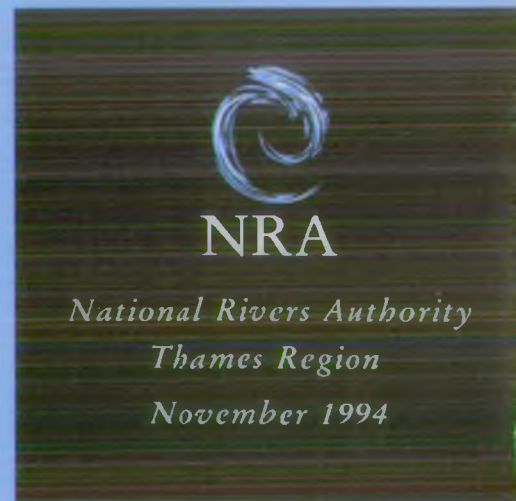


# BLACKWATER RIVER CATCHMENT MANAGEMENT FINAL PLAN



## THE CONCEPT

The rivers, lakes, estuaries and coastal waters of England and Wales have never before been subject to such extensive and rapidly increasing demands. The National Rivers Authority is the statutory regulator of the water environment and has a significant direct management role. As such, the important responsibility of safeguarding the water environment includes reconciling conflicts between water users.

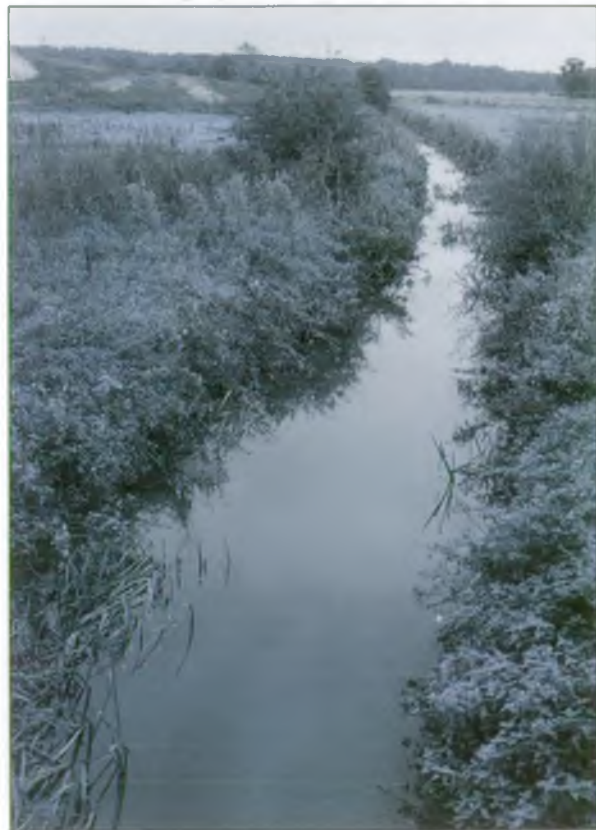
The Mission Statement of the National Rivers Authority expresses the following principles:

**We will protect and improve the water environment by the effective management of water resources and by substantial reductions in pollution. We will aim to provide effective defence for people and property against flooding from rivers and sea. In discharging our duties we will operate openly and balance the interests of all who benefit from and use rivers, groundwaters, estuaries and coastal waters. We will be businesslike, efficient and caring towards our employees.**

Catchment Management Plans translate these principles into action. The plans describe the vision for each catchment, identify problems and issues and propose actions that may be taken to resolve them. The plans also provide the means of promoting two key aspects of environmental management – land use planning and water quality objectives.

## WATER QUALITY OBJECTIVES

The Water Resources Act (1991) allows the Government to set Statutory Water Quality Objectives (SWQOs). These will replace the non-statutory River Quality Objectives (RQOs) set in the 1970s. The objectives set will be related to the uses of the water. Five such uses have been proposed. Detailed regulations have been published for one, the "Rivers Ecosystem" use, based on the suitability to support fish populations. Implementation of these regulations by Government is awaited.







