

EA-WID-LEAP

Box 7

local environment agency plan

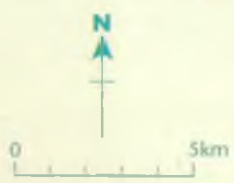
West Midlands Stour
Consultation Report Summary
March 1998



FREE



ENVIRONMENT
AGENCY



Map 1 Main Rivers, Administrative Boundaries and Infrastructure

KEY	
	Area Boundary
	Main River
	Ordinary Watercourse
	Canal
	Built up Area
	Motorway
	Main Road
	Railway
	County boundary
	District boundary
	Metropolitan Borough boundary

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We Need Your Views



Local Environment Agency Plans (LEAPs) rely on the opinions of individuals and organisations who have an interest in the protection and enhancement of the local environment. This booklet is a summary of the full Consultation Report which is available from the Environment Agency and local libraries. If you have any comments about the information and issues contained in the LEAP or views on the future management of the area, we would like to hear from you. You can let us know your views by filling in the questionnaire on the centre pages of this booklet and returning it in the pre-paid envelope provided, or by writing to:

Nicola Pinnington

LEAPs Officer

The Environment Agency

Hafren House

Welshpool Road

Shrewsbury

Shropshire SY3 8BB

Telephone (01743) 272828

Fax (01743) 272138

Comments are required by:

19th June 1998

Further copies of this booklet and the full Consultation Report are available at the above address.

All comments received will be treated as public information unless you explicitly state otherwise in your response.

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West Midlands Stour Key Details

General

Area	374km ²
Topography	Highest point 315m (AOD) (top of Walton Hill) Lowest point 20m (AOD) (River Stour/River Severn confluence)

Water Companies	Severn Trent Water Ltd South Staffordshire Water Plc	
Population (estimated from 1991 Census)	Year 1991 2001 (predicted)	Population 437,341 439,152

Administrative Details

County Councils	Metropolitan Borough Councils	District Councils
Staffordshire	Wolverhampton	South Staffordshire
Shropshire	Dudley	Bridgnorth
Hereford & Worcester	Sandwell	Wyre Forest
(reorganisation due April 1998, see Section 5.1)		Bromsgrove Wychavon

Water Resources and Flood Defence

Length of Main River in catchment	90.0km
Average annual rainfall (1961 - 1990)	697mm
Length of navigable canal (administered by British Waterways)	75.1km
River Stour flows at Kidderminster: Mean daily flow (1953 - 1996)	241 MI/day
Maximum recorded flow (1953 - 1996)	4,500 MI/day
Mean annual flood flow (1976 - 1996)	1,827 MI/day
Total licensed abstraction: Groundwater	76,543 MI/year 74,839 MI/year
Surface water	1,704 MI/year
Number of licensed abstractions:	156
Groundwater	94
Surface water	62

Land Use

Type	Area covered
Urban development	32.07%
Arable	35.78%
Grass	18.85%
Woodland	7.55%
Fallow/bare soil	5.66%

Conservation and Fisheries

24km of the Staffordshire & Worcestershire Canal is designated under the EC Freshwater Fisheries Directive (78/659 EEC)	
Sites of Special Scientific Interest	20
Special Wildlife Sites	82
Scheduled Ancient Monuments	25

Waste Management Facilities

Landfill sites (inert)	5
Landfill sites (biodegradable)	7
Former landfill sites	226
Waste treatment plants	2
Metal recycling sites	51
Transfer stations	38
Household waste reclamation sites	5

Integrated Pollution Control (IPC)

IPC authorisations	13
Radioactive substances authorisations	4
Radioactive substances registrations	35

Water Quality

Length of watercourse (km) in each component of the General Quality Assessment (GQA) 1996 is shown below.

Component		GQA Grade Chemistry Class Biology		Inferred Water Quality	
		Rivers	Canals	Rivers	Canals
GOOD	A	0	0	0	0
	B	11.4	0	3	4
FAIR	C	31.3	10.7	9.1	6.7
	D	30.3	46.7	38.4	5
POOR	E	30.9	0	24	22
BAD	F	0	0	21.5	0

Water company sewage discharges and storm overflows	178
Private sewage treatments plants	127
Industrial	47
Surface water sewers	15
Total number of consented discharges:	367



Fens Pool Site of Scientific Interest, Pensnett



Brintons Carpet Factory Chimney, Kidderminster



Black Poplar Trees

We need your views

Local Environment Agency Plans (LEAPs) rely on the opinions of individuals and organisations who have an interest in the local environment.

What do you think?

- Have all the important environmental issues been identified?
- Have all the solutions to these issues been identified?
- Is the vision for the area your vision?
- Do you have any other information or ideas you would like to express?

Your comments will help us produce an Action Plan which is the next stage in the LEAP process. The Action Plan will be published in October 1998.

Agency Plan

The West Midlands Stour LEAP

The Consultation Report describes the West Midlands Stour area (the area that it covers is shown on the map opposite). It details the uses and activities which take place in the area and the pressures that they put on the local environment.

