Organics		0	0	2	1	3
Totals		1	0	32	12	45

Note – 1: Both landfills are licensed but not in use.

The LEAP process.

The Local Environment Agency Plan for the River Alt and Crossens area is produced on a five-year cycle.

In year one (1999) a consultation report was produced. This outlined what we felt were the key environmental issues in the area. This was then widely distributed and people and organisations had the opportunity to comment on the plan. We particularly encouraged people and organisations to identify areas where it is possible and sensible to work together to bring about real environmental improvements in the River Alt and Crossens area.

We received 16 written responses from 16 organisations. These comments have allowed us to develop this Action Plan. Over the next three years we will publish Annual Reviews to demonstrate our progress in carrying out these actions.

The whole LEAP process benefits from the advice of the Area Environment Group. This consists of 21 members who live and work locally and advise us on how plans should be produced to meet the needs of local people and organisations.

Vision for the River Alt and Crossens area.

Our vision is: A better environment in England and Wales for present and future generations.

This Action Plan explains how we intend to help bring about a better environment in the River Alt and Crossens area over the next five years.

We have specific responsibilities relating to improving the environment. We only have the authority and resources to plan for those matters which are related to our statutory duties and responsibilities. These responsibilities include managing and regulating the water environment, controlling waste management, regulating emissions from major industrial processes and contaminated land. We also have duties to protect and improve biodiversity, manage freshwater fisheries, to protect the landscape and heritage of land and to promote recreation. Throughout the Action Plan logos are used to identify the responsibilities that the actions relate to.



Managing Water Resources



Delivering Integrated River Basin Management



Managing Freshwater Fisheries



Conserving the Land



Enhancing Biodiversity



Managing Waste



Improving Air Quality



Addressing Climate Change



Regulating Major Industry

Alt / Crossens LEAP
Action Plan 2000 - 2005

LEAPs and other plans.

We share the regulation and management of the environment with others. Local Environment Agency Plans intend to complement and integrate with other plans such as Local Waste Plans, Local Air Quality Management Plans, Development Plans, Local Agenda 21 Action Plans and Local Biodiversity Action Plans.

LEAPs and Partnerships.

We are particularly keen to work in partnership with local people and organisations. We are working with Lancashire County Council and North West Water along with West Lancashire District Council to offer advice and small grants to local community environmental projects.

To support communities we have set up River Valley Initiatives (RVI). These support local tidy up campaigns, develop school nature areas and help community groups to get funding for their projects. The RVI within the River Alt and Crossens area is Alt 2000.

Alt 2000 is an alliance of organisations striving to improve the River Alt and its environment. The Mersey Basin Campaign and other interested bodies set up this River Valley Initiative. Alt 2000 acts as a co-ordination of resources, bringing local authorities, agencies and public interest groups together. A steering group comprising various organisations exists to oversee the work of the partnership. We have worked closely with Alt 2000 in various environmental improvement schemes; including river clean-ups, litter surveys and also organising joint seminars and conferences.

Introduction to the River Alt and Crossens LEAP Area.

The River Alt and Crossens LEAP Area.

The LEAP area can be described in two parts; namely the River Alt catchment and the Crossens area.

The Alt Catchment – The River Alt rises in Huyton and flows 28km to its tidal limit at Hightown. The catchment area includes North Liverpool, Knowsley, Aughton and Ainsdale. The source of the River Alt is located at Huyton within the Huyton Wetlands Site of Biological Interest (SBI). The classification of SBI results from its large area of natural marsh and smaller areas of acidic marsh. There has also been tree and scrub planting in association with dry neutral grassland. The catchment has two distinct areas and on both of these the watercourses have been substantially engineered.

The upper Alt catchment from Huyton to Maghull is largely urban and industrialised, receiving flows from surface water sewers, combined sewer overflows and also treated effluent from Fazakerley Wastewater Treatment Works (WwTW). The upper Alt and its tributaries is well recorded as a polluted and degraded catchment and its limited habitat and wildlife is a symptom of this legacy of diffuse contamination.

The lower Alt catchment between Maghull and Altmouth is predominantly rural with lowlying land. This area is drained by a large network of drained ditches which are linked to the main watercourses via land drainage pumping stations. At the mouth of the River Alt, Altmouth pumping station pumps fluvial flows into the Mersey Estuary whilst also preventing tidal inflows.

The issues of limited habitat and wildlife are being tackled by different organisations but also in partnership through the Alt 2000 Partnership.

The Crossens area– The Crossens area comprises three main watercourses:

- The Sluice rising to the east of Rufford,
- Middle (also known as Back) Drain which drains the central area of mosslands and
- Three Pools which rises in the south east corner in Ormskirk and flows north eastwards, skirting Southport.

All three watercourses support a coarse fishery within the pumped station network.

More than a third of the Crossens area is below the high water mark of ordinary spring tides. The northern part is protected from the sea by an embankment and the southern part by sand dunes. The pumping station at Crossens serves a dual role, primarily for land drainage but during dry weather it maintains high water levels to alleviate lowland peat shrinkage. An additional facility as a result of maintaining water levels in the system is the ability to supply water for spray irrigation during the summer season.

The watercourse provides a refuge for wetland species with areas of the mossland providing an internationally recognised haven for migratory birds.

Introduction to the River Alt and Crossens LEAP Area.

Within the Crossens area approximately 13083 hectares of coastal zone have been designated as Sites of Special Scientific Interest (SSSI), due to the international importance of the sand dunes along the Sefton Coast. The dunes are also designated as a candidate Special Area of Conservation (SAC) and as a Special Protection Area (SPA). These wetlands support rare species such as Natterjack toads and provide habitats for over-wintering waders and wildfowl. There are European Union designated bathing beaches at Formby, Ainsdale and Southport. The coastal zone falls within the Sefton Coastal Management Plan.

The River Alt and Crossens area supports a wide variety of recreational pursuits including walking, sailing, cycling, fishing and bathing. Navigation takes place along the Leeds and Liverpool Canal, which crosses the area.

Action Plans

The Issues

The issues are presented with a number of actions, a target timetable and the identification of responsible parties. Where possible, costs have been outlined, for each action, for the period covered by the plan. This does not necessarily reflect the total cost of the schemes and is sometimes a projected estimate to be accurately costed later. This document recognises current priorities, both within the Agency and other organisations. The issues are not listed in any order of priority or importance, but are grouped to demonstrate how they relate to our responsibilities. The use of logos is used to identify our responsibilities.

List of abbreviations used in tables:

The Agency	Environment Agency
AC	Angling Clubs
BTCV	British Trust for Conservation Volunteers
BW	British Waterways
CC	Chamber of Commerce
EAS	Environmental Advisory Service
EN	English Nature
ERDF	European Regional Development Fund
ES	Emergency Services
ETBPP	Environmental Technology Best Practice Programme.
FWAG	Farming and Wildlife Advisory Group
GWK	Groundwork Trust
HSE	Health and Safety Executive
KMBC	Knowsley Metropolitan Borough Council
KIPP	Knowsley Industrial Park Partnership
LCC	Lancashire County Council
L&DAA	Liverpool and District Angling Association
LiCC	Liverpool City Council
LPLF	Liverpool Park Lakes Forum
LWT	Lancashire Wildlife Trust
MAFF	Ministry of Agriculture Fisheries and Food
MF	Mersey Forest
NFU	National Farmers Union
NMGM	National Museums and Galleries, Merseyside

NWW	North West Water	
QCP	Queens Community Partnership	
RO	Riparian Owner	
SC	Sefton Council	
WLDC	West Lancashire District Council	
W&DAA	Wigan and District Angling Association	



Issue 1: The need for effective management of water levels.

Background to the issue:

Water levels are artificially controlled on much of the area and there are a large number of licensed abstractions from surface water and from boreholes in the area.

A balance is needed whereby licensed abstractors can still draw water during prolonged dry periods and avoid the land stability problems caused by over-abstraction. The adjustment of the pumping regime is intended to achieve this objective.

Actions:

The Water Level Management Plans for both Downholland Moss SSSI and Mere Sands Wood SSSI are at draft stage. We have agreed with English Nature that a simple management plan is needed for Downholland Moss SSSI, whereas a full consultative plan is required for Mere Sands Wood SSSI. Both plans have now been sent to English Nature.

In relation to the imposition of embargoes on new summer licences from the Crossens area we will use our powers under the Water Resources Act 1991 and also by applying the precautionary principle. We are currently measuring and monitoring abstractions in the Crossens area.

To address the issue we have started discussions with ADAS and the National Farmers Union (NFU) with the objective of developing a methodology and criteria for the model of the area. As part of our enforcement and inspections role, regular informal discussions take place with licensed abstractors. The information obtained from these discussions will provide the basis for the study.

Following the results of the study we will then liaise with all licensed abstractors in the Crossens area and hold formal discussions through attendance at NFU meetings and with ADAS. This will enable us to identify the Water Demand System.

If we are satisfied that the model works then we will consider applying it in the River Alt catchment. This will be with the provision that we have established the initial data requirements.

Issue 1: The need for effective management of water levels.

ACTIONS	RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/ DRIVER.
	LEAD	OTHER	C	R	C	R	C	R	C	R	C	R	C	R	
1. Impose embargoes on new summer abstraction licenses pending results of the study.	The Agency		✓	✓	✓	✓					✓				
2. Carry out a study on the water resource availability in the Crossens area and develop a model of the area based on the study.	The Agency		✓	✓	✓										
3. Initiate discussions with water abstractors following results of the study.	The Agency		✓	✓	✓	✓									
4. Water Level Management Plans to be drawn up for Downholland Moss SSSI	The Agency	EN Landowner.	✓	✓											
5. Water Level Management Plans to be drawn up for Mere Sands Wood SSSI.	The Agency	EN Landowner	✓	✓											
6. Identify heritage significance of peatlands and produce catchment wide action plans to protect them.	The Agency. County Archaeologist.		✓	✓	✓	✓									

Glossary:

EN – English Nature.

**Issue 2: The potential increase in abstraction quantities on the Sefton Coast and the potential impacts on the environment.****Background to the issue:**

The Sefton Coast is of European importance for its dune habitats; namely dune grassland, shifting dunes, dunes with creeping willow and humid dune slacks and is consequently designated as a candidate Special Area of Conservation (SAC). The dunes also form an important local water resource for irrigation purposes for many of the links golf courses in the area. Changes in climatic conditions and the increased demand for water has significantly increased the pressures on the Sefton Coast Aquifer.

Actions:

The water resources assessment of groundwater resources was completed in 1999. Consequently this action has now been removed from this action plan. The assessment showed that impacts from abstractors are minimal and that there are, other, bigger issues having an impact e.g. land drainage.

Recent developments have included Golf Clubs moving abstraction points further away from designated sites and the installation of shallow boreholes in sand areas. The Golf Clubs are also carrying out monitoring on courses and providing us with data and information. We are also monitoring groundwater levels in and between golf courses to assess the cumulative impact.

We have now started a review of existing licensed abstractions on the Sefton Coast, reflecting results of the assessment. The objective of the review is to establish the sustainability of abstractions.

To help resolve this issue, Sefton Council has set Coastal Management Objectives and Conservation Objectives will be set by English Nature. Sefton Council has also produced a Sefton Coast candidate Special Area of Conservation strategy. This is the result of a three-year Life-Nature project supporting action on the Sefton Coast. We contributed to this strategy for the section dealing with water conservation.

ACTIONS	RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/ DRIVER.
	LEAD	OTHER	C	R	C	R	C	R	C	R	C	R	C	R	
1. Review existing licenced abstractions on the Sefton Coast.	The Agency	EAS. EN. Sefton Council.			✓						✓				

Glossary:

EAS – Environmental Advisory Service (formerly Joint Countryside Advisory Service).

EN – English Nature.



Issue 3: The need for rehabilitation and regeneration of watercourses.

Background to the issue:

The watercourses of River Alt and Crossens area have had a long history of people modifying its watercourses for their own needs or to prevent flooding.

In the River Alt catchment growth of towns and cities and heavy industry have led to the degradation of many rivers from culverting, reinforcing banks or putting the river into a concrete channel.