## VISION FOR THE CATCHMENT

The impact of human activities, ranging from intensive development to agriculture, has been detrimental in varying degrees to the environment of the Blackwater and its tributaries.

The National Rivers Authority's vision for the Blackwater catchment comprises the following:

- *Reverse the decline of the water environment and seek to restore the river corridor to a more natural state in which it will become a valued asset for the whole of the community;*
- *Secure protection and enhancement of the water environment through its own actions, in partnership with others and, increasingly, through the process of land use planning, implement the principles of sustainable development;*
- *Facilitate activities by various water users in appropriate locations and balance them so as to avoid conflict, through strong links and involvement with local communities*



ENVIRONMENT AGENCY

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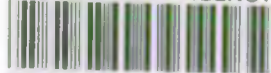
Rio House, Waterside Drive,  
Aztec West, Almondsbury,  
Bristol BS32 4UD

The proposed actions set out in this Final Plan represent a firm commitment to embark upon securing the comprehensive protection and enhancement of the natural water environment of the catchment. These proposed actions alone will not achieve the vision. However, they will form a sound basis for further actions in the future and contribute towards the realization of the vision.

Catchment plans are dynamic documents. The actions will be monitored and reviewed regularly. The Blackwater Catchment Management Plan will, in any case, be subsumed within the Loddon Catchment Management Plan to be prepared in 1997/8. This will provide the opportunity for any necessary revision.



ENVIRONMENT AGENCY



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## REVIEW OF THE CONSULTATION PROCESS

A fundamental objective of Catchment Management Planning is to involve the public and all interested parties in the planning for the future well-being of the catchment. To meet this objective the consultation process included a press release, a Consultation Document, a summary leaflet, displays in local libraries and meetings.

The press release, which was issued on 12th November 1992, read as follows:

### **BLACKWATER RIVER CATCHMENT MANAGEMENT PLAN**

*Planning for the future of the water environment in the Blackwater River Catchment is the main objective for the NRA's latest catchment management plan.*

*A consultation report has been sent to a wide range of organisations, groups and individuals including Parish, District and County Councils. The purpose of the report is to raise awareness of the way we currently use our water heritage and to plan for its future use. A number of displays in libraries and other public areas are to be organised over the next two months.*

*Areas covered in the report include the Basingstoke Canal, Blackwater Valley, Fleet Pond and the Rivers Whitewater and Hart.*

The Consultation Document and the summary were published in November 1992 and sent to a total of 119 interested parties. The consultation period extended to 29th January 1993 and written comments were requested to be submitted by that date. Responses were received from 45% of those consulted.

On twelve days (between 29th November 1992 and 5th January 1993) a display was set up in the public libraries at Aldershot, Camberley, Farnborough, Fleet, Odiham and Sandhurst. Copies of the summary document were available at the display for members of the public.

Following detailed analysis of the comments received, a Draft Action Plan to address the issues was prepared. This was sent for comment to 81 key participants of whom 57 attended a forum meeting on 17th November 1993. As a result of representations at the meeting, the period of consultation was extended by a month to 17th January 1994. However, in recognition of the importance of such comments, responses received after that date have been taken into consideration.

The consultation exercise was helpful and productive. Not only did it afford the National Rivers Authority the opportunity to become more aware of the concerns of others but it also resulted in the Blackwater catchment and its issues being given a higher profile. The issues and actions were confirmed as being correct and appropriate.



## OVERVIEW OF THE CATCHMENT

### BRIEF DESCRIPTION OF THE CATCHMENT

The Blackwater River catchment comprises all land draining surface water run-off to the Blackwater River and its tributaries which include the River Whitewater, River Hart, Fleet Brook and Cove Brook. The length of Main River (over which the NRA has statutory powers for flood defence) is 87 kilometres; the length of Controlled Water (monitored by the NRA for water quality purposes) is 125 kilometres.