We have identified some problems in the West Midlands Stour area and have raised them as issues. Options/actions are suggested to try to resolve these problems.



The issues are:

- Issue 1 Compliance with River Quality Objectives and EC Directives
- Issue 2 The Need for Assessment of the Current Status of the Pensnett Canal
- Issue 3 Nitrate Contamination of Groundwater
- Issue 4 The Sustainability of Water Resources
- Issue 5 Impacts of Over-abstraction within the Blakedown Valley
- Issue 6 Flytipping and Litter
- Issue 6a Shopping Trolleys in Watercourses
- Issue 7 The Impact of Culverted Watercourses
- Issue 8 Kidderminster Town Centre Redevelopment
- Issue 9 Flooding Resulting from Urban Development, and Flood Warning
- Issue 10 The Current Level of Air Quality Monitoring
- Issue 11 Environmental Monitoring of Integrated Pollution Control Authorisations
- Issue 12 Metal Recycling Sites
- Issue 13 Sustainable Waste Management
- Issue 14 The Need to Raise and Promote Environmental Awareness and Education
- Issue 15 Low Conservation Value and Poor Biodiversity
- Issue 16 Poor Fish Stocks
- Issue 17 Lack of Recreation and Amenity Facilities
- Issue 18 Protection and Expansion of the River Corridor and its Associated Wildlife
- Issue 19 The Effects of Development on Wildlife, Cultural Heritage and the Landscape

Where to find a copy of the West Midlands Stour LEAP

The West Midlands Stour LEAP Consultation Report and Summary Booklet are available from the Environment Agency, at the address given below, and from local libraries. The Summary Booklet is free and contains a short questionnaire. You can let us know your views by filling in the questionnaire and returning it in the pre-paid envelope provided, or by writing to:

Nicola Pinnington, LEAPs Officer
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Hafren House
Welshpool Road
Shrewsbury Tel (01743) 272828
Shropshire SY3 8BB Fax (01743) 272138

We need your comments by:

19th June 1998



Canal Boats on the Stourbridge Extension Canal
(Courtesy of British Waterways)

MI-1/98-3K-C-BBLG
Printed on Cyclus Print

**ENVIRONMENT AGENCY
GENERAL ENQUIRY LINE**

0645 333 111

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EMERGENCY HOTLINE**

0800 80 70 60

local environment agency plan

West Midlands Stour

March 1998



ENVIRONMENT AGENCY

West Midlands Stour Local Environment

We want to involve *you* in the protection and improvement of the West Midlands Stour area. The Environment Agency has just published the West Midlands Stour Local Environment Agency Plan (LEAP) Consultation Report. This report is our way of raising issues, and finding solutions, to help protect and enhance *your* local environment.



Swan Pool - before and after artificial restoration of water levels

This leaflet sets out:

- what the Environment Agency is and what it does;
- our draft Vision for the West Midlands Stour area;
- the Consultation Report and the issues that we feel are important in the area;
- why your views are important;
- where you can find a copy of the West Midlands Stour LEAP Consultation Report and Summary Booklet.

The Environment Agency

The Environment Agency is an organisation responsible for protecting and enhancing the environment. We do this by looking after land, air and water; through education, pollution prevention and control and, where necessary, enforcement.

The Environment Agency's Vision for the West Midlands Stour is:

"To develop a better local environment in which people can live and work and maintain this, by sustainable management, for future generations."





Vision ● ● ●

The Environment Agency's Vision for the West Midlands Stour is:

"To develop a better local environment in which people can live and work and maintain this, by sustainable management, for future generations."

Our key objectives for the West Midlands Stour area are to:

- Educate and raise awareness of the local environment and environmental issues.
- Work in partnership with local people and organisations to realise the potential of the area and encourage ownership of the local environment.
- Maintain and improve the water quality of rivers, canals and groundwater.
- Manage our water resources in an environmentally sustainable way by balancing the needs of legitimate users with those of the environment.
- Reduce the impact of flooding on existing developments, where possible, and resist development where it would be at risk from flooding or may cause flooding elsewhere.
- Develop a monitoring programme, in partnership with Local Authorities, to assess air quality and the impact of Integrated Pollution Control (IPC) processes on it and enable improvements to be made.
- Promote waste minimisation, encourage the achievement of national waste management targets and ensure the effective regulation of waste.
- Protect and enhance river/green corridors, and support biodiversity through the protection and enhancement of species and habitats.
- Develop the recreational and amenity value of watercourses and protect the varied cultural heritage that exists within the area as a whole.



*Photographs:
River Stour, Kidderminster;
Wilden Marsh with Black Poplar;
Windmill End Junction, Dudley
Canal, (Courtesy of British
Waterways); Water Vole*

Introduction

The Environment Agency was formed on the 1st April 1996 bringing together the expertise of the National Rivers Authorities (NRA), Her Majesty's Inspectorate of Pollution (HMIP), Waste Regulation Authorities (WRA) and some technical units from the Department of the Environment.

The Agency's principle aim is to protect and enhance the environment as a whole in order to promote sustainable development.