In the Crossens area it is the intensification of agriculture and land drainage that has led to re-sectioning, deepening and straightening of the river channels. Cropping right up to the river's edge has also damaged many rivers. (Refer to issue 10 "Adverse impacts on water quality in the River Alt and Crossens area arising from farming").

We have carried out a landscape assessment of the main rivers in the area. And developed three management strategies to resolve those stretches where there are signs of signs of weak character and degradation:

1. Conservation – where there is a strong landscape character in a good state of management only needing current management practices to continue.
2. Restoration – for stretches which have a fairly strong character but where the emphasis should be on restoring the landscape character which has to a greater or lesser extent been eroded.
3. Enhancement – for landscapes that have completely lost their character and are heavily degraded or despoiled. This provides opportunity for the creation of new landscapes.

Issue 3: The need for rehabilitation and regeneration of watercourses.**Actions:**

The River Habitat Survey (RHS) of the River Alt and Crossens area is now underway with, to date, half of the sites surveyed.

We will initially need permission from landowners for creating meanders (and pools and riffles), but we will emphasis the potential benefits gained by these types of site improvements. We will also be encouraging developers to include environmental improvements at the design stage of proposed developments. Meanders will improve both habitat diversity and the aesthetic appeal of the river; biological and water quality benefits need to be assessed at a later stage.

The creation of wet fringes on those watercourses that we maintain is being addressed under our Flood Defence routine maintenance programme. And also through influencing landowners/managers by our input to agricultural and environmental schemes, such as Countryside Stewardship.

During spring 2000 we influenced, through the consents system, a developer to construct a 2000m² wetland. This wetland weakens the impact of surface water run-off. Designed with flood defence needs and wildlife habitat creation, the conservation benefits of this new habitat have still to be assessed.

Issue 3: The need for the rehabilitation and regeneration of watercourses.

ACTIONS		RESPONSIBILITY		TOTAL COST	00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER	
		LEAD	OTHER		C	R	C	R	C	R	C	R	C	R		
A River Habitat survey of the River Alt and Crossens area will establish the current physical condition of the watercourses.		The Agency		✓		✓		✓		✓		✓		✓		
1: Creation of meanders.		The Agency	Land-owners. Deve- lopers	✓		✓		✓		✓		✓		✓		
2: Creation of pools and riffles, where appropriate, to the catchment stretch.		The Agency	Land-owners. Deve- lopers	✓		✓		✓		✓		✓		✓		
3: Construction of off-line ponds and shallow bays.		The Agency	Land-owners. Deve- lopers	✓		✓		✓		✓		✓		✓		
4: Habitat enhancement and landscape improvements e.g. creation of wet fringes and planting schemes.		The Agency		✓		✓		✓		✓		✓		✓		
5: The use of constructed wetlands.		The Agency	Land-owners. Devel- opers	✓		✓		✓		✓		✓		✓		
6: Restoring culverted watercourses to open channels.		The Agency	Land-owners.	✓		✓		✓		✓		✓		✓		
7: Construction of grassed drainage channels, termed "swales".		Devel- opers		✓		✓		✓		✓		✓		✓		
8: Development of tumbling flow to increase aeration.		The Agency	Land- Owners. Devel- opers	✓		✓		✓		✓		✓		✓		
9: Installations to capture and retain silt and debris.		The Agency		✓		✓		✓		✓		✓		✓		



Issue 4: Adverse impact on inland watercourses of discharges from North West Water (NWW) Ltd Wastewater Treatment Works (WwTW).

Background to the issue: The adverse environmental impact from NWW Ltd wastewater treatment works in the Alt and Crossens area can be broken down into their contributions to three issues:

- 4.1: Failure to comply with Dangerous Substances Directive.
- 4.2: Failure or risk of failure to meet non-statutory water quality objectives.
- 4.3: Problems associated with eutrophication.

4.1: Failure to comply with the Dangerous Substances Directive.

- (i) Failure of the Environmental Quality Standards for Copper in the River Alt downstream of Fazakerley WwTW.
- (ii) Failure of the Environmental Quality Standards for Tributyltin in the River Alt below Fazakerley WwTW.
- (iii) Failure of the Environmental Quality Standards for Triphenyltin in the River Alt below Fazakerley WwTW.
- (iv) Failure of the Environmental Quality Standards in the River Alt below Fazakerley WwTW.

The major source of copper to the River Alt is Fazakerley WwTW, which receives a number of trade effluent discharges from Knowsley Industrial Estate. The amount of copper entering the River Alt has reduced but further reductions in copper levels in the effluent are required for the River Alt to comply with the Environmental Quality Standards (EQS).

Further investigations by North West Water Ltd into the sources of copper from domestic premises may be significantly contributing to the copper load received at the works. Improvements to monitoring of authorised discharges have been made and investigations into other potential inputs from Knowsley Industrial Estate are continuing.

Actions:

The copper concentration at Fazakerley WwTW has been reduced. The consent conditions will possibly be reviewed in 2001/2002. We will also be undertaking joint programmes of action with North West Water Ltd to implement further control of copper loads. We are also seeking, in partnership with North West Water Ltd, improvements of tributyltin, triphenyltin and permethrin at Knowsley Industrial Estate.

4.1: Failure to comply with the Dangerous Substances Directive.

Improved treatment has recently been achieved at Fazakerley WwTW to meet water quality objectives. The benefits of the improved treatment have still to be realised. Currently Fazakerley WwTW is still not meeting its consent standards.

North West Water Ltd has removed Fazakerley WwTW from its AMP3 programme and we are currently seeking re-justification for its inclusion in AMP3.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/DRIVER
		LEAD	OTHER	C	R	C	R	C	R	C	R	C	R			
1. Trade effluent control at Fazakerley WwTW to reduce copper concentrations.		NWW Owners. Occupiers.	The Agency	✓		✓		✓		✓		✓		✓		
2. Ongoing investigations into sources of copper in order to implement further control of copper loads.		NWW Owners. Occupiers.	The Agency	✓		✓		✓		✓		✓		✓		
3. Improved monitoring of known sources of tributyltin, triphenyltin and permethrin and investigations to identify other major sources.		NWW Owners. Occupiers.	The Agency	✓		✓		✓		✓		✓		✓		

4.2: Failure or risk of failure to meet non-statutory water quality objectives.

Background to the issue:

River Quality Objectives (RQOs) are currently defined using the "River Ecosystem" (RE) classification scheme. They have been set as attainable quality targets considered necessary to maintain and improve uses to which the river is put and the aquatic life it supports. These should reflect the present and future needs of local communities. Improvements in water quality can have many benefits to the environment and the community in terms of environmental enhancement for housing regeneration, promoting business, leisure, conservation, tourism, public enjoyment and quality of life.

The majority of watercourses in the River Alt and Crossens area have objectives of RE4 to achieve "water of fair quality suitable for coarse fish populations" though some have an RE3 objective to achieve "water of fair quality suitable for high class coarse fish populations".

Actions:

The improved treatment carried out at Hillhouse WwTW, to meet water quality objectives in the River Alt, has resulted in considerable improvements on ammonia levels. The site is now almost complying with its consent and other improvements are still needed. We are continually monitoring the site.

4.2: Failure or risk of failure to meet non-statutory water quality objectives.

ACTIONS	RESPONSIBILITY		TOTAL COST		00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER
	LEAD	OTHER			C	R	C	R	C	R	C	R	C	R	
1. Improved treatment at Fazakerley WwTW to meet water quality objectives in the River Alt.		NWW Ltd.	The Agency			✓		✓		✓		✓			
2. Improved treatment at Hillhouse WwTW to meet water quality objectives in the River Alt.		NWW Ltd.	The Agency			✓									
3. Consent review at Hallsall to ensure water quality objectives are met in Barton Brook.		The Agency	NWW Ltd.			✓		✓		✓		✓			
4. Improved treatment /consent review at Bickerstaffe WwTW to ensure water quality objectives are achieved in Downholland Brook.		NWW Ltd.	The Agency.			✓		✓		✓		✓			
5. Improved treatment /consent review at Haskayne WwTW to ensure water quality objectives are achieved in Chisnall Brook.		NWW Ltd.	The Agency.			✓		✓		✓		✓			
6. Improved treatment at Burscough WwTW to ensure water quality objectives are achieved in Boathouse Sluice.		NWW Ltd.	The Agency.			✓		✓		✓		✓			
7. Improved treatment at Mere Brow WwTW to ensure water quality objectives are achieved in Tarleton Runner.		NWW Ltd.	The Agency.			✓		✓		✓		✓			

4.2: Failure or risk of failure to meet non-statutory water quality objectives.

Background to the issue:

River Quality Objectives (RQOs) are currently defined using the "River Ecosystem" (RE) classification scheme. They have been set as attainable quality targets considered necessary to maintain and improve uses to which the river is put and the aquatic life it supports. These should reflect the present and future needs of local communities. Improvements in water quality can have many benefits to the environment and the community in terms of environmental enhancement for housing regeneration, promoting business, leisure, conservation, tourism, public enjoyment and quality of life.

The majority of watercourses in the River Alt and Crossens area have objectives of RE4 to achieve "water of fair quality suitable for coarse fish populations" though some have an RE3 objective to achieve "water of fair quality suitable for high class coarse fish populations".

Actions:

The improved treatment carried out at Hillhouse WwTW, to meet water quality objectives in the River Alt, has resulted in considerable improvements on ammonia levels. The site is now almost complying with its consent and other improvements are still needed. We are continually monitoring the site.

4.3: Problems associated with eutrophication.

Background to the issue:

Eutrophication is the term used to describe the enrichment of waters by inorganic plant nutrients (principally phosphorus and nitrogen). When nutrients are at high concentrations there is the potential for excessive plant and algae growth to occur if other conditions such as flow, light, temperature and turbidity are also favourable. The most important sources of nutrients to watercourses are generally sewage effluents (point sources) and agricultural run-off (diffuse sources).

Excess plant growth can have many detrimental impacts. Certain species of algae can cause fish deaths by physically clogging or damaging gills causing asphyxiation. Other algal species such as freshwater blue-green algae can produce toxins, which may seriously affect the health of mammals and fish. Increases in plant activity effect the chemical balance of a watercourse, particularly oxygen levels.

Actions:

Burscough WwTW is a candidate sensitive area (subject to investigation) and in relation to the proposal of nutrient removal we have to submit reports to justify sensitive areas. This needs to be done by the end of 2001. We take into account data from ecological monitoring, routine water quality data collection and we also check that it is consistent with national criteria and policy. Decisions are made by the Department of Environment, Transport and the Regions (DETR) as to which sites are suitable for selection as sensitive areas.

ACTIONS		RESPONSIBILITY		TOTAL COST	00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER
		LEAD	OTHER		C	R	C	R	C	R	C	R	C	R	
1. Installation of nutrient removal at Fazakerley WwTW.		NWW Ltd.	The Agency			✓		✓		✓		✓			
2. Installation of nutrient removal at Hillhouse WwTW.		NWW Ltd.	The Agency			✓		✓		✓		✓			
3. Further monitoring of nutrient removal at Burscough WwTW.		The Agency	NWW												Possibly after 2005.
4. Further monitoring of other potential nutrient inputs e.g. diffuse agricultural inputs.		The Agency				✓		✓		✓		✓			
5. Raise public awareness of the problems caused by eutrophication and the role of domestic products as a source of nutrients.		The Agency				✓		✓		✓		✓			



Issue 5: Failure of designated bathing waters to meet EC Directive Standards.

Background to the issue:

There are three designated bathing waters in the River Alt and Crossens area. These are at Formby, Ainsdale and Southport. Despite the completion by North West Water Ltd (NWW) of major capital sewerage and Wastewater Treatment works improvement schemes, intermittent failures of the mandatory standards of the Bathing Waters Directive continue to occur along the Sefton Coast.