The area covered by the catchment, which is 356 square kilometres in extent, falls within the administrative boundaries of the following Local Authorities:

<b>County Councils</b>	<b>District &amp; Borough Councils</b>
<i>Hampshire</i>	Hart DC
	Rushmoor BC
	Basingstoke & Deane BC
	East Hampshire DC
<i>Surrey</i>	Surrey Heath BC
	Guildford BC
	Waverley BC
<i>Berkshire</i>	Wokingham DC
	Bracknell Forest BC

The catchment is one of contrasts. On the western side the Rivers Whitewater and Hart drain a largely open area (apart from the towns of Fleet, Hartley Wintney and Hook), whilst on the eastern side the Blackwater River and Cove Brook drain a heavily urbanised area comprising the towns of Aldershot, Camberley, Farnborough, Sandhurst and Yateley.

During the period between the late 1950s and mid 1980s considerable urbanisation took place, resulting in the crescent of intense development which now exists along the Blackwater Valley. At present approximately 250,000 people reside in the catchment and the good road and rail communications with Central London continue to maintain pressure for further development.

Major variations in river water quality occur within the catchment. The River Whitewater is of "high" quality and supports a natural population of brown trout. In contrast, the Blackwater River is in part of "poor" quality, although its downstream reaches are considered to be of "fair" quality.

Water bearing strata underlie the catchment and act as a source both of drinking water supplies and of several springs which feed the Whitewater and Hart Rivers. The Blackwater River is also spring fed. However, sewage effluent is the major component of flow in the river.

The Basingstoke Canal runs through the catchment from west to east close to the 75 metre ground contour. The canal, which has been restored and reopened, now supports a number of Sites of Special Scientific Interest and is regarded by many to be of national ecological importance.

Within the catchment there are other water dependent habitats which are designated as Sites of Special Scientific Interest. These include fens, lakes, bogs and water meadows, making this a particularly diverse and rich area in ecological terms. Fleet Pond, the largest freshwater lake in Hampshire, was designated as a Site of Special Scientific Interest in 1951.



## SUMMARY OF CATCHMENT USES AND ACTIVITIES

### ECOLOGY:

This refers to aquatic flora and fauna along with dependent organisms. Dependent organisms are plants and animals which rely, at some stage of their life cycle, on the aquatic environment or associated land. A healthy river corridor will be characterised by a diverse and abundant plant and animal community and a variety of habitat types.

The upper sections of the Blackwater River and Cove Brook are extensively urbanised and the river therefore provides an essential ecological corridor. The Whitewater and Hart valleys are much less developed and have a more natural structure and higher water quality. Important ecological features in the catchment include meadows, wet grasslands, bogs, marshes, lakes, ponds and gravel pits. In addition, the Greywell Tunnel on the Basingstoke Canal has been designated a wildlife heritage site of world importance because of the size and diversity of its bat population.

### FISHERIES:

This relates specifically to the maintenance of breeding populations of salmonid (i.e. game) and cyprinid (i.e. coarse) fish. The European Commission (EC) Freshwater Fisheries Directive, on the quality of waters needing protection or improvement in order to support fish life, provides a statutory basis for the protection of water quality in certain rivers.

The Blackwater River, which is an EC designated cyprinid fishery, has several sites with good fish populations and tributaries that support wild brown trout. Impoverished fish populations are associated with areas of degraded habitat and poor water quality.

The River Whitewater is a high quality river with a good fish population. From its source to its confluence with the Blackwater River it is an EC designated salmonid fishery. The River Hart is a designated cyprinid fishery from Elvetham Park Bridge to the River Whitewater.

The Basingstoke Canal is a designated cyprinid fishery from Greywell Tunnel to Eelmoor Bridge, and supports good fish populations in many sections.



## **LANDSCAPE:**

The landscape reflects the complex interplay between the natural environment and man's activities. Geomorphology, topography and drainage provide the basic elements of the landscape and, together with associated vegetation and settlement patterns, determine the essential landscape character of different areas.

Within the catchment there are several distinct landscape zones. The poorest quality landscape occurs in the Blackwater Valley where extensive development has resulted in pressure on the urban fringe.