The integrated management of land, air and water, through pollution prevention and control, education, and where necessary, enforcement, are key means in meeting this aim.



Protection through partnership

Partnerships are another important means by which we can help protect and enhance the local environment while working towards the worldwide goal of sustainable development. We aim to work in partnership with Local Authorities, industry, environment groups and many other organisations and individuals who share an interest in the area.



Local Environment Agency Plans

Local Environment Agency Plans (LEAPs) are non-statutory action plans which will contribute towards the principles of sustainable development through integrated environmental management. They provide a focus for those concerned with the future of the local area. The West Midlands Stour LEAP will establish a common vision for the area and provide a framework for protecting and improving our local environment. It will raise local environmental issues and, through partnership, will direct resources where they are most needed.

LEAPs also play a key role in:

- Promoting openness and accountability;
- Developing liaison and partnerships with key groups;
- Informing the public about local environmental issues;
- Prioritising and establishing an action plan for managing and improving the local area over the next five years.

The Consultation Process

The Consultation Report is the first output from the LEAP process for the West Midlands Stour area and is not the final plan. Before a finalised plan is produced (the Action Plan) a three month consultation period is provided. This enables all interested parties to liaise and reach a consensus about the management of the area and agree on a shared vision. The publication of the full Consultation Report and this Summary Booklet marks the start of the consultation period. The Action Plan will be published in October 1998.

The diagram below shows the West Midlands Stour LEAP process and the main outputs in the five year cycle.

Sustainable development

The most commonly used definition of sustainable development was provided in 1987 in the Brundtland Report *Our Common Future* as:

"...development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

As stated above, the Environment Agency, in carrying out its role, is required to act in accordance with the Government's overall environmental strategy, the basis of which is a commitment to the goal of sustainable development.





The Local Environment

Overview

The River Stour and its tributaries drain an area of just over 374km². The Stour rises in the Clent Hills and the Smestow Brook, its principal tributary, rises in Wolverhampton. The two watercourses flow west and south, respectively, through the heavily urbanised environment of the West Midlands conurbation and converge at Stourton. The river continues south through the town of Kidderminster to meet the River Severn at Stourport. The Staffordshire and Worcestershire Canal follows the river along much of its course, it is joined by the Stourbridge Canal near Stourton allowing connection of the Dudley Canal and the rest of the Birmingham Canal Network to the River Severn.

The plan area mostly falls within the counties of Staffordshire and Hereford & Worcester, and the West Midlands area which includes the Metropolitan

Boroughs of Wolverhampton, Dudley and Sandwell. These three boroughs constitute the majority of the urbanised part of the catchment and form much of what is historically known as the Black Country. The urbanised area has a significant impact on the character of the river and the state of the area in general.

Development of the Black Country resulted from the Industrial Revolution. This began in Coalbrookdale in the adjacent Severn catchment but spread into this area in the mid 18th Century. This movement was due to the plentiful supplies of minerals, principally coal, which was exploited for the making of iron. The legacy of extensive mining operations in the thick 'Ten Yard Coal' seams of the South Staffordshire coalfield and other mineral workings are still in evidence. Much industrial heritage remains, particularly in the form of canals which were built to replace the packhorse as a better means of moving raw materials and finished goods.

The remainder of the plan area to the south and west is largely rural in character, with the exception of Kidderminster and Stourport. Much of this is Green Belt, the urban/sub-urban fringes are mainly pasture land and the rest is utilized for intensive arable agriculture.

The sections on land, air, water, wildlife, heritage and recreation which follow provide a general outline of the local environment and help illustrate how the legacy of the Industrial Revolution impacts on the West Midlands Stour area.

Land ● ● ●

Over 75% of the West Midlands Stour LEAP area is underlain by red sandstones and conglomerates (Sherwood Sandstone Group). Other rock types include Limestones and Coal Measures which provided an important local source of raw materials which fuelled the beginnings of the West Midlands heavy industry.

The landscape falls into four main landscape types, these are shown on a national map published jointly by the Countryside Commission and English Nature *The Character of England; landscape, wildlife and natural features*.

The main areas of landscape character are:

- Industrial, post industrial and urban areas
- Arable land with heathland and conifer plantations
- Broadleaved woodlands and hedgerow trees
- Ancient landscape of small fields and winding lanes

The urban area covers just over 32% of the total land area and urban development pressures are significant. Agricultural land makes up over 60% of the plan area. Agriculture has the potential to affect the environment in various ways, through discharges of organic waste, its demands on ground and surface waters and the use of fertilisers.



Himley Landfill Site

Centres of population and industry give rise to waste which has to be managed. Whilst waste management facilities do not represent an major land use in terms of the total plan area they cover, their potential environmental impact can be very significant unless suitably regulated. The built up areas, especially in and around Dudley, are characterised by a high proportion of metal recycling sites, waste transfer stations and old landfill sites.