By the start of the 1999 bathing season UV disinfection was in place on the final effluent at Southport, as well as at two other key sites discharging to the Ribble Estuary, namely Preston and Hesketh Bank WWTWs. Further research into the sources of bacterial pollution indicated that the Ribble Estuary could impact on the Sefton Coast to its south as well as the Fylde Coast to its north, depending on wind, weather and sea conditions.

The exact causes of exceedences of the bathing water standards are complex with variable factors including tide, wind conditions, sunshine and bacterial die-off rates.

Our partnership work to resolve this issue is two-fold. This involves extensive monitoring with North West Water Ltd of the Ribble Estuary system and investigating, with Sefton Council, local sources of contamination.

Actions:

We are still monitoring for local sources of contamination contributing to exceedences at Ainsdale and Southport.

Some "hot spots" have been identified arising from our investigations into the impact on the Sefton Coast for contamination from the Ribble Estuary.

The mathematical model of the Ribble Estuary by Cardiff University is now complete. The model has proven useful in that it has highlighted the impact of Wigan WWTW. And it has also predicted impacts for up to three days after a storm event; this also includes the type of impact. The model also demonstrates the impact of Preston CSOs (on the Ribble), which supports the idea of these affecting Lytham beaches.

Sefton Council has offered to share its survey information and also to develop an aerial survey of bathing waters, which will further help to resolve the issue.

Issue 5: Failure of designated bathing waters to meet EC Directive Standards.

ACTIONS	RESPONSIBILITY		TOTAL COST	00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER
	LEAD	OTHER		C	R	C	R	C	R	C	R			
1. Require improvements to Southport WwTW storm tanks.	NWW Ltd.	The Agency			✓		✓		✓		✓			
2. Improvements to Weld Road UCSO.	NWW Ltd.	The Agency												
3. Improvements to Lulworth Road UCSO.	NWW Ltd.	The Agency												
4. Ongoing investigations into the impact on the Sefton Coast of contamination from the Ribble Estuary.	NWW Ltd. The Agency				✓		✓		✓		✓			
5. Make further use of the mathematical model of the Ribble Estuary constructed by Cardiff University.	NWW Ltd. The Agency				✓		✓		✓		✓			
6. Require improvements to WwTWs identified as significant to bacterial loads to the Ribble Estuary.	NWW Ltd.						✓							
7. Hold regular seminars and presentations to disseminate information on improvement work and ongoing problems.	The Agency	The Agency Sefton Council			✓									



Issue 6: Adverse impact of overflows from combined sewerage systems.

Background to the issue:

Combined sewers are used to convey both foul drainage and uncontaminated surface waters (rain falling on roofs and hard standing areas) to wastewater treatment works. Combined sewer overflows (CSOs) are located on sewers or at pumping stations and discharge to local watercourses. When properly designed and constructed they should only operate during storm conditions when there is adequate dilution available in the receiving watercourse. North West Water Ltd is consented for a number of storm discharges from the sewerage network, which conveys wastewater to these works.

The design and consenting of storm overflows aims to limit the discharges so that spills only occur infrequently after intense rainfall when there is sufficient increase in river flows to dilute the sewage effluent.

However, increasing urban development has resulted in overloaded sewerage networks, which overtop and spill much sooner in storms, or in the worst cases during dry weather, when there is little or no increase in receiving water dilution. This can lead to deterioration in water quality and lowering of the aesthetic value of the watercourse due to the accumulation of quantities of unsightly sewage litter and sewage fungus. CSOs can also impact on bathing water quality and contribute to failure of bathing water standards.

There are presently 23 CSOs designated as unsatisfactory and requiring improvement out of approximately 79 overflows within the River Alt and Crossens LEAP area.

Actions:

The proposed action in the consultation report "use of Sustainable Urban Drainage Systems (SUDS) and Wetland Creation schemes at outfalls" will not be carried out. The action is no longer relevant to this issue, because we are looking to reduce the spills that are coming out of combined sewer overflows. Once these are reduced then the CSOs will be considered satisfactory. Reedbeds are more effective for controlled flows as against storm flows.

Issue 6: Adverse impact of overflows from combined sewerage systems.

ACTIONS	RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/DRIVER
	LEAD	OTHER	C	R	C	R	C	R	C	R	C	R	C	R	
1. Removal of unsatisfactory overflows from combined sewerage system.	NWW Ltd.				✓		✓		✓		✓		✓		
2. Improved screening of overflows.	NWW Ltd.				✓		✓		✓		✓		✓		
3.Improved storage and retention in combined sewer system.	NWW Ltd.				✓		✓		✓		✓		✓		



Issue 7: Locations at risk of flooding within the River Alt and Crossens area.

Background to the issue:

Main rivers are watercourses that have been identified as being essential to the natural drainage of a river area and which have been formally registered with the Ministry of Agriculture, Fisheries and Food (MAFF). The status of main rivers enables us to carry out works of improvement and maintenance. Local Authorities have similar permissive powers to carry out works on non – main rivers. Work carried out will need to be environmentally sustainable and cost-effective.

Locations at risk of flooding within the River Alt and Crossens area are all designated main rivers and include:

Watercourse	Location
Whinney Brook	Maghull
Dovers Brook	Maghull
Eight Acre Lane	Formby
River Alt	Sand down Park
River Alt	Croxteth Park
Hurleston Brook	Ormskirk

We will continue to influence the development control process to guide new development away from flood risk areas or where the development would increase the risk of flooding to others.

Issue 7: Locations at risk of flooding within the River Alt and Crossens area.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/DRIVER
		LEAD	OTHER	C	R	C	R	C	R	C	R	C	R			
Main River Problems:																
1. Require riparian owners to carry out works of maintenance or improvement.		The Agency RO				✓		✓		✓		✓		✓		
2. The Agency exercises its powers to carry out works of maintenance or improvement.		The Agency				✓		✓		✓		✓		✓		
3. Implement flood warning scheme.		The Agency				✓		✓		✓		✓		✓		
4. Prevent new flooding problems being created.		The Agency LAS				✓		✓		✓		✓		✓		
Non-main River Problems:																
1. Require riparian owners to carry out works of maintenance or improvement.		RO	The Agency			✓		✓		✓		✓		✓		
2. Ask local authorities to exercise their powers to carry out works.		LAs				✓		✓		✓		✓		✓		
3. Consider Re-maining specific sites.		The Agency				✓		✓		✓		✓		✓		
4. Implement flood warning scheme.		The Agency				✓		✓		✓		✓		✓		
5. Prevent new flooding problems being created.		LAs	The Agency			✓		✓		✓		✓		✓		
Tidal Flooding Problems:																
1. Require riparian owners to carry out works of maintenance or improvement.		The Agency RO				✓		✓		✓		✓		✓		
2. The Agency exercises its powers to carry out works of maintenance or improvement.		The Agency				✓		✓		✓		✓		✓		
3. Implement flood warning scheme.		The Agency				✓		✓		✓		✓		✓		
4. Prevent new flooding problems being created.		The Agency				✓		✓		✓		✓		✓		



Issue 8: The need to effectively warn the public about the risk of flooding and formulate an emergency response.

Background to the issue:

We aim to warn people about flooding to a standard of 1 in 50 years. However, if a storm exceeds this we feel it is necessary that emergency procedures are agreed and implemented.

Potentially anyone who lives in a floodplain is at risk of flooding. The Agency, Local Authorities and others carry out maintenance works or construction of new flood defences to minimise the risk of river and tidal flooding. A reasonable standard of protection to properties throughout the catchment is provided by the flood defences. But if works to alleviate flooding are done then there remains a residual risk of flooding should there be a breach of the defence or should the defence be overtopped by a flood greater than the design standard.

Those flood risk areas with a high population concentration can be treated as a priority in identifying arrangements for a co-ordinated emergency response to extreme flooding.

Actions:

We are continuing with improvements to our rainfall and river monitoring equipment. Later this year we will be carrying out joint exercises with Local Authorities and the Emergency Services where major flooding scenarios will be included. As part of this approach we are continually strengthening our links with Local Authorities regarding emergency response capabilities; this will help to determine the role and responsibilities of each party. To inform the public on the dangers of flooding we have run a poster campaign on billboards. An independent company (BMRB) evaluated the campaign to be a success.

ACTIONS	RESPONSIBILITY		TOTAL COST		00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER
	LEAD	OTHER			C	R	C	R	C	R	C	R	C	R	
1. Improve rainfall and monitoring equipment.	The Agency						✓								
2. Write-up a standard definition of a major flood.	The Agency				✓										
3. Major flooding scenarios to be incorporated in joint exercises.	The Agency LAs. ES.				✓										
4. Adopting a national policy on identifying high-risk properties.	The Agency				✓										

**Issue 9: Adverse impact on water quality from unsewered communities within the Alt catchment.****Background to the issue:**

Rural parts of the River Alt catchment, having no access to main foul sewers, have relied upon septic tank type installations to effect the disposal of their domestic sewage. In many cases these septic tanks were constructed many years ago when there was no regulation of such discharges. Consequently many of these septic tanks were constructed in such a way that they discharged directly into tributaries of the River Alt or the River Alt itself. Because there are vast numbers of them they then make a considerable impact on the water quality of the catchment. In some cases there are significant public health issues on account of the extent of the smell and risk of infection posed by the discharge of poorly treated sewage entering ditches and streams.

Actions:

We are identifying premises or groups of premises causing septic tank effluent to pollute the River Alt and the Crossens area. The premises are usually domestic properties and generally located in rural areas. We have established two criteria to deal with septic tank effluent. These are the environmental impact and nuisance issues such as smells and complaints from the public.

We have identified those homeowners for a mailshot to educate them of their obligations. The objective of the mailshot is to raise awareness of the problem and highlight the cause and effect of septic tank effluent. Homeowners are responsible for approaching North West Water Ltd for connection to the main sewer.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER
		LEAD	OTHER			C	R	C	R	C	R	C	R	C	R	
1. Identify and prioritise, according to impact, premises or groups of premises causing septic tank effluent to pollute the River Alt and Crossens area.		The Agency				✓		✓								
2. Identified sites to then have their drainage diverted to an appropriate soakaway.		The Agency								✓						
3. The identified sites should replace the septic tank system with a more advanced effluent treatment system.		The Agency								✓						



Issue 10: Adverse impacts on water quality in the River Alt and Crossens area arising from farming practices.

Background to the issue:

The River Alt catchment and Crossens area, in common with many UK rivers, receive both diffuse and direct inputs from farming practices and premises. The substances concerned can include pesticides, synthetic fertilisers, slurry, vegetable washings and fuel oils. The extra nutrients running off the land from the fertilisers applied are thought to contribute to over enrichment of the receiving watercourses, which can lead to the river being clogged with weed. More direct spillage of any of the above substances can cause more acute water pollution incidents within the river. Overall, better control of the way that pollutants are stored and used on farm premises in the area will lead to a reduced impact on the water quality of the river.

Actions:

We have started visits to farm premises in the lower River Alt downstream of Sefton Meadows and also within the Crossens area. The advice given to farmers mainly concerned pesticide handling and storage. We were also represented at the Lancashire Growers show. This gave us the opportunity to make readily available our advice to the wider farming community. We will use the Groundwater Regulations 1999 for the use pesticides and fertilisers, with the objective of preventing pollution of groundwater. As part of our approach we will initially assess farm sites for registration and apply enforcement measures for those that do not register. The best practices we want farmers to adopt are outlined in MAFF codes of agricultural practice.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/DRIVER
		LEAD	OTHER													
				C	R	C	R	C	R	C	R	C	R	C	R	
1. A campaign of pollution prevention visits to farm premises in the area to assess the need for improved storage or handling of pollutants		The Agency				✓		✓								
2. Application of new regulations relating to use of pesticides and fertilisers.		The Agency. MAFF				✓		✓		✓		✓		✓		
3. Adoption of best practices for application of pesticides and fertilisers by farmers.		The Agency. MAFF. NFU. FWAG Farmers				✓		✓		✓		✓		✓		

Glossary:

MAFF – Ministry of Agriculture, Fisheries and Food. FWAG- Farming and Wildlife Advisory Group.

NFU – National Farmers Union.