## **AMENITY, RECREATION AND NAVIGATION:**

Activities such as walking, bird watching, angling, boating, rowing and picnicking bring people into close proximity with the water.

Access by foot alongside the watercourses varies, being limited in the case of the River Whitewater, and excellent in the case of the Basingstoke Canal. On the Blackwater River, considerable improvement is underway in association with road construction works. Fleet Pond and Wellington Country Park are sites which attract large numbers of visitors.

The lakes and gravel pits in the catchment, notably in the Blackwater Valley, provide for boating, sailing, rowing, windsurfing and waterskiing. On the Basingstoke Canal, boating and canoeing are the main activities.

Navigation relates to waterways for which there is a statutory right of passage for boat traffic. The Basingstoke Canal is the only example in the catchment with such statutory right of navigation.

## **WATER ABSTRACTION:**

This includes surface and groundwater abstractions for potable and non-potable supplies. Major potable abstractions are operated by Water Supply Companies. Since 1963 abstractions have been licensed to ensure they do not derogate either existing sources or the natural water environment, including surface water flows.

Abstractions from groundwater for potable supplies are made by the Mid-Southern Water Company. There are 32 non-potable licences in the catchment comprising 18 groundwater and 14 surface water abstractions.

## **EFFLUENT DISPOSAL:**

The majority of consented discharges made to watercourses are from sewage treatment works. The raw sewage entering a treatment works usually consists of both household sewage and trade effluent from industrial premises. Control of each discharge is achieved by imposing consent conditions which limit the volume and quality of the effluent.

Treated sewage effluent constitutes the majority of the flow in the Blackwater River above the River Whitewater confluence. The quality of the effluent is the prime factor in determining the river water quality.





### **AGRICULTURE AND FORESTRY:**

This covers commercial forestry and all types of agriculture. These activities may affect the quality of surface and groundwaters (e.g. leaching of pesticides and nitrate) or require flood defence/land drainage activities to be undertaken so as to ensure field drains can operate freely.

The chalk downlands in the south-west of the catchment area are of considerable value as an agricultural resource and suited to the growing of cereal crops. In comparison, agricultural land in the Blackwater Valley has severe limitations on its use since it is subject to flooding and waterlogging. Grazing is the predominant agricultural activity in this area.

The predominant agricultural activities in the Whitewater Valley are mixed farming and livestock production.



### **BUILT ENVIRONMENT:**

The built environment includes residential, commercial and industrial developments. Land use planning matters are primarily the responsibility of County and District Councils. However, the National Rivers Authority is a statutory consultee in the planning process and can play a key role in influencing such matters.

Development in the catchment is concentrated on the Blackwater Valley which has played a significant role in accommodating regional growth since the late 1950s. The high rate of growth has placed increasing pressure on the natural water environment.

### **MINERAL EXTRACTION AND SOLID WASTE DISPOSAL:**

Mineral extraction has the potential to affect the catchment through effluent discharge whilst works are active, and through contamination of ground and surface water when disused workings are used as solid waste disposal sites.

The gravels of the Blackwater Valley are continuing to be extensively worked in the vicinity of Yateley and Eversley Cross. The majority of non-inert waste disposal sites close to watercourses are former extraction sites along the Blackwater Valley. Contaminated waste disposal sites in the catchment include both active and disused gasworks and sewage treatment works.

## **INFRASTRUCTURE AND COMMUNICATIONS:**

This includes all the works and structures necessary to support development: roads, railways, airports, power supply, water supply and sewage disposal facilities etc. The provision of these may lead to significant impacts on the natural water environment.

Many elements of infrastructure have not been upgraded to meet the demands placed upon them. Hence, there is a need to ensure that further infrastructure investment does not compromise the natural water environment.



## **ARCHAEOLOGY AND HERITAGE:**

This deals with features of archaeological significance, areas which have been designated as conservation areas because of their urban form, and sites of heritage value because of their nature conservation, scientific, scenic, historical or archaeological importance. Many of these sites have a strong relationship with water features.