Air ● ● ●

The Environment Agency contributes to the management of air through the Integrated Pollution Control (IPC) system, emissions from the most potentially polluting industrial processes are regulated by the Agency to minimise their impact upon the environment (see Issue 11). There are twelve sites of this type in the West Midlands Stour area operating a range of processes including incineration of municipal waste, aluminium recovery and chemical manufacture. In addition to emissions to air from the above mentioned processes, road transport

emissions result in elevated levels of Nitrogen Oxides in some parts of the West Midlands conurbation. The Agency has no regulatory control over general air quality or air quality monitoring which is the responsibility of Local Authorities. The level of monitoring in the area is raised in Issue 10.

Water ● ● ●

Annual rainfall figures within the catchment have been consistently below the long term average since the late 1980s, with the exception of a few wet years in the early 1990s. This will have contributed to the low flow problems experienced in parts of the catchment, such as the Blakedown Brook (Issue 5). Abstractions from and discharges to watercourses alter their natural flow. There is a large artificial component to the river flow in the main River Stour and canal networks consisting of treated sewage effluent and industrial effluent. However, these surface waters are only used to support industrial and agriculture abstraction.

The Sherwood Sandstone which underlies much of the area is classified by the Agency as a major aquifer and has historically supported a high level of groundwater abstraction for public water supplies. Abstraction from public water supply boreholes lowers groundwater levels. In addition, the drier weather conditions experienced in recent years have caused a decline in levels. This decline has also had detrimental effects on wetland areas

(see Issues 4 and 5). The groundwater resources in much of the LEAP area are either fully or over committed and as a result are closed to further abstractions in order to protect existing users and the environment.



Flooding in Vicar Street, Kidderminster,
27th March 1955

The growth of the West Midlands conurbation has caused development to encroach onto the floodplains of both the River Stour and Smestow Brook. This is particularly true of the town centre of Kidderminster, where since 1795, there have been at least nineteen serious flood events. To protect people and property at risk from flooding the Agency operates a flood warning system for Kidderminster which involves the 24 hour monitoring of rainfall and river levels. Warnings are issued when there is a risk that flooding could occur.

Water quality of the watercourses in the area, as measured by chemical sampling methods in 1996, was generally 'fair'. Biological sampling methods, however, indicate that the quality of invertebrate life is lower than the water quality would suggest. This is typical of watercourses in urban areas which receive intermittent discharges of surface water and storm sewage. Since 1990 the overall quality of the watercourses in the Stour catchment has improved slightly. The canals in the plan area are all chemically of 'fair' quality. There is a greater variety in biological quality which ranges from 'good' to 'poor'. Much of the variability in the biological classification is due to the popularity of the canals for boating which restricts the growth of plants and in turn restricts the invertebrates which are dependant on them.

The main pressures on the quality of the water environment in the area can be summarised as:

- Discharges from sewage treatment works and industry
- The urban nature of the catchment
- Low flow in watercourses

The quality of groundwater in the West Midlands Stour catchment is generally good, particularly in the areas underlain by the Sherwood Sandstone. However, the eastern part of the area is underlain by Coal Measures within which groundwater quality can be affected naturally by the minerals in the strata and by

chemical changes induced by the closure of coal mines. Past industrial practices in parts of the area have created large tracts of contaminated land, which can result in the pollution of groundwater due to the leaching of contaminants.

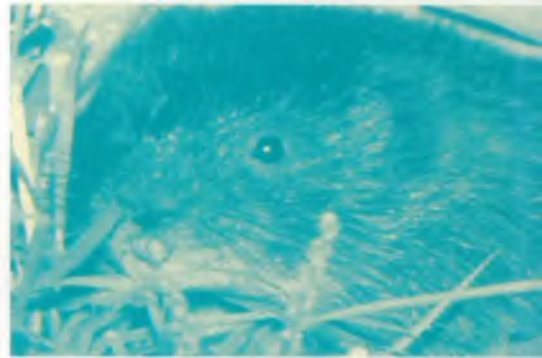
Groundwater quality has also deteriorated in some areas as a result of increased crop production and grassland management. These types of farming practice involve the use of nitrates which can leach into underlying aquifers. In response to the EC Nitrate Directive, the Agency has defined Nitrate Vulnerable Zones (NVZs) around public water supply abstractions, where nitrate concentrations in groundwater have been found to exceed a certain level (see Issue 3). There are four NVZs in the plan area, these are Tom Hill, Hinksford, Kinver and Wildmoor.

Wildlife ● ● ●

A significant part of the West Midlands Stour area is urban and this is the major factor influencing the wildlife. However, it is an area of surprises and amongst the industry and houses, pockets of green exist, some of them supporting important species such as the water vole. These open spaces are essential as refuges for both people and wildlife. Rivers are of particular importance as they tend to form green corridors linking urban areas to the surrounding countryside (see Issue 18). For example, in Kidderminster the

Stour valley still supports some of the richest and most important marshland in the area.