Issue 11: Water quality problems in Kirkby Brook due to failure to meet European Council Dangerous Substances Directive.

Background to the issue:

Knowsley Industrial Park, Merseyside is a major industrial location that impacts significantly on the local water quality through present use and the legacy of previous use.

Currently all surface water from the estate is diverted to North West Water Ltd, Fazakerley WwTW, due to it being grossly polluted through industrial wrong connections, industrial pollution incidents and previous land use. In wet weather there is a high level overflow to Kirkby Brook.

The impact of the industrial estate is such that Kirkby Brook is classified as GQA F, grossly polluted. And fails the European Council Dangerous Substances Directive for copper (a dissolved metal), permethrin (a pesticide) and tributyltin (an anti-fouling agent).

Actions:

The problems caused by industrial wrong drainage connections have been traced to two companies. We have spent significant time and resources identifying these sources (e.g. £10,000 was spent over a one-month period on analytical costs of samples).

Installation of the treatment plant (to treat all discharges from the Park to Kirkby Brook) will be the joint responsibility of North West Water Ltd and Knowsley Metropolitan Borough Council. The permanent diversion of all low flows to foul sewer and then to Fazakerley WwTW will also be the responsibility of both North West Water Ltd and Knowsley Metropolitan Borough Council. We will carry out regular monitoring and also play a facilitating role for both parties.

Both Knowsley Metropolitan Borough Council and North West Water Ltd will also be responsible for the reedbed treatment of contaminated surface water discharge to Kirkby Brook. To carry out this action we have secured £40,000 from our multi-functional budget, which has helped to attract Single Regeneration Bid funding of £250,000 from the UK Government. There is now a total of £300,000 to carry out this action over the next five years.

We have started an awareness raising campaign to help resolve this issue. The campaign has involved 200 visits to companies in the Kirkby Brook catchment. We have also held 5 seminars covering businesses from Knowsley Industrial Park, these seminars also involved the Health and Safety Executive and Knowsley Metropolitan Borough Council.

Issue 11: Water quality problems in Kirkby Brook due to failure to meet European Council Dangerous Substances Directive.

ACTIONS	RESPONSIBILITY		TOTAL COST	00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER	
	LEAD	OTHER		C	R	C	R	C	R	C	R	C	R		
1. Identify industrial wrong connections and encourage remediation.	LA. NWW Ltd The Agency				✓		✓		✓		✓		✓		
2. Install treatment plant to treat all discharges from the Industrial Park prior to discharge to Kirkby Brook.	LA. NWW Ltd				✓		✓		✓		✓		✓		
3. Permanently divert all flow (not just low flows) to foul sewer and then to Fazakerley WwTW.	NWW Ltd LA.				✓		✓		✓		✓		✓		
4. Reedbed treatment of contaminated surface water discharge to Kirkby Brook.	The Agency	LA			✓		✓		✓		✓		✓		
5. Identify sites that can contribute to adverse water quality as a result of historical uses. Encourage remediation.	The Agency	LA			✓		✓		✓		✓		✓		
6. Awareness raising through the support of the Business Environment Park, pollution prevention campaigns, information seminars and Leaflets (see also issue 30 relating to the need for sustainable development).	The Agency GWK.	Alt 2000			✓		✓		✓		✓		✓		
7. Develop and promote sustainable business practices (see also issue 30).	The Agency LA	GWK Alt 2000			✓		✓		✓		✓		✓		
8. Identify sites that may contribute to excessive levels of copper, permethrin and tributyltin. Ensure any releases are within acceptable limits, where applicable.	The Agency	NWW Ltd.			✓		✓		✓		✓		✓		

Glossary:

GWK – Groundwork Trust



Issue 12: Adverse impact of urban drainage and highway run-off.

Background to the issue:

The upper River Alt catchment is largely urbanised and as such much of the river flow comes from urban drainage. Apart from the impacts of combined sewer overflow and contaminated surface waters, which are addressed as separate issues, there are several impacts from urban drainage itself. Accidental spillage, grime and oil from cars, rotting litter and atmospheric pollutants can all end up in the surface water systems and the river. These surges can pose a threat to flood risk areas and flood defences.

Actions:

We have been encouraging new housing developments within the River Alt catchment, particularly in Simonswood Brook (at the top end of the brook) to minimise their contribution to the impact of urban drainage. This has been done through various means e.g. planning liaison visits by Agency staff to Local Authority planning departments, site visits, seminars and by presentations to developers and planners. We have achieved success in reducing the impact on the watercourse by the housing development at Simonswood Brook.

The development of wetland treatment systems has been greatly helped by the provision of finance from the Mersey Forest Project as part of a European Regional Development Funding bid (ERDF). This will be applicable for the next five years. In relation to Moorhey Brook the finance will be provided by North West Water Ltd. The Highways Agency will construct it. The system for Gilmoor Wetland has undergone a project quality plan to determine its feasibility and £10,000 has now been made available for its construction. As yet no progress has been made on this site.

Issue 12: Adverse impact of urban drainage and highway run-off.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/DRIVER
		LEAD	OTHER	C	R	C	R	C	R	C	R	C	R			
1. Encourage new developments to utilise Sustainable Urban Drainage Systems (SUDS) in the design of drainage systems.		The Agency	LAs (KMBC, LiCC, WLDC, SC).			✓		✓		✓		✓		✓		
2. Develop wetland treatment systems both at outfalls and in-river to treat/balance flows at Tue Brook Wetland.		The Agency	LAs.			✓										
3. Develop wetland treatment systems both at outfalls and in-river to treat/balance flows at Moorhey Brook.		The Agency	LAs.			✓										
4. Develop wetland treatment systems both at outfalls and in-river to treat/balance flows at Gilmoss Wetland.		The Agency	LAs.							✓						
5. Develop wetland treatment systems both at outfalls and in-river to treat/balance flows at Kirkby Brook Wetland.		The Agency	LAs.							✓						
6. Improve the system by encouraging the voluntary wardening of the River Alt to detect pollution incidents i.e. fly-tipping and accidental spillage.		Alt 2000.	The Agency. Local Residents.			✓		✓		✓		✓		✓		

Glossary:

KMBC – Knowsley Metropolitan Borough Council.

LiCC – Liverpool City Council.

WLDC – West Lancashire District Council.

SC – Sefton Council.



Issue 13: Adverse impact of contaminated surface waters from separately sewerage areas.

Background to the issue:

A Contaminated Surface Water (CSW) is defined as a stretch of watercourse showing adverse water quality or nuisance and having been identified as being wholly or partly attributable to the public sewerage system. The problem generally arises when trade premises have toilets, sinks or washing machines wrongly connected to the surface water drains, which go directly to the nearest stream.

The River Alt suffers greatly from many CSWs from its source, in Huyton, Knowsley, through Liverpool and into Sefton. The Crossens area, though not impacted as greatly, still has its fair share of CSWs located in West Lancashire and Sefton. All of the CSW problems in the North West of England have been put onto a list and prioritised as shown on the next page.

Issue 13: Adverse impact of contaminated surface waters from separately sewered areas.

Rank	CSW Number	CSW Location	Local Authority
1	146	Alder Lane Outfall	Knowsley Metropolitan B.C.
7	147	Salerno Drive,	Knowsley Metropolitan B.C.
9	148	Lydiat Canal Bank	Sefton Metropolitan B.C.
10	149	Kirkby Industrial Estate, near Kirkby Brook	Knowsley Metropolitan B.C.
11	151	Croxteth Park at Culvert outfall	Liverpool City Council
13	150	Stocksbridge Village/Croxteth Park	Knowsley Metropolitan B.C.
16	158	Chisletts Close, Burscough,	West Lancs D.C.
19	152	Moorhey Brook at culvert outfall	Sefton Metropolitan B.C.
25	154	Sugar Brook at Lower Lane	Liverpool City Council
26	153	Fazakerley / Tue Brook at Durley Road	Liverpool City Council
40	155	Deyes Brook at Golf Course Outfall	Liverpool City Council
70		Hurlston Brook in Coronation Park	West Lancs D.C.
97		Skipton Avenue, Crossens, Southport	Sefton Metropolitan B.C.
101		Melling Marc Avenue	Knowsley Metropolitan B.C.
115		Waddicar Lane	Sefton Metropolitan B.C.
117		Huyton Wetlands	Knowsley Metropolitan B.C.
119		Mill Brook, Knowsley Village	Knowsley Metropolitan B.C.
136		Formby Long Lane	Sefton Metropolitan B.C.
138		Willow Hey, Maghull	Sefton Metropolitan B.C.
140		Aintree Outfalls	Sefton Metropolitan B.C.
143		Fleetwood Park, Banks	West Lancs D.C.
145		Weaver Avenue	Sefton Metropolitan B.C.
162		Blackgate Lane, Tarleton	West Lancs D.C.
Unranked		Railway Bridge at Guinea Hall	West Lancs D.C.
Unranked		Turnbridge Road, Maghull	Sefton Metropolitan B.C.
Unranked		Just upstream of Stonebridge Lane on right bank of River Alt	Liverpool City Council
Unranked		Near Pilling Lane, Lydiat	Sefton Metropolitan B.C.

Actions:

North West Water has set aside finance for a further programme, within AMP3, to remediate CSW discharges already identified. To date between 30 – 40 schemes have been built to resolve this issue; this is out of an original total of 50 – 60 that were prioritised for resolution. We also intend to visit companies on industrial estates and offer advice on how to prevent contamination of surface waters.

Issue 13: Adverse impact of contaminated surface waters from separately sewered areas.

		RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/DRIVER
		LEAD	OTHER													
				C	R	C	R	C	R	C	R	C	R	C	R	
1. Investigate drainage systems and rectify identified problems at the following sites:		NWW Ltd.														
Alder Lane Outfall (L.A. - Knowsley Metropolitan Borough Council).		LA's														
Salerno Drive (L.A. - Knowsley M.B.C.).																
Lydiat Canal Bank (L.A.- Sefton Council).																
Kirkby Industrial Estate, near Kirkby Brook (L.A.- Knowsley M.B.C.).																
Stocksbridge Village / Croxteth Park (L.A. - Knowsley M.B.C.).																
Chisletts Close, Burscough (L.A.- West Lancs District Council).																
Croxteth Park at culvert outfall (L.A.- Liverpool City Council).																
Moorhey Brook at culvert outfall (L.A. - Sefton Council).															✓	
Fazakerley / Tue Brook at Durley Road (L.A. - Liverpool City Council).															✓	
Deyes Brook at Golf Course Outfall (L.A. - Liverpool City Council).															✓	
Hurlston Brook in Coronation Park (L.A. - West Lancs District Council).															✓	
Skipton Avenue, Crossens, Southport (L.A. - Sefton Council)															✓	
Melling Marc Avenue (Knowsley M.B.C.)															✓	
Waddicar Lane (L.A. - Sefton Council)															✓	
Huyton Wetlands (L.A. - Knowsley M.B.C.)															✓	
Mill Brook, Knowsley Village (L.A. - Knowsley M.B.C.)															✓	
Formby Long Lane (L.A.- Sefton Council)															✓	
Willow Hey, Maghull (L.A. - Sefton Council)															✓	
Aintree Outfalls (L.A. - Sefton Council)															✓	
Fleetwood Park, Banks (L.A. - West Lancs District Council)															✓	
Weaver Avenue (L.A.- Sefton Council)															✓	
Blackgate Lane, Tarleton (L.A.- West Lancs District Council)															✓	
Railway Bridge at Guinea Hall (L.A.- West Lancs District Council)															✓	
Turnbridge Road, Maghull (L.A - Sefton Council)															✓	
Just upstream of Stonebridge Lane on right bank of River Alt. (L.A - Liverpool City Council)															✓	
Near Pilling Lane, Lydiat (L.A. - Sefton Council)															✓	

Issue 13: Adverse impact of contaminated surface waters from separately sewered areas.