Gravel workings in the Blackwater Valley have led to the discovery of many archaeological artefacts, notably from the Bronze Age in the area north of Yateley.

Many of the villages in the west of the catchment have conservation area status, as does the Basingstoke Canal. The area north of the M3 between the Whitewater and Blackwater Rivers has been designated as a Countryside Heritage Area.



## **FLOOD DEFENCE:**

This activity deals with the protection of people and property from flooding from natural watercourses. The standards of flood protection considered appropriate vary according to the land use to be protected and the economics of providing the service.

On watercourses designated as " Main River " the National Rivers Authority has permissive powers to construct new defences, maintain defences and control the actions of others under the formal consents procedures. By controlling and influencing the actions of others the risk to existing and future activities can be minimised.

On the River Whitewater and River Hart there are few urban areas at risk from flooding. However, in February 1990 sixteen properties in Crondall were flooded. Works to alleviate the risk of flooding have recently been completed by the National Rivers Authority.

The Blackwater Valley is extensively developed and up to fifty properties are considered to be at risk of flooding in Blackwater, Farnborough and Aldershot. A flood storage lagoon on the Cove Brook balances surface water run-off generated by the urban development in the area so that flood risks are not increased downstream.



## RELATIONSHIP BETWEEN LAND USE AND THE WATER ENVIRONMENT

The broad objective of catchment management planning is to conserve and enhance the total water environment through effective land and resource management. The National Rivers Authority is well placed to influence some of the factors affecting the water environment, particularly in relation to the river corridor itself. However, it has very little direct control over the mechanisms which determine land use activities on a catchment-wide basis. This function is primarily the responsibility of local planning authorities through the implementation of the town and country planning legislation.

The policies contained in statutory development plans are important in this regard. Such policies set out the framework for land use activities. They provide the key consideration in deciding whether planning permission should be granted. Since 1989, the National Rivers Authority has been actively encouraging local planning authorities to include policies which safeguard the water environment. Many such policies are now in force. The process will continue as County Structure Plans and District and Borough Local Plans covering the catchment are reviewed and revised. This will ensure that the policies remain up to date.

## FUTURE REVIEW AND MONITORING

The National Rivers Authority will be jointly responsible, with other organisations and individuals, for implementing the actions identified in this Final Plan.

Progress will be monitored on a regular basis and reported annually in a review document. The annual review will:

- *detail the progress achieved compared with the work planned,*
- *identify additional actions required in the light of changes in the catchment,*
- *consider the need to update the Catchment Management Plan.*





A C T I O N P L A N S



## CATCHMENT - WIDE ACTION PLAN (I)

ISSUE	STRATEGY	ACTION	PRIORITY	TIMING	LEAD	OTHERS	COST (£K) 1994/99
CW1. Impact of development on river corridors within Blackwater catchment	1. Ensure appropriateness of development	1. Continue promotion of appropriate land use policies and influence of development plans.	High	Ongoing	NRA		5
		2. Improve appropriate policy framework in development plans and implement to resist inappropriate development.	High	Ongoing	CC, BC, DC	NRA	
		3. Continue to ensure, through the consultation process, that planning decisions respect the needs of the water environment.	High	Ongoing	CC, BC, DC	NRA	
		4. Undertake surveys to improve information on flood risk and its impact on development.	Medium	97/8	NRA		50
	2. Manage quantity and quality of urban and road run-off	1. Produce run-off control management plan incorporating recommendations on source control and flow attenuation.	Medium	95/6	NRA	TWUL, BC, DC	5
		2. Advise on best practical environmental options.	High	94/5 onwards	NRA		3

Note: Costs shown are those attributable to the NRA are indicative and subject to detailed project justification.