The main factors limiting the value of the area for wildlife, including fish stocks, are water quality and water quantity. The over-abstraction of groundwater units in the Blakedown area (Issue 5) is causing a problem to several important areas for nature conservation. The areas of open space



Water Vole

mentioned above are under tremendous pressure both directly from development and from degradation resulting from pollution and flytipping (see Issue 6). The Agency has responsibility towards the implementation of the UK Biodiversity Action Plan, this is a national action plan which was drawn up to ensure that the full range of animal and plant species are conserved. The Agency will be developing targets for species and habitats of conservation concern. Examples of biodiversity species in this area, for which the Agency act as a 'contact point', are the otter and water vole.

Questionnaire

Your views count

The aims of this booklet are:

- for you to share our vision and proposals for the West Midlands Stour area;
- to ask you for your views and comments.

This is your opportunity to tell us what you think. Please:

- 1 Answer the quick questionnaire on the next three pages.
- 2 Write any extra comments in the space provided at the end of the questionnaire.
- 3 Pull the questionnaire out of the booklet.
- 4 Send it to us in the **FREEPOST** envelope provided, or place it in the comments box attached to the library display boards, even if you have not answered all the questions.

1 How did you first find out about this Local Environment Agency Plan?

Please tick appropriate box

Letter from the Environment Agency

Environment Agency display

Environment Agency poster

TV

Radio

Newspapers

Other, please specify

2 Where did you get this booklet?

.....

3 In which town or area do you live?

.....

4 Our vision for this area is to develop a better local environment in which people can live and work and maintain this, by sustainable management, for future generations

Do you agree with this?

Yes

No

If you disagree, please tell us your vision for the area.

5 Please tick the three objectives that you feel are the most important.

- Educate and raise awareness of the local environment and environmental issues.
- Work in partnership with local people and organisations to realise the potential of the area and encourage ownership of the local environment.
- Maintain and improve the water quality of rivers, canals and groundwater.
- Manage water resources in an environmentally sustainable way by balancing the needs of legitimate users with those of the environment.
- Reduce the impact of flooding on existing developments, where possible, and resist development where it would be at risk from flooding or may cause flooding elsewhere.
- Develop a monitoring programme, in partnership with Local Authorities, to assess air quality and the impact of Integrated Pollution Control (IPC) processes on it and enable improvements to be made.
- Promote waste minimisation, encourage the achievement of national waste management targets and ensure the effective regulation of waste.
- Protect and enhance river/green corridors, and support biodiversity through the protection and enhancement of species and habitats.
- Develop the recreational and amenity value of watercourses and protect the varied cultural heritage that exists within the area as a whole.

6 Are there other key objectives you would like to see included?

Heritage ● ● ●

Much of the area's heritage is in the form of industrial remains which are a legacy of the Industrial Revolution. The energy harnessed from the fast flowing River Stour was one of the reasons why industry developed in the area. The importance of the river is reflected in the large number of mill sites. There are also many fine examples of canals and canal architecture eg. the Delph Locks between the Dudley and Stourbridge Canals, and warehouses such as the Bonded Warehouse at Stourbridge.

There are a number of large estate houses with their associated parks and gardens. Some of these are now open to the public, for example Wightwick Manor, a National Trust property on the edge of Wolverhampton, whilst others have alternative uses such as old peoples homes, country clubs and golf courses.

The intensive urbanisation of the area has meant that signs of earlier history have often become masked.

Exceptions to this are a site on the Lutley Gutter which bears ancient artifacts and Roman camps at Greensforge. However, new sites of importance are continually being discovered (see Issue 19).

Recreation ● ● ●

Water sports are poorly catered for in the area, this is largely due to problems with water quality. In the case of river angling the poor water

quality means that in many areas there is little to catch. With immersion sports such as canoeing there are the potential dangers of Weils disease or Leptospirosis. The canals, however, with their fine architecture and impressive flights of locks, are very popular and attract visitors to the area on boating holidays. There are ample opportunities for walking and cycling and many disused railways and canal towpaths are used for passive recreation, although in the heavily urbanised areas access tends to be fragmented. There are also four Country Parks in the area.



Canal Boats on the Stourbridge Extension Canal
(Courtesy of British Waterways)



Issues and options

This section of the plan details specific environmental issues in the area.

The issues have been identified by:

- Using the local knowledge of Environment Agency staff.
- Informal consultation with a range of organisations and interested groups.
- Comparing the current state of the area with national and regional targets.

The options presented are the initial views of the Environment Agency Upper Severn Area, Midlands Region, and do not constitute policy statements. They are intended to facilitate improvements to the local environment for the benefit of all users. Their implementation will require the co-operation and commitment of many organisations and individuals. The issues identified are not in priority order. Some issues are site specific whilst others can affect many parts of the area.

7 Are there any errors or omissions in this booklet? Yes No

If yes, please give details.