ACTIONS	RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/ DRIVER
	LEAD	OTHER	C	R	C	R	C	R	C	R	C	R	C	R	
2. Divert dry weather flow and first flush of CSW drainage into foul sewer at Croxteth Park.	NWW Ltd. LAs.												✓		
3. Divert dry weather flow and first flush of CSW drainage into foul sewer at Sugar Brook.	NWW Ltd. LAs.												✓		
4. Provide wetland treatment system at the discharge point of the CSW at Fazakerley.	The Agency	NWW Ltd. LAs.											✓		
5. Provide wetland treatment system at the discharge point of the CSW at Alder Lane.	The Agency	NWW Ltd. LAs.											✓		

Note 1: The following CSW locations have now been investigated by North West Water Ltd, but the timescale for final resolution within this five year plan is unknown:

- Alder Lane Outfall - Local Authority: Knowsley Metropolitan Borough Council.
- Salerno Drive - Local Authority: Knowsley Metropolitan Borough Council.
- Lydiat Canal Bank - Local Authority: Sefton Council.
- Kirkby Industrial Estate, near Kirkby Brook - Local Authority: Knowsley Metropolitan Borough Council.
- Croxteth Park at Culvert Outfall - Local Authority: Liverpool City Council.
- Stocksbridge Village/Croxteth Park - Local Authority: Knowsley Metropolitan Borough Council.
- Chisletts Close, Burscough - Local Authority: West Lancashire District Council.

The Contaminated Surface Water located at Sugar Brook at Lower Lane (Local Authority, Liverpool City Council) has now been resolved.



Issue 14: Poor in-river habitat restricting the survival and distribution of coarse fish species.

Background to the issue:

The channels of the River Alt and the Crossens area are uniform and featureless. They are very straight with steep sides and a flat bottom. This lack of habitat diversity results in poor availability of food resources and few places that provide places for fish to shelter or spawn. During periods of high flow juvenile fish tend to be washed downstream and out of the river system.

Actions:

The River Habitat Survey (RHS) will be published, as a draft report, later this year. The survey findings will assist us in prioritising stretches needing improvements to the in-river habitat.

Our bank mowing policy will now be applied to future flood defence work. The policy states that bank mowing will only happen when necessary. Also as part of applying more sensitive methods of local flood defence work we have created wet ledges on Downholland Brook. This has also involved a maintenance programme, which means that there will be, for example, prevention of silt build-up and protection of removal of the wet ledge by operations such as dredging.

We have still to identify locations for habitat enhancement; the prioritisation of these locations will be dependent on the 1999 baseline fish survey, which will be regularly updated.

Issue 14: Poor in-river habitat restricting the survival and distribution of coarse fish species.

ACTIONS	RESPONSIBILITY		TOTAL COST		00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER
	LEAD	OTHER			C	R	C	R	C	R	C	R	C	R	
1. Gather baseline fisheries habitat information by using existing data and by utilising the River Habitat Survey (RHS). The results of the RHS to assess the fisheries habitats and outline and prioritise sites for suitable rehabilitation/ restoration/enhancement projects.		The Agency			✓										
2. Continue to utilise more sensitive methods of flood defence maintenance work.		BTCV. Local Community and Conservation Group.			✓		✓		✓		✓				
3. Carry out specific habitat enhancement projects.		The Agency			✓		✓		✓		✓				
4. Produce promotional material to encourage the inclusion of habitat enhancing aspects of wildlife on or near watercourses.		The Agency			✓										

**Issue 15: Poor access to the watercourses for angling and recreational activities.****Background to the issue:**

Access to much of the River Alt and the watercourses of the Crossens area for angling and other recreational pursuits is poor. This is due to steep flood banks and general lack of footpath access and general lack of footpath access.

Actions:

The potential user groups identified for consultation on this issue consists of walkers and anglers. We have also identified Downholland Brook as one area where improved access is wanted. Fishing pegs have been constructed at The Sluice in the Crossens area. This has helped to provide access to the waters edge.

We have been working on producing a recreational site plan for land owned by the Agency. As part of the consultation process we have contacted angling clubs to find out their priorities (e.g. comfortable fishing pegs).

The objective of each plan is to make best use of land as an asset for both recreational and fishing interests.

ACTIONS	RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/DRIVER
	LEADER	OTHER			C	R	C	R	C	R	C	R	C	R	
1. Identify potential user groups and consult to ascertain their requirements.	The Agency	LAs. User groups			✓		✓		✓		✓		✓		
2. Phase 1 – identify areas where improved access would be desirable.	The Agency	LAs.			✓		✓		✓		✓		✓		
2. Phase 2 – negotiate access agreements.	The Agency	LAs. Local Communities.			✓		✓		✓		✓		✓		
2. Phase 3 – provide access to waters edge including disabled access by construction of fishing pegs.	The Agency	LAs.			✓		✓		✓		✓		✓		
3. Provision of signage.	The Agency				✓		✓		✓		✓		✓		



Issue 16: The poor distribution of fish within the River Alt catchment and the lack of information regarding the fish populations of the Crossens area.

Background to the issue:

The 1996/97 Fishery Survey of the River Alt showed that it holds only isolated fish populations found in the majority of the catchment and major coarse fish such as roach, pike and bream found only in the Downholland Brook system. The Crossens area, which used to be renowned for its prolific fishery, has never been formally surveyed.

Actions:

The fishery survey is due to start in 2001. The survey will enable us to determine if it is worthwhile establishing populations of minor Coarse Fish from populations already present within the River Alt. It will also determine the possibility of stocking Brown Trout in Simonswood Brook. The survey will show the distribution of fish affected by the Bull Bridge Weir.

In May of this year we put 2,500 fish (all roach) into the Formby by-pass upstream and a further 2,500 into Bull Bridge at Aintree.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER
		LEAD	OTHER			C	R	C	R	C	R	C	R	C	R	
1. Carry out a fishery survey of the Crossens area and include the River Alt and Crossens area in our fisheries five year rolling survey programme.		The Agency				✓		✓		✓		✓		✓		
2. Identify options where restocking from Leyland fish farm would be desirable and feasible. Stock fish where applicable.		The Agency				✓		✓		✓		✓		✓		
3. Establish populations of minor coarse fish species by transfer of fish from populations already present within the River Alt.		The Agency				✓		✓		✓		✓		✓		
4. Investigate the possibility of introducing brown trout to the River Alt catchment.		The Agency				✓		✓		✓		✓		✓		
5. Investigate the effect of Bull Bridge Weir on the distribution of fish. Design and implement alterations to the weir if desirable and /or feasible.		The Agency				✓		✓		✓		✓		✓		



Issue 17: The need to realise the recreational and fishery potential of the stillwaters of the River Alt and Crossens area.

Background to the issue:

Stillwaters including the Leeds and Liverpool Canal and the Liverpool Park Lakes provide a valuable resource for the enjoyment of visitors and local communities. Much work has already been started through partnership with British Waterways, the Liverpool and District Angling Association and Wigan and District Angling Association to improve and develop sustainable habitats and fish populations on the canal.

The Liverpool Park Lakes Project is a collaborative project with Liverpool City Council, Queens Community Partnership and Liverpool and District Angling Association. The project is aimed at realising the recreational and fisheries potential of the Park Lakes. The Liverpool Park Lakes Forum facilitates the input of each organisation and also receives representations from the Royal Society for the Protection of Birds (RSPB) and other interested parties.

Pilot studies have been undertaken at Larkhill and Calderstones Park Lakes to tackle deep-rooted problems facing the lakes. These problems include increased urbanisation, eutrophication, water supply and drainage problems and also unbalanced fish populations.

Actions:

Improvements have been carried out at Calderstones Park and Larkhill Gardens Lakes which are now providing disabled access for the footpaths and angling pegs. We have also continued the planting scheme at both locations.

A coarse fisheries seminar was held in Liverpool, attended by representatives from Liverpool City Council, other local councils, the Agency, local angling clubs and environmental consultants.

We will continue to work in partnership with Liverpool City Council to meet the objectives of this issue. A recent example of our partnership work is the development of a Liverpool Park Lakes Strategy Consultation Document. The document provides a framework to address the issue. Both organisations have also worked together to develop a strategy for the redistribution of aquatic and marginal plants within Liverpool city boundary.

Issue 17: The need to realise the recreational and fishery potential of the stillwaters of the River Alt and Crossens area.

ACTIONS		RESPONSIBILITY		TOTAL COST	00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER
		LEAD	OTHER		C	R	C	R	C	R	C	R	C	R	
		1. Improve access to the canal, park lakes and other stillwaters where applicable / desirable to include disabled access and angling pegs.	The Agency LiCC. L&DAA. W&DAA.	QCP. LPLF.			✓		✓		✓		✓		
2. Deculvert and redirect watercourses and drains in the Liverpool Parks to provide increased supply of fish to the lakes. Investigate the Feasibility of provision of boreholes where water supply remains a problem.	The Agency	LiCC. QCP. LPLF.			✓		✓		✓		✓				
3. Install reedbeds and develop a more aquatic flora to filter inlet and outlet from the lakes and provide additional habitat within the park-scape. Connect outlets to the River Alt system.	The Agency	LiCC. QCP. LPLF.			✓		✓		✓		✓				
4. Investigate the possibility of using the lakes as balancing ponds to ease the city's drainage problems.	The Agency	LiCC.			✓		✓		✓		✓				
5. Use the canals and lakes to create linear parks for migration of wildlife and improve recreational activity.	The Agency BW				✓		✓		✓		✓				

Glossary:

BR – British Waterways

LiCC – Liverpool City Council

L&DAA – Liverpool and District Angling Association

W&DAA – Wigan and District Angling Association

QCP – Queens Community Partnership

LPLF – Liverpool Park Lakes Forum.



Issue 18: The improvement of existing flood defences to a designated standard.

Background to the issue:

The presence of a flood alleviation scheme does not remove entirely the risk of flooding. Schemes for urban areas should offer protection from flood events that happen once every one hundred years. Whilst schemes for rural areas are designed to offer less protection.

Actions:

As a statutory consultee on all planning applications our policy is to object to those proposals which we consider add to the likelihood of flooding in a locality. It is also our practice to consider the ecological features of an area before any flood defence work takes place.

ACTIONS	RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT / DRIVER
	LEAD	OTHER	C	R	C	R	C	R	C	R	C	R	C	R	
1. Improve flood defence to indicative standard for Whinney Brook at Maghull.					✓		✓		✓		✓		✓		
2. Improve flood defence to indicative standard for Wham Dyke at Formby					✓		✓		✓		✓		✓		
3. Improve flood defence to indicative standard for Simonswood Brook at Kirkby.					✓		✓		✓		✓		✓		
4. Improve flood defence to indicative standard for Eight Acre Lane at Formby.					✓		✓		✓		✓		✓		
5. Improve flood defence to indicative standard for Kirkby Brook at Kirkb					✓		✓		✓		✓		✓		
6. Improve flood defence to indicative standard for Hightown Defences					✓		✓		✓		✓		✓		
7. Object to or advise against planning proposals that could further increase flood risk.	The Agency	Local Planning Authority			✓		✓		✓		✓		✓		

Note: 1 – The lead responsibility for actions 1 – 6 will be either the Environment Agency if main river or the relevant Local Authority if non-main river.

**Issue 19: To restrict the surface water run-off from new developments to reduce the risk of flooding.****Background to the issue:**

Where available, flood records and information regarding levels of flood protection allow the identification of areas in which development should be controlled. On rivers where known problems exist, the Agency already seeks to restrict the surface water run-off rates to existing levels from any new development. There is a need to identify the consequences of the interaction of the various balancing systems that can be adopted. Development control aims to contain known problems before they escalate and prevent potential problems before they arise.

It is our policy to advise or steer development away from the Flood Plain and in areas where flooding problems are known to exist.

Actions:

The hydraulic model, mentioned as a proposed action in the consultation report, was completed earlier this year. The action has now been removed from this action plan. We can now provide to Local Authorities, on request, a Level 1 map showing flood areas.