CATCHMENT- WIDE ACTION PLAN (II)

ISSUE	STRATEGY	ACTION	PRIORITY	TIMING	LEAD	OTHERS	COST(£K) 1994/99
CW2. River maintenance standards	1. Produce integrated river management plan	1. Produce methodology for maintenance standard (NRA R&D Project).	High	Complete	NRA		
		2. Pilot test R&D methodology on Blackwater River.	High	95/6	NRA		10
		3. Produce agreed Reach Sketch Maps for River Maintenance Management after multidisciplinary consultation.	Medium	96/7	NRA	CWTs, EN	15
		4. Publish standards, targets and maintain Blackwater to the agreed methodology.	Medium	97/8 onwards	NRA		120
		5. Carry out similar action for the River Hart.	Medium	97/8 onwards	NRA	CWTs, EN	85
CW3. Groundwater quality	1. Implement NRA Groundwater Protection Policy	1. Promote Groundwater Protection Policy to local Planning Authorities.	High	94/5 onwards	NRA	CC, BC, DC	2
CW4. Surface water quality	1. Implement Statutory Water Quality Objectives	1. Submit Proposals to DoE and conduct informal consultation	High	Dependent upon DoE	NRA		
		2. Implement.		Dependent upon DoE	NRA	TWUL, Discharges	

Note: Costs shown are those attributable to the NRA are indicative and subject to detailed project justification.

## BLACKWATER RIVER ACTION PLAN (I)

ISSUE	STRATEGY	ACTION	PRIORITY	TIMING	LEAD	OTHERS	COST (£K) 1994/99
BW1. Impact of development on Blackwater River corridor	1. Minimise adverse impact of Blackwater Valley Road	1. Finalise design of river works and mitigation proposals.	High	Complete	HCC, SCC	NRA	10
		2. Implement sympathetic river works and mitigation proposals.	High	93/4, 94/5, 95/6	HCC, SCC	NRA	
		3. Monitor works after construction.	Medium	93/4 onwards	NRA	HCC, SCC	
	2. Develop and implement habitat enhancement programme	1. Commission strategic river corridor habitat survey, formulate enhancement programme.	High	94/5	NRA	EN, CWTs	50+
		2. Implement enhancement works and management regime incorporating geomorphological principles.	Medium	95/6 onwards	NRA	EN, CC, BC, DC, Developers	
	3. Develop and implement landscape enhancement programme	1. Undertake a strategic enhancement study of Cove Brook.	High	94/5	HCC, RBC	NRA	10
		2. Commission strategic landscape assessment, formulate enhancement programme.	High	95/6	NRA	CoCo, CC, BC, DC	
		3. Implement enhancement works incorporating geomorphological principles.	Medium	95/6 onwards	NRA	CC, BC, DC, Developers.	
	4. Maintain, develop and improve fish populations	1. Continue programme of fishery assessments.	High	96/7	NRA		10
		2. Implement habitat improvements.	Medium	94/5 onwards	NRA	CC, BC, DC, Developers	50
		3. Protect and improve isolated brown trout populations.	High	Ongoing	NRA	Landowner	

Note: Costs shown are those attributable to the NRA are indicative and subject to detailed project justification.



**BLACKWATER RIVER ACTION PLAN (II)**

ISSUE	STRATEGY	ACTION	PRIORITY	TIMING	LEAD	OTHERS	COST(£K) 1994/99
BW2. Water quality in Blackwater River	1. Improve water quality downstream of Camberley STW (3.3km reach failed RQO in 1990)	1. Improve Camberley STW.	High	Complete	TWUL	NRA	
	2. Maintain quality improvement downstream of Aldershot Military STW to Cove Brook	1. Review consent at Ash Vale STW.	Medium	94/5	NRA	TWUL	1
	3. Improve water quality downstream of Cove Brook to R.Loddon	1. Review consent at Sandhurst STW.	Medium	94/5	NRA	TWUL	1
	4. Manage impact of potential changes to trade effluent treatment at Camberley STW	1. Monitor water quality downstream and review consent if necessary.	High	95/6 (dependent upon TWUL proposals)	NRA	TWUL	15

*Note: Costs shown are those attributable to the NRA are indicative and subject to detailed project justification.*