8 We have identified the issues on pages 13 to 20.

Please tick the five issues that are the most important to you:

- Issue 1: Compliance with River Quality Objectives and EC Directives
- Issue 2: The Need for Assessment of the Current Status of the Pensnett Canal
- Issue 3: Nitrate Contamination of Groundwater
- Issue 4: The Sustainability of Water Resources
- Issue 5: Impacts of Over-abstraction within the Blakedown Valley
- Issue 6: Flytipping and Litter
- Issue 6a: Shopping Trolleys in Watercourses
- Issue 7: The Impact of Culverted Watercourses
- Issue 8: Kidderminster Town Centre Redevelopment
- Issue 9: Flooding Resulting from Urban Development, and Flood Warning
- Issue 10: The Current Level of Air Quality Monitoring
- Issue 11: Environmental Monitoring of Integrated Pollution Control Authorisations
- Issue 12: Metal Recycling Sites
- Issue 13: Sustainable Waste Management
- Issue 14: The Need to Raise and Promote Environmental Awareness and Education
- Issue 15: Low Conservation Value and Poor Biodiversity
- Issue 16: Poor Fish Stocks
- Issue 17: Lack of Recreation and Amenity Facilities
- Issue 18: Protection and Expansion of the River Corridor and its Associated Wildlife
- Issue 19: The Effects of Development on Wildlife, Cultural Heritage and the Landscape

9 Are there other issues you would like to see included in the Action Plan?

No Yes If yes, please give details.

10 This document is part of a consultation process about the West Midlands Stour area.

Do you think this process is appropriate? Yes No

How could this process be improved?

11 If you would like a reply, please write your name and address below.

Your name and address will not be given to anyone else.

Name

Address.....

.....

..... Postcode

If you have any other comments please write them here (including your ideas for the future of the area) and continue on another sheet of paper if required.

.....

.....

.....

.....

.....

.....

The Impact of Urbanisation

Many of the issues identified have a common theme; they have resulted from the impact of urbanisation on the Stour area. Urban development in the form of housing, industry and infrastructure has put pressures on the natural resources, wildlife and habitat of the area. These pressures are addressed in the issues set out below for; water resources (Issues 4 and 5), air (Issues 10 and 11) and water quality (Issues 1 and 2), problems resulting from waste production (Issues 6/6a, 12 and 13), and loss of wildlife and habitat (Issues 7, 15, 16, 18 and 19). Flooding and culverting also result from urbanisation and are addressed in Issues 7, 8 and 9.

Issue 1 Compliance with River Quality Objectives and EC Directives

1 (i): EC Directive Failures

Objective: Seek improvements to water quality to ensure compliance with standards set out in the EC Dangerous Substances Directive

Options/Actions	Responsibility
List 2 failures:	Environment Agency Severn Trent Water Ltd
a. River Stour at Stourport. Investigate results, check the error inherent in this type of sampling	
b. Wom Brook, Smestow confluence Pipe Wombourne STW effluent to Smestow brook to receive greater dilution (see Issue 1 (ii) options table)	

1 (ii): Failures involving specific discharges

Objective: Seek improvements in relation to specific discharges to ensure compliance with River Quality Objectives

Options/Actions	Responsibility
Tighten consent conditions to protect watercourse	Environment Agency Severn Trent Water Ltd
Pipe Wombourne STW effluent to Smestow brook to receive greater dilution (see Issue 1 (i) options table)	Environment Agency Severn Trent Water Ltd

1 (iii): Failures requiring investigation by the Agency

Objective: Investigate failures to ensure compliance with long term River Quality Objectives

Options/Actions	Responsibility
Investigate to identify/confirm cause of failure: Smestow Brook Lutley Gutter Merryhill/Warstones Brook Hoo Brook Staffordshire & Worcestershire Canal Dudley Canal	Environment Agency

1 (iv): Problems associated with unsatisfactory combined sewer overflows

Objective: Reduce the number of unsatisfactory combined sewer overflows to help improve water quality and aesthetic problems

Options/Actions	Responsibility
Eliminate sewer overflows Eliminate clean surface water from foul sewers Improve combined sewer overflows to no visible or detectable impact	Severn Trent Water Ltd

Issue 2 The Need for Assessment of the Current Status of the Pensnett Canal

Objective: Assess status of the Pensnett Canal to allow possible improvements to be made

Options/Actions	Responsibility
Discuss current status and future proposals for canal with Dudley MBC	Environment Agency Dudley MBC
Assess water quality of canal	Environment Agency
Assess polluting inputs to canal (also see issue 12)	Environment Agency
Assess importance/potential importance of canal to local conservation	Environment Agency Dudley MBC

Issue 3 Nitrate Contamination of Groundwater

Objective: Monitor nitrate levels and implement schemes to help prevent/reduce nitrate contamination of groundwater

Options/Actions	Responsibility
Do nothing - continue with Nitrate Sensitive Area scheme only	Environment Agency
Discontinue Nitrate Sensitive Area scheme	Environment Agency
Implement and extend Nitrate Vulnerable Zone scheme	Action plan to be agreed between Environment Agency and DETR

Issue 4 The Sustainability of Water Resources

Objective: Develop a groundwater model to aid long term aquifer resource management and implement short term measures

Options/Actions	Responsibility
Develop groundwater model	Environment Agency
No new licences and negotiate reduced abstraction	Environment Agency/Water Company Licence holders
Enhance Swindon gauging station for low flow measurements	Environment Agency
Encourage winter abstraction and storage	Licence holder Environment Agency