We recommend that Local Authorities steer development away from flood risk areas. We are consulted as part of the development control process, but we are only one of a number of organisations consulted. The final decision regarding development rests with the local planning authority.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER
		LEAD	OTHER													
				C	R	C	R	C	R	C	R	C	R			
1. Implement development control measures on upper River Alt (including tributaries) and Hurlston Brook.	Alt	The Agency	LA			✓		✓		✓		✓		✓		
2. Implement development control measures in other areas of the catchment, depending on the results of the hydraulic study.		The Agency	LA			✓		✓		✓		✓		✓		



Issue 20: Redevelopment of sites contaminated by tin slags.

Background to the issue:

Slags produced by the former tin-smelting industry in Bootle are known to have been used as fill materials in the Liverpool and nearby Merseyside areas and into parts of West Lancashire. The tin slag contains enhanced concentrations of uranium and thorium ores and is therefore naturally radioactive. The exact location of where the material has been deposited is not known. We need to manage all re-developments to ensure all due consideration is given to the issue at the planning stage to achieve appropriate levels of remediation. This will be done in partnership with Local Authorities.

Actions:

We are currently in the process of drafting a guidance note to be used by Local Authorities on receipt of a planning application, relating to land, which may be affected by radioactive contamination. The guidance note will provide background information on the sources of radioactivity and will outline statutory roles. It will also include advice on when to undertake radiological investigation and how the investigation should be carried out. It aims to assist Local Authority Planning Departments in deciding when a planning condition requiring such investigation should be applied. The information we provide to Local Authorities can then in turn be passed onto developers.

A control regime for contaminated land has been introduced with the powers provided by Part IIA of the Environmental Protection Act 1990, inserted by Section 57 of the Environment Act 1995. Although these provisions were not developed to deal specifically with land contaminated with radioactivity, they provide a suitable overall framework for this purpose, and the Act provides the Secretary of State with powers to make regulations applying the provisions of Part IIA to radioactive contamination. The DETR has released a consultation paper containing the broad principles of such a regime and proposes to prepare draft regulations in the light of comments received on this consultation paper.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT DRIVER
		LEAD	OTHER			C	R	C	R	C	R	C	R	C	R	
1. To ensure timely discussion with the Local Authority and the Agency.		The Agency	LA			✓		✓		✓		✓		✓		
2. Educate and raise awareness of the issue with land developers prior to planning approval.		LA	The Agency			✓		✓		✓		✓		✓		

**Issue 21: Contamination of land and groundwater around Knowsley Industrial Park, Kirkby.****Background to the issue:**

Knowsley Industrial Park has had several historical uses that may have resulted in ground contamination. These include munitions manufacture, electroplating and processes involving copper and tin smelting.

The area is currently used for a wide range of industrial processes. The groundwater in the area is classified as Major Aquifer and the local watercourse, Kirkby Brook, fails to meet standards set under the European Council Dangerous Substances Directive.

Actions:

To help resolve the issue we will provide the Local Authority with information (using a Geographical Information System where possible) ranging from information on potential sources of pollution and contamination to details of sensitive receptors, such as surface and ground water abstractions. This information is being provided as part of the Agency's responsibility to assist Local Authorities in the development of an inspection strategy for contaminated land in their area. The Local Authority must publish this strategy within 15 months from April 2000.

The strategy should set out how the local authority proposes to implement its inspection duties under the new contaminated land regime, introduced by Part IIA of the Environmental Protection Act 1990. The strategy will detail arrangements and procedures for inspecting their area for contaminated land, as well as proposed timescales and procedures for dealing with complaints.

Where the local authority has identified land as contaminated under the Part IIA regime, and it is considered to be a 'special site', we will take on the inspection work, and follow through on remediation if found to be necessary. Special sites are certain types of contaminated land that we have been deemed to have the appropriate experience for dealing with. Since the local authority has the lead role to play in identifying land as contaminated, it initially controls the rate at which we can deal with sites under this regime.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/DRIVER
		LEAD	OTHER	C	R	C	R	C	R	C	R	C	R			
1. Produce a strategy for assessment of the extent of the problem.		LA				✓		✓		✓		✓		✓		



Issue 22: Loss of built heritage around the River Alt and Crossens area.

Background to the issue:

The River Alt and Crossens area was until relatively recent times a vast area of swamps, bogs and very wet and dense woodland. It was quite an inhospitable place to live and was relatively sparsely populated. However, the bogs, which have formed peat, are a good record of human activity because they trap airborne particles and pollen grains and preserve them in layers. Although relatively recently occupied the landscape is almost totally artificial with many of the river courses being long straight drainage channels.

The Crossens Pumping Station, which pump drains a large part of the area, prevents the whole area from being flooded. With many man-made river features, like weirs and flood defence apparatus, the riparian zone is a potentially rich area for archaeology. The Agency needs to be aware of the significance of these features, so that they can be taken account when planning maintenance or renewal works or when designing new flood defence schemes.

A survey of the river corridors needs to be carried out to identify all sites of archaeological importance; their significance and condition assessed, risks highlighted and action taken to preserve or record them.

Actions:

The proposed archaeological survey within 10 metres of the River Alt and Crossens and their tributaries has still to start. A programme of surveys for the whole of the North West has now been put together. The River Alt and Crossens area is planned to start in 2005/2006, at a cost of £23,000. The programme is flexible, so it is possible that the start date may change in response to changing circumstances. This will affect the start date for actions 2 and 3.

Criteria for judging the best sites are from a nationally agreed archaeological system. The information for deciding criteria should comply with data standard of the Royal Commission for Historic Monuments England (RCHME), which is part of English Nature. This gives a contractor details of how to evaluate their findings.

Issue 22: Loss of built heritage around the River Alt and Crossens area.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/DRIVER
		LEAD	OTHER	C	R	C	R	C	R	C	R	C	R			
1. Archaeological survey within 10 metres of the River Alt and Crossens area and their tributaries designated as main river.		The Agency	LCC. NMGM.			✓		✓		✓		✓		✓		
2. With the results of the survey we can devise ways of protecting the best archaeological sites.		The Agency	LCC. NMGM.			✓		✓		✓		✓		✓		
3. With the results of the survey we can record the sites that cannot be protected.		The Agency	LCC. NMGM.			✓		✓		✓		✓		✓		

Glossary:

LCC – Lancashire County Council.

NMGM – National Museums and Galleries, Merseyside.



Issue 23: The need to develop a more ecologically sensitive management practice along the banks of watercourses.

Background to the issue:

As the Crossens area is almost completely artificially built to drain an area, which was once a great lake, there are no natural channel formations to aim for when planting habitat enhancements, and besides, the watercourse channels are confined within regularly maintained flood embankments. Therefore we must aim to improve the area for biodiversity by focussing on the banks themselves, some of which are already home to rare species (e.g. water voles, barn owls, species rich grassland).

The River Alt also requires enhancement of its bankside habitats, particularly because of the heavily managed nature of the channel and its banks and embankments.

Actions:

Our Best Practice Guideline is centred on a bank mowing policy, which is at a draft stage. The objective of the policy is to produce an agreement for bank mowing in Central Area that integrates wildlife protection and enhancement with flood defence needs. The bank mowing policy will also consider bankside habitat retention and enhancement and countryside stewardship schemes.

The catchment wide survey to establish water voles has now started. This is due to finish in autumn 2000, with a further survey on specific areas. The results found will link in with the bank mowing policy. We are hoping to carry out an initial survey covering 25% of the whole area as part of a Biodiversity Action Plan. Our early results show that almost half of the sites surveyed show a presence of water voles. Some species specific plans are being developed by Lancashire Wildlife Trust and English Nature.

Issue 23: The need to develop a more ecologically sensitive management practice along the banks of watercourses.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/ DRIVER
		LEAD	OTHER													
				C	R	C	R	C	R	C	R	C	R	C	R	
1. Review and update the existing Crossens Best Practice Guidelines and develop a strategy for the River Alt.		The Agency.				✓		✓		✓		✓		✓		
2. Bankside habitat retention and improvement.		The Agency. Landowners				✓		✓		✓		✓		✓		
3. Catchment wide survey for Water Voles to establish population situation and indicate conservation measures.		The Agency. LWT. LAs.				✓		✓		✓		✓		✓		
4. Carry out enhancement projects on Agency owned land e.g. habitat management / provision for barn owls.		The Agency. LWT.				✓		✓		✓		✓		✓		
5. Control of invasive species through habitat management.		The Agency. LWT. Developers. LAs.				✓		✓		✓		✓		✓		

Glossary:

LWT – Lancashire Wildlife Trust.

**Issue 24: The need to develop a strong partnership approach to ensure the continued improvement of important coastal habitats.****Background to the issue:**

There are approximately 13083 hectares of coastal zone within the River Alt and Crossens LEAP area which are designated as being internationally important for their wildlife. As a candidate Special Area of Conservation (SAC) the Regulations will apply to Sefton Coast and we will be reviewing new and existing consents against detailed conservation objectives to be provided by English Nature for this site.

The coastal zone falls within the Sefton Coastal Management Plan, and Shoreline Management Plans have been drawn up by Liverpool and North Western Coastal Groups for the whole area. Like the rest of the catchment, the coastal areas support a wide variety of recreational pursuits such as walking, boating, cycling, fishing and bathing. We recognise the importance of accommodating these activities and making improvements whilst still maintaining and enhancing the significant biodiversity resources.

Actions:

There is now one managed retreat established at Hesketh Outmarsh. Managed retreat puts flood defences further inland allowing for coastal habitats to be retained for nature conservation. We have been consulted as part of the Coastal Strategy and the Countryside Stewardship Scheme. Our policy is to consider all managed retreat options on a case-by-case basis looking at the merits and demerits of proposals and ensuring that all of our concerns are addressed. One main consideration is the impact managed retreat may have on the flood defence system; at Hesketh Outmarsh we have expressed our concerns about any impact the managed retreat may have on the maintenance of the rearward flood defence and the long-term cost implications on maintenance and repair.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/ DRIVER
		LEAD	OTHER													
				C	R	C	R	C	R	C	R	C	R	C	R	
1.Consider managed retreat options where they arise, bearing in mind that the current Agency policy may not fully emphasise the conservation benefits.		The Agency.	EN. Wildlife Trusts.			✓		✓		✓		✓		✓		
2. Development of Crosby Coastal Park.		Sefton Council GWK Trusts.	The Agency.			✓		✓		✓		✓		✓		

Glossary:

EN – English Nature.

GWK – Groundwork Trust.



Issue 25: The need to develop an integrated tree planting strategy for the River Alt and Crossens area.

Background to the issue:

Although it is likely that the River Alt and Crossens area was never heavily wooded due to the marshy nature of the area, the existing tree and hedgerow cover has declined to a very low level. Localised tree and hedge planting along watercourses would improve the wildlife and aesthetic characteristics of the area. However, there are a number of issues to be addressed. These include planting and the existence of unwanted alien pest species. An overall strategy for planting is required to maximise the benefits while minimising the potential for damage to locally scarce and valuable species. This includes the encouragement of red squirrel populations to expand and discouraging its major competitor, the grey squirrel.

Actions:

- The detailed survey of Fazakerley Ecology Park has been carried out by Lancashire Wildlife Trust. The survey involved North West Water Ltd, Liverpool City Council and Aintree Hospitals NHS Trust. The conservation draft will be completed by the end of July 2000. As part of the consultation process landowners will be contacted with the intention of opening negotiations to establish buffer zones.
- Funding has now been secured for tree planting at Fazakerley reedbed (Tue Brook). The tree planting is aimed at encouraging the growth of red squirrel populations.
- Future management programmes for all Mersey Forest new plantations have been agreed in principle.
- Mersey Forest and Lancashire Wildlife Trust have drawn up provisional maps for refuge and buffer zones in North Liverpool and Knowsley areas. These zones will seek the management of all habitats. They will prove beneficial for many species, with the red squirrel habitat being a priority. But as yet they do not deal with the strategic issues of planting.

Issue 25: The need to develop an integrated tree planting strategy for the River Alt and Crossens area.