Issue 5 Impacts of Over-abstraction within the Blakedown Valley

Objective: Restore levels in pools at Blakedown and gain a greater understanding of the hydrological regime within the valley

Options/Actions	Responsibility
Quantify impacts: Install observation wells and water level monitoring equipment Determine effects on ecological and archaeological environment	Environment Agency
Complete full support of water levels in Swan Pool, Forge Pool and Ladies Pool in 1998 using groundwater	Environment Agency
Review trial releases of water to Blakedown Brook in 1998/99 and assess the benefit to Hurcott/Podmore SSSI	Environment Agency Severn Trent Water Ltd South Staffordshire Water Plc
Reduce groundwater licences to a sustainable volume as indicated by groundwater modelling (Issue 4)	Environment Agency Severn Trent Water Ltd South Staffordshire Water Plc
Review the possibility of restoring dried pools higher up system in Blakedown using groundwater from new and/or existing sources	Severn Trent Water Ltd South Staffordshire Water Plc Environment Agency



Swan Pool - Before and After Artificial Restoration of Water Levels

Issue 6 Flytipping and Litter

Objective: Reduce flytipping and litter activity at certain locations within the plan area

Options/Actions	Responsibility
Develop a strategy to control litter and flytipping at specific locations	Environment Agency Local Authorities Tidy Britain Group Landowners
Remove 'build up' of litter at certain locations eg Mousesweet/ Black Brooks	Tidy Britain Group Landowners Environment Agency Voluntary Organisations Local Authorities
Discussions with responsible parties to tackle flytipping/littering in Mushroom Green Area	Sandwell/Dudley MBC Environment Agency Groundwork Urban Wildlife Trust



The effects of Flytipping/Littering on the Mousesweet Brook



Shopping Trolleys in a Watercourse

Issue 6a Shopping Trolleys in Watercourses

Objective: Reduce the number of shopping trolleys deposited in watercourses

Options/Actions	Responsibility
Seek solutions in partnership with others to resolve problem	Supermarkets Wyre Forest District Council Environment Agency
Coin operated shopping trolleys used	Supermarkets
Publish a national league table of offending supermarkets	Environment Agency
Prosecute offenders under Land Drainage Byelaw 11 for permitting an obstruction to a main river	Environment Agency

Issue 7 The Impact of Culverted Watercourses

Objective: Prevent inappropriate culverting of watercourses and encourage restoration of culverted watercourses where possible

Options/Actions	Responsibility
Publish national policy	Environment Agency
Undertake more enforcement action on illegal culverting works	Environment Agency
Remove culverts where possible	Landowner
Identify significant lengths of culverting for potential removal	Environment Agency

Issue 8 Kidderminster Town Centre Redevelopment

Objective: Improve conservation interests and flood protection in Kidderminster town centre

Options/Actions	Responsibility
Provide early advice at feasibility stage of the development on the improvement of flood defence standards and ecological quality	Environment Agency
Improve "off-site" flood defences	Environment Agency

Issue 9 Flooding Resulting from Urban Development, and Flood Warning

Objective: Protect people, property and land from flooding to standards which are practical, economic and appropriate and improve flood warning

Options/Actions	Responsibility
Alleviate risk of flooding to property at locations identified in S105 survey (see Section 6, Table 19): a) Construct flood defences to protect property at risk b) Reduce flood levels by increasing watercourse capacity to protect property at risk c) Reduce flood flows by upstream surface water balancing	Environment Agency Local Authorities Property owners/developers
Remove obstructions/culverts and developments which increase flood levels (also see Issue 7)	Environment Agency Local Authorities Property owners/developers
Map floodplain, provide maps for Local Authorities and highlight areas where restoration of floodplain capacity is necessary	Local Authorities supported by the Environment Agency
Investigate quantitative effects of urbanisation on flooding regime and devise long term strategy to reduce detrimental effects	Environment Agency
Ensure proposed new development does not add to existing flooding problems	Local Authorities
Investigate the feasibility of improving/extending the flood warning system	Environment Agency

Issue 10 The Current Level of Air Quality Monitoring

Objective: Quantify the impact of IPC processes on air quality to allow priorities to be set in process improvements

Options/Actions	Responsibility
Work with Local Authorities to assess air quality monitoring needs for the area	Environment Agency/Local Authorities
Agree common data sets	Environment Agency/Local Authorities/DETR
Estimate the impact of Integrated Pollution Control (IPC) processes	Environment Agency

Issue 11 Environmental Monitoring of Integrated Pollution Control Authorisations

Objective: Develop a joint and consistent approach to environmental monitoring to determine the levels within the environment of persistent toxic pollutants released from IPC processes to air and assess whether reductions in these releases are required

Options/Actions	Responsibility
Develop a joint and consistent approach on environmental monitoring with Local Authorities	Environment Agency/Local Authorities
Identify sites for environmental monitoring	Environment Agency/Local Authorities
Undertake monitoring at agreed sites	Environment Agency/Site operators/Local Authorities