ACTIONS		RESPONSIBILITY		TOTAL COST	00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER	
		LEAD	OTHER		C	R	C	R	C	R	C	R	C	R		
		C	R	C	R	C	R	C	R	C	R	C	R			
1.Continue to implement existing strategy for tree planting		The Agency. Mersey Forest. LAs. Landowners.				✓		✓		✓		✓		✓		
2. Develop tree planting strategy for Liverpool and Sefton area which encourages the red squirrel populations to expand.		The Agency. LWT.	EN. LAs.			✓		✓		✓		✓		✓		

Glossary:

EN – English Nature.

LWT – Lancashire Wildlife Trust.



Issue 26: The need for sustainable waste management in the River Alt and Crossens area.

Background to the issue:

The vast majority of municipal waste (including household waste) is going to landfill. This practice is proving to be unsustainable because of two factors:

- available land is decreasing for future developments
- materials being thrown away are valuable resources.

Both the Merseyside Waste Disposal Authority and the Lancashire Waste Disposal Authority are conducting public consultation exercises to plan for a more sustainable waste management system for municipal waste. However, there is also the need to plan for the disposal of waste from commercial organisations, which is outside the scope of both Waste Disposal Authorities.

There is now a need for all types of waste to be considered as part of a sustainable waste management approach.

Actions:

Our Area Environment Group has formed a sub-group to prepare a waste strategy. The strategy is now under consideration and will be published in autumn 2000.

We are currently represented on Lancashire County Council's waste management officers strategy group. This group enables the sharing of Best Practice for waste management and also best value techniques for waste collections. The group is a link to the County Council's overall Waste Management Strategy. As part of the Best Practice approach in waste management environmental consultants (MEL) have been analysing bin contents to assess the amount of biodegradable waste contents.

We have developed a waste life cycle assessment, which is a modelling tool devised by us in partnership with a private consultancy. The tool provides the means to analyse different collection strategies and also compare emissions from incineration and landfill. Different Local Authorities will apply the modelling tool in the River Alt and Crossens area.

We have been actively involved in the Knowsley Industrial Waste Initiative (KIWI) at Knowsley Business Park. This has allowed us to demonstrate to local businesses Best Practice in waste management through seminars and workshops. Our further involvement with Green Business Clubs (which are part of Business Environment Network) will also make a contribution to encouraging waste minimisation initiatives. Our partnership with Green Business Clubs involves both organisations co-ordinating the sites at Knowsley Industrial Park.

Issue 26: The need for sustainable waste management in the River Alt and Crossens area.

ACTIONS	RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/DRIVER
	LEAD	OTHER			C	R	C	R	C	R	C	R	C	R	
1.Offer support to Waste Disposal Authorities to prepare waste management strategies.	The Agency				✓		✓		✓		✓		✓		
2. For the Agency to work with the Area Environment Group to develop awareness of the need to plan for the sustainable management of all waste types.	The Agency				✓		✓		✓		✓		✓		
3. Working with Local Authorities with the objective of increasing the number of easily accessible recycling facilities.	LAs. The Agency.				✓		✓		✓		✓		✓		
4. Encourage waste minimisation initiatives in the River Alt and Crossens area.	LAs. The Agency. Green Business Clubs. Local Companies				✓		✓		✓		✓		✓		



Issue 27: The detrimental impact on the environment of litter and fly tipping.

Background to the issue:

Merseyside has a number of historical fly tipping problems. In part this is general domestic waste. But more recently, commercial type waste likely to incur a disposal cost is making up an increasingly bigger percentage of the ongoing aspect of the problem.

Probably the biggest problem with fly tipping is that once it starts at a location, unless checked, it acts like a magnet until eventually what was an isolated incident becomes an epidemic. This is common in lay-bys, pull in areas in front of isolated or disused buildings, and on quiet and in particular private stretches of road.

Actions:

To help resolve this issue we are considering plans for Southport, which are subject to available resources. These plans include the installation of Closed Circuit Television (CCTV) to help identify offenders. This system places extra demands on available resources because of the time spent viewing the tapes (sometimes up to 30 hours) and also the follow-up documentation work

There is the potential for self-help groups to be formed within communities to tackle this issue, as has been the case in East Lancashire, with the voluntary wardening scheme in Burnley.

Where we serve notices on landowners to remove waste or be prosecuted for keeping controlled waste without a Waste Management Licence we can encounter problems with the appeal mechanism and notices, we may even reach a situation where legal costs are paid by ourselves. The process can be legally complex.

We are in contact with Sefton Council regarding the erection of bollards at the end of public cul-de-sacs leading onto non-public land where fly tipping has taken place. We are identifying sites and passing this information onto the Local Authorities.

We have had three meetings with Local Authorities and Police where we have shared knowledge of instances of fly tipping and successes achieved by each organisation. The process of intelligence gathering to benefit each organisation is a long process requiring a concerted effort by each. The lessons learnt by the pilot project in Burnley as part of the crime and disorder audit will be applied to other local areas.

Our approach to litter and fly tipping is one of zero tolerance where we will pursue prosecution where possible, particularly for fly tipping.

Issue 27: The detrimental impact on the environment of litter and fly tipping.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER
		LEAD	OTHER													
		C	R	C	R	C	R	C	R	C	R	C	R			
1.Increased surveillance in relevant areas.		The Agency	LAs.			✓		✓		✓		✓		✓		
2. Serve notice on landowners to remove waste or be prosecuted for keeping controlled waste without a Waste Management Licence.		The Agency				✓		✓		✓		✓		✓		
3. Erect bollards at the end of public cul-de-sacs leading onto non-public land where fly tipping takes place.		LAs.				✓		✓		✓		✓		✓		
4. Erect lockable drop down bollards at the point public roads end and affected private roads used by businesses begin.		Landowners or Business Owners.				✓		✓		✓		✓		✓		
5. Establish partnerships with the police and local authorities to include fly tipping projects as part of their crime reduction strategies.		The Agency				✓		✓		✓		✓		✓		
6. Participate in crime and disorder audit.		The Agency. The Police. LAs.				✓		✓		✓		✓		✓		



Issue 28: To assist in the development of a local action plan to improve air quality.

Background to the issue:

Assist the Local Authority in identifying and quantifying key sources of air pollution to enable the development of a local action plan in line with the National Air Quality Strategy (NAQS).

Actions:

We have organised meetings, seminars and also consulted closely with the Local Authorities responsible for NAQS. National Air Quality Strategy plans are developed by Local Authorities and we are consulted on them. This helps to ensure clear lines of communication between each organisation. The information provided consists of technical data on releases from sites and any details on abatement equipment used to reduce emissions.

We have provided information to Knowsley Metropolitan Borough Council on significant sources of emissions.

As yet there are no Air Quality Management Plans proposed or in effect for the area. The relevant Local Authority will decide on its plan, which is mainly directed at traffic areas. Equally, there are none specifically related to sites within the River Alt and Crossens area. The benefit of promoting releases from processes on a regional basis is that it allows trans-boundary impacts to be assessed and to highlight key "hot-spots".

ACTIONS	RESPONSIBILITY		TOTAL COST		00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER
	LEAD	OTHER													
			C	R	C	R	C	R	C	R	C	R	C	R	
1.Ensure clear lines of communication with the Local Authority (Knowsley Metropolitan Borough Council) responsible for NAQS.	The Agency.	KMBC.				✓									
2. Provide information to the Local Authority (Knowsley Metropolitan Borough Council) on the significant releases to air from the industries within the catchment.	The Agency.					✓									
3. Consult with Knowsley Metropolitan Borough Council on the areas that breach the NAQS limits and establish plans to improve air quality.	The Agency. KMBC.					✓		✓		✓		✓		✓	
4. Promote the impact of the releases from processes on a regional basis rather than just a site basis.	The Agency	LA.				✓		✓		✓		✓		✓	



Issue 29: The high concentration of top and lower tier COMAH sites in the Knowsley Industrial Park.

Background to the issue:

The high concentration of COMAH (Control of Major Accident Hazards Regulations) sites within the Knowsley Industrial Parks mean that the smooth implementation of the regulations are vital to reduce the risks to people and the environment. Identification of those sites that fall under the Regulations and ensuring that the company is aware of its responsibilities will be a key task over the next year. This scoping exercise will establish the scale of the issue facing the authorities over the next few years.

The COMAH regulations came into force on 1st April 1999 and have the potential for significant impact on the Knowsley Industrial and Business Parks due to the high concentration of sites within that area. The central area has ten of the most significant level of sites known as "Top Tier sites", 5 of which are in the Knowsley Industrial area. The COMAH regulations are aimed that those industrial sites that have a potential to cause major harm to people and the environment.

The regulations need an integrated approach to industry by the Environment Agency, The Health and Safety Executive, The Local Authority and all of the emergency services. The COMAH regulations impose the preparation of on and off site emergency plans, an assessment of the possible "Knock on effects" of incidents on sites and consideration of planning aspects of sites.

Actions:

During February of this year we established at Knowsley Industrial Park the number of top and lower tier COMAH sites. These are 4 top tier and 3 lower tier. The notifications for these sites are now on our public register. The assessment notifications will identify those sites that have a "domino effect".

The lines of communication have been established via a local Health and Safety Officer. We need to identify the Local Authority Officer responsible and also set up links via emergency planning processes. These lines of communication will be reviewed on annual basis.

The promotion of site assessment of the COMAH regulations was done by a presentation in late 1999 to all interested parties. We issued letters to the relevant sites likely to be subject to the regulations. We will now carry out site visits and inspections on those sites. We will progress those sites not currently notified or registered. And continue to make aware other sites of their responsibilities. We are carrying out a joint presentation with Knowsley Metropolitan Borough Council to highlight the new regulations and duties faced by industry.

Issue 29: The high concentration of top and lower tier COMAH sites in the Knowsley Industrial Park.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER
		LEAD	OTHER			C	R	C	R	C	R	C	R	C	R	
1. Work with the Health and Safety Executive (HSE) to establish the number of top and lower tier sites within the Knowsley Industrial Park.		The Agency.	HSE			✓										
2. Establish those sites that will have a “domino effect” on other sites.		The Agency.	HSE			✓										
3. Establish lines of communication with the local authority (Knowsley Metropolitan Borough Council) and emergency services.		The Agency	HSE KMBC. ES.			✓		✓		✓		✓		✓		
4. Promote site assessment of the COMAH regulations.		The Agency	Local Companies. HSE.			✓										



Issue 30: To develop and promote sustainable business practices to improve the environment and competitiveness.

Background to the issue:

The business community in the River Alt and Crossens area has experienced decline and stagnation through factors such as the increase in crime, lack of maintenance and lack of investment. These things have led to reduced competitiveness, increased vandalism, an increase in pollution problems and recruitment problems. Responding to this the Agency has been at the forefront of developing the concept of the Green Business Park – improving industrial areas through a partnership of resident businesses and local business support organisations.

There have been tremendous achievements, especially on Knowsley Industrial Park, but continuing improvements are required to the environment and infrastructure that will greatly broaden the scope of activities into areas of business competitiveness and developing people. The vision underpinning the regeneration is the creation of a sustainable, manageable quality business environment.

Actions:

There is now a web site for Knowsley Industrial Park (www.knowsley.gov.uk), which helps to clarify environmental regulations for all interested parties. An information centre has also been established to help with this process, this is staffed by Knowsley Metropolitan Borough Council and the local Chamber of Commerce. Information on ISO 14001 and Environmental Management Audit Systems (EMAS) are available at the Business Resource Centre located at Knowsley Industrial Park.

We will also advise companies and local authorities to develop and encourage supply initiatives through seminars and business networks. The promotion of initiatives such as Waste Minimisation Interactive Tool, Site Right and Water Wise will also involve Knowsley Industrial Waste Initiative (KIWI) and Environmental Best Practice Programme. We have also provided to Knowsley Industrial Park our "Eliminate" board game as a training tool in waste minimisation.

Knowsley Metropolitan Borough Council's Business Environment Plan encourages the incorporation of environmental conditions in lease agreements. And also the strengthening of existing agreements to include requirements to perform in an environmentally sensitive manner.

We are also exploring the possibility of obtaining Objective 1 funding for the waste minimisation initiatives.