Issue 12 Metal Recycling Sites

Objective: Bring all operations into line with the Regulations in order to prevent pollution of the environment and harm to human health from waste activities

Options/Actions	Responsibility
i) Unlicensed sties: a) ensure that all operations are licensed or registered as exempt b) take enforcement action as appropriate	Environment Agency
ii) Licensed sites: a) enforce licence conditions b) improve operating standards where necessary	Environment Agency
iii) Exempt sites: a) ensure sites are registered and complying with criteria. Take enforcement action where necessary b) improve operating standards where necessary	Environment Agency
iv) Flytipped waste a) require landowners/Local Authorities to remove flytipped waste as appropriate (see Issue 6)	Environment Agency Local Authorities Landowners
v) Regularly review the situation ie. i) and ii) and monitor progress. Increase enforcement action if it appears that land occupiers/licence holders are not making improvements in accordance with set, agreed timetables	Environment Agency

Issue 13 Sustainable Waste Management

Objective: Reduce the amount of waste produced in the West Midlands Stour area and make the best use of waste that is produced

Options/Actions	Responsibility
Set up waste minimisation	Groundwork Trust and partners including the Environment Agency
'Roadshow' style seminars to companies on industrial estates	Environment Agency
Develop a strategy to achieve the targets in Making Waste Work with regard to household waste	Local Authorities Environment Agency

Issue 14 The Need to Raise and Promote Environmental Awareness and Education

Objective: Raise and promote environmental awareness and education and develop a local education strategy

Options/Actions	Responsibility
Develop a local education strategy and establish partnerships to deliver it	Environment Agency



The Pensnett Canal and Adjacent Metal Recycling Site



Black Poplar Trees

Issue 15 Low Conservation Value and Poor Biodiversity

Objective: Protect and enhance the biodiversity and conservation value of the area

Options/Actions	Responsibility
Develop and implement appropriate guidelines for the protection and management of riparian habitats for water voles	Environment Agency Urban Wildlife Trust Local Authorities
Monitor otter distribution and identify habitat improvement sites	Environment Agency Wildlife Trusts Local Authorities
Determine the current status of native brown trout and investigate the degree of genetic diversity in these relict populations	Environment Agency
Implement planting and management schemes to ensure the continued presence of native black poplar in the catchment	Environment Agency Forestry Commission Local Authorities
Seek opportunities for reed bed creation	Severn Trent Water Ltd Environment Agency Developers Local Authorities
Promote the restoration of wetlands at Puxton, Stourvale, Wilden and Spennels Valley in Kidderminster and develop as a Country Park and Local Nature Reserve	Environment Agency Wyre Forest District Council Worcester Wildlife Trust Landowners English Nature

Issue 16 Poor Fish Stocks

Objective: Increase the numbers and diversity of fish stocks in the catchment

Options/Actions	Responsibility
Develop and implement a strategy for the creation of instream habitat and riparian buffer zones	Environment Agency
Selective fish stocking	Environment Agency

Issue 17 Lack of Recreation and Amenity Facilities

Objective: Increase scope for Recreation and Amenity facilities

Options/Actions	Responsibility
Increase the opportunities for angling on rivers, canals and other water bodies	Environment Agency Angling Clubs Local Authorities British Waterways Landowners
Improve the opportunities for disabled angling	Environment Agency Angling Clubs Local Authorities British Waterways Landowners Fieldfare Trust
Promote and support access initiatives	Local Authorities Groundwork Sustrans British Waterways Landowners
Improve public access at Mushroom Green	Environment Agency Sandwell MBC Dudley MBC BTCV

Issue 18 Protection and Expansion of the River Corridor and its Associated Wildlife

Objective: Implement and promote schemes to protect and expand the river/green corridor

Options/Actions	Responsibility
Continue to implement and promote collaborative schemes that enhance areas of urban green desert adjacent to watercourses and wetland eg. Worn Brook Walk	Environment Agency Local Authorities Local Community groups and forums

Issue 19 The Effects of Development on Wildlife, Cultural Heritage and the Landscape

Objective: Encourage and promote best practice in relation to new developments to protect and enhance the local environment

Options/Actions	Responsibility
Develop a joint and consistent approach between all those involved with new developments in the area	Local Authorities Developers Environment Agency
Actively seek greater publicity for examples of best practice	Environment Agency Local Authorities Developers
Launch the Community Pride initiative in Dudley	Environment Agency Local Authorities Community Groups

Abbreviations used in this document:

- STW** Sewage Treatment Works
SSSI Site of Special Scientific Interest
BTCV British Trust for Conservation Volunteers
DETR Department of the Environment, Transport and the Regions
MBC Metropolitan Borough Council

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For general enquiries please call your local Environment Agency office. If you are unsure who to contact, or which is your local office, please call our general enquiry line.

**ENVIRONMENT AGENCY
GENERAL ENQUIRY LINE**

0645 333 111

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**ENVIRONMENT AGENCY
EMERGENCY HOTLINE**

0800 80 70 60



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