Note: 1- ISO 14001 is an international standard which specifies the requirements for an environmental management system that an organisation must meet if it is to achieve third party certification. ISO 14001 encourages a cultural change by establishing disciplines that ensure policy and objectives are met and a continual improvement in environmental performance is achieved. The standard is voluntary and open to any organisation to adopt.

Issue 30: To develop and promote sustainable business practices to improve the environment and competitiveness.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/01		01/02		02/03		03/04		04/05		COMMENT/DRIVER
		LEAD	OTHER	C	R	C	R	C	R	C	R	C	R			
1. Provide facilities and services to clarify environmental regulations.		The Agency.	LA. GWK.			✓		✓		✓		✓		✓		
2. Provide a series of Best Practice Guidelines.		The Agency.	ETBPP.			✓		✓		✓		✓		✓		
3. Encourage companies to apply for ISO 14001 and EMAS.		The Agency.	LA. GWK.			✓		✓		✓		✓		✓		
4. Develop and encourage supply chain initiatives.		LAs.	The Agency.			✓		✓		✓		✓		✓		
5. Facilitate transfer of information between companies.		Business Links. LAs. CC.				✓		✓		✓		✓		✓		
6. Promote initiatives such as Waste Minimisation Interactive Tool, Site Right and Water Wise.		The Agency.				✓		✓		✓		✓		✓		
7. Encourage the incorporation of environmental conditions in lease agreements. Strengthen existing agreements to include requirements to perform in an environmentally sensitive manner.		LAs. Landowners.				✓		✓		✓		✓		✓		
8. Redevelopment of derelict land.		EP. LA.				✓		✓		✓		✓		✓		
9. Explore the possibility of Objective 1 funding for the initiatives.		The Agency	GWK. LA.			✓		✓								
10. Develop site specific management plans for the benefit of wildlife.		The Agency	MF. GWK. BE.			✓		✓		✓		✓		✓		

Glossary:

ETBPP – Environmental Technology Best Practice Programme. MF – Mersey Forest
 GWK – Groundwork Trust. CC – Chamber of Commerce.
 BE – Business Environment.



Issue 31: The need to identify and obtain external funding for partnership projects.

Background to the Issue:

Merseyside has been awarded Objective One status for the period 2000 – 2005. There is potential funding for major environmental improvements through Objective One, a unique situation in North West Region, and from other sources. The Agency has missed opportunities in the past and has been haphazard in its approach to securing external funding for projects. It is important that the new opportunities that are available are fully utilised within the River Alt and Crossens area.

External funding should be pursued where it can help the Agency and its partners achieve their objectives. Each funding source has its own criteria but in general any funding bids should:

- Not be capable of being funded by the Agency or from other public sources.
- Involve clear, credible and measurable environmental improvements.
- Be consistent with local, regional and national environmental strategies, plans and targets.
- Be supported by the local community.
- Provide maximum public benefit.
- Have match funding available or firm commitments.
- Be viable after grant support expires.

Fundraising is not an Agency role or an area where we currently have expertise so ideally our partners who are experienced in this type of work should carry it out.

Actions:

We have developed a draft strategy for fund raising to enable us to take advantage of objective 1 status. Local Authorities will carry out the main role in the strategy. We have started meetings, at our regional level, with the Government Office of the North West and the Regional Development Agency to discuss the strategic planning of each organisation. We have also supported the work of the European Regional Development Fund Pathways Partnership in Liverpool. As part of this partnership the Alt Valley group has now been established and we have been closely involved through our input to their regeneration plan.

A number of initiatives concerning regeneration of Kirkby Brook and Northwood have been proposed. These have involved Knowsley Metropolitan Borough Council and we have received money from the Single Regeneration Budget through the UK Government.

Issue 31: The need to identify and obtain external funding for partnership projects.

ACTIONS		RESPONSIBILITY		TOTAL COST		00/ 01		01/ 02		02/ 03		03/ 04		04/ 05		COMMENT/ DRIVER
		LEAD	OTHER													
		C	R	C	R	C	R	C	R	C	R	C	R			
1.Develop a fund raising strategy for the River Alt and Crossens area to take advantage of Objective One status.		LA.	The Agency.			✓										
2.Develop links with the Government Office of the North West and the Regional Development Agency.		The Agency.				✓		✓		✓		✓		✓		
3.Support the work of the ERDF Pathways Partnerships in Liverpool.		The Agency.				✓		✓		✓		✓		✓		
4.Contribute to Local Authority SRB bids.		The Agency.				✓		✓		✓		✓		✓		
5. Promote established plans and strategies such as Knowsley Industrial Park Regeneration Strategy and the River Alt Pollution Mitigation Strategy.		The Agency. LA. KIPP.				✓		✓		✓		✓		✓		
6. Develop and promote environmental improvement projects.		The Agency. LA. GWK.				✓		✓		✓		✓		✓		
7. Develop partnerships with external funding bodies who are keen to see partnership ideas coming forward.		The Agency.				✓		✓		✓		✓		✓		

Glossary:

ERDF – European Regional Development Fund.

LA – Local Authority.

KIPP – Knowsley Industrial Park Partnership.

GWK – Groundwork Trust.

SRB – Single Regeneration Bids.

Appendix 1: The routine work of the Agency.

On a day-to-day basis we carry out a large environmental monitoring and regulatory operation, most of which is to achieve statutory requirements. The aim of regulation is to balance the needs of people and the environment. We work to:

- Save, redistribute and improve river, lake, reservoir and underwater supplies.
- Prevent and control pollution of air and water.
- Reduce the risk of harm from contaminated land and bring it back into use.
- Make sure waste is dealt with safely and legally.
- Make sure radioactive materials are kept, used and disposed of safely.
- Make sure flood risks are not created or exacerbated.

Regulating the environment takes place through licensing and consents. We regulate the abstraction of water from rivers and boreholes, releases to air, land and water, the carrying and disposal of waste and to carry out work in, over, under or near a watercourse.

We monitor the environment to ensure that pollution is controlled and resources are adequately protected. We regularly monitor the quantity and quality of rivers, estuaries and the sea and check emissions from the processes we regulate. Results are reported on a public register that can be inspected at our main offices. We run a 24-hour service for receiving reports of and responding to flooding and pollution incidents and emergencies (such as major fires where there is a possibility of pollutants being released to the air or rivers) in the air, water or on land. We also work with others to reduce the risk of harm from contamination and to bring back land into good use.

We work to minimise waste and prevent pollution through advice and education, including national campaigns and through working with environmental regulators. When necessary, we are prepared to enforce environmental legislation in a tough way. Those who show little regard for the law and who cause blatant and persistent damage to the environment can expect to be prosecuted.

We also have the role of reducing the risk to people and the environment from flooding by providing effective defences. Protecting life is our highest priority and to meet this aim we provide a flood forecasting and warning system and discourage development in flood-risk areas.

We are responsible for maintaining, improving and developing fisheries. We regulate fisheries by issuing licenses for rod angling and net fishing. We carry out improvements to fisheries by improving the habitat and fish stocks and providing advice to fishery owners. We also seek to ensure that wildlife, landscape and archaeological heritage are protected both in any work we carry out and in work carried out by others.

Our principal aim for recreation is to protect, improve and promote the water environment for recreational use. We do this by protecting existing use, creating opportunities in the course of our work and by maximising the use of our owned sites for recreation.

Appendix 2: Environment Agency Leaflets and reports available from the Central Area Office of the North West Region.

Listed below is a selection of leaflets available from the Environment Agency. It is intended as a guide to the type of information available rather than a complete list, as new leaflets are being produced. The list does not include policy documents or technical reports.

General Information

An Environmental Strategy for the Millennium and Beyond.
Customer Charter – September 1997.
The Environment Agency of England and Wales.
The Environment Agency in the North West of England.
Environment Agency – Aim, Objectives, Work.
About the North West – fact file.
Guardians of the Environment.
A Guide to Information Available to the Public.
Our Complaint and Commendations Procedure.
Who's Who in the Environment Agency – North West.
Agency Emergency Hotline – 0800 credit card size.
Corporate Plan Summary.
Annual Report and Accounts

Education

Activity Book – for Primary School Children.
Pack for Key Stages 1 and 2 for Primary School Children.
Helping protect the Environment – (colour in) poster.
Understanding your Environment – poster.

Waste Regulation

Classification of Special Waste – Information Sheet 1.
Use of the Consignment Note – Information Sheet 2.
Special Waste Regulations 1996 – How they affect you.
North West Statistics
New Packaging Regulations - How they affect you.
Farm Waste Minimisation.
What a Waste! Leaflet.

Fisheries and Recreation.

Fisheries North West – brochure.
Fisheries in the North West – fact file.
Rod Fishing Licences – 1999/2000.
Anglers and the Agency.

Ecology

Mink

Guidance for the Control of Invasive Plants near Watercourses.

Conservation.

Understanding Riverbank Erosion.

Riverlife from Source to Sea.

Ponds and Conservation.

Pond Heaven.

The Habitat's Directive.

Aquatic Weed Control.

Phytophthora disease of Alder.

Flood Defence

Flood Defence – North West – brochure.

Paying for Flood Defence.

Main River – fact file.

Maintaining Watercourses – fact file.

Understanding buffer strips.

Development with Flood Risk Implications.

Flood Warning Information – for the Deaf and Blind.

Flood Warning Information – What to do if your property is at risk.

Policy and Practice for the Protection of Floodplains.

Pollution Control

Environmental Protection and Pollution Control – North West – brochure.

EC Directives and the Control of Water Pollution – fact file.

Bathing Water Quality Summary Report 1999.

A Guide to Environmental Quality & Pollution Control – booklet.

Looking After Our Rivers.

Agricultural Pesticides and Water.

Alt / Crossens LEAP

Action Plan 2000 - 2005

Pollution Prevention Pays.
Building a Cleaner Future.
Blue Green Algae.
Discharges to Controlled Waters -current charges.
Home Pollution and how to avoid it.
River Pollution and how to avoid it.
Silage Pollution and how to avoid it.
Farm Pollution and how to avoid it.
Farm Waste Management Plans.
Farm Waste Regulations.
Chemical Pollution and how to avoid it.
Solvent Pollution and how to avoid it.
Making the right conenction.
Natures Way – Designs that prevent water pollution.
Whats Hidden Behind your Garden Fence? (Water Watch).
Groundwater Pollution.
The Use of Licences to Prevent Pollution.

Water Resources

Water Resources – North West –brochure.
Annual Abstraction Current Charges.
Spray Irrigation.

IPC/RAS

Integrated Pollution Control Current Charges.
Radioactive Substances Act Regulation Current Charges.

Catchment Management / Environment Agency Action Plans

Alt / Crossens Catchment Management Plan – Consultation Report/Action Plan/ First Annual Review.
Alt / Crossens Local Environment Agency Plan – Consultation Report/ Action Plan.
Douglas Catchment Management Plan – Consultation Report/ First Annual Review/ Second Annual Review.
Douglas Local Environment Agency Plan – Consultation Report / Action Plan.
Ribble Catchment Management Plan – Consultation Report/First Annual Review/Second Annual Review.
Ribble Local Environment Agency Plan – Consultation Report / Action Plan Summary Report/ Action Plan.
Lune Local Environment Agency Plan - Consultation Report/ Action Plan.
Wyre Local Environment Agency Plan - Consultation Report / Action Plan/ First Annual Review.

Alt / Crossens LEAP
Action Plan 2000 - 2005

Appendix 3: List of respondents.

Local Authorities.

City of Liverpool Council – Development and Environmental Services Directorate.
Lancashire County Council.
Sefton Council – Planning Department.
The Mersey Forest.
West Lancashire District Council – Housing and Health Department.

Public Organisations.

Coal Authority.
The Countryside Agency.
English Nature.
Farming and Rural Conservation Agency.

Water Companies.

North West Water.

Voluntary Organisations/Registered Charities.

British Canoe Union.
The Hawk and Owl Trust.
Lancashire Wildlife Trust.
Save our Shoreline Southport Association / Southport Friends of the Earth.
West Lancashire Archaeological Society.

Other organisations.

Environmental Services Association.