## BLACKWATER RIVER ACTION PLAN (III)

ISSUE	STRATEGY	ACTION	PRIORITY	TIMING	LEAD	OTHERS	COST (£K) 1994/99
BW2. Water quality in Blackwater River (Continued)	5. Review suitability of river for appropriate water contact sports	1. Collect data on bacteriological water quality.	High	95/6 onwards	NRA		10
		2. Prepare action plan based on forthcoming Government proposals on SWQOs for Water Sport Activity.	High	Dependent upon DoE	NRA	BC, DC, BVRCMS	5
							2
	6. Reduce excessive number of oil pollution incidents	1. Implement Pollution Prevention Initiative.	High	Complete	NRA	Industry	5
		2. Monitor surface water outfalls.	Medium	93/4 onwards	NRA	TWUL, BC, DC	25
		3. Investigate pollution incidents: prosecute if appropriate.	High	93/4 onwards	NRA	TWUL, BC, DC	100
BW3. Excessive Macrophyte growth	1. Formulate management strategy	1. Carry out DO survey programme.	High	93/4 onwards	NRA		5
		2. Propose designation of Blackwater as a 'Sensitive Area (Eutrophic)' under EC Directive on Wastewater Treatment leading to phosphate removal at STW.	High	Complete	NRA		
		3. Baseline study monitoring of impact of phosphate removal.	High	94/5 onwards	NRA		
		4. Investigate improved habitat management technique.	Medium	94/5 onwards	NRA	Landowner	50

Note: Costs shown are those attributable to the NRA are indicative and subject to detailed project justification.



**BLACKWATER RIVER ACTION PLAN (IV)**

ISSUE	STRATEGY	ACTION	PRIORITY	TIMING	LEAD	OTHERS	COST(£K) 1994/99
BW4. Inadequate flood defence standards	1. Improve standards to appropriate level	1. Carry out multifunctional feasibility study	High	Complete	NRA	EN, CoCo, CWTs, CC, BC, DC	10
		2. Design environmentally sympathetic and economically justifiable scheme.	High	95/6	NRA		15
		3. Implement scheme.	High	96/7	NRA		300
		4. Monitor.	Medium	97/8 onwards	NRA		2
BW5. Recreational and amenity usage	1. Protect and promote appropriate recreational uses and facilities	1. Identify opportunities, promote and implement improvements, including extension of Blackwater Valley Footpath.	High	Ongoing	BVRCMS	NRA CC, DC, Sp Co, CoCo	

*Note: Costs shown are those attributable to the NRA are indicative and subject to detailed project justification.*

## RIVER HART ACTION PLAN

ISSUE	STRATEGY	ACTION	PRIORITY	TIMING	LEAD	OTHERS	COST(£K) 1994/99
RH1. Flooding at Crondall from River Hart and minor watercourses	1. Improve flood defence standards	1. Implement scheme on main river.	High	Completed 93/4	NRA		90
		2. Implement scheme on minor watercourses.	High	95/6	HCC, HDC	NRA	25
		3. Identify other areas at risk, investigate and alleviate.	High	93/4 to 96/7	HCC, HDC	NRA	50
RH2. Water quality in the River Hart and Fleet Brook	1. Improve water quality downstream of Fleet STW	1. Review consent conditions.	High	Complete	NRA		5
		2. Improve Fleet STW to meet tightened consent conditions.	High	Dependent upon outcome of appeal	TWUL		
RH3. Effect of Itchel abstraction on local springs and river flows in upper Hart	1. Evaluate situation as part of regional review	1. Assess priority for detailed study.	Medium	Completed 93/4	NRA		1
		2. Review situation.	Medium	94/5 onwards	NRA		2
RH4. Degraded habitats	1. Formulate and implement enhancement programme	1. Undertake River Corridor Habitat Survey.	High	95/6	NRA		2
		2. Undertake fisheries survey.	High	Complete 94/5	NRA		
		3. Prepare management and enhancement.	High	95/6 96/7	NRA		
		4. Undertake habitat enhancement works.	Medium	95/6 onwards	NRA	CC, BC, DC, Landowner	20
RH5. Poor population of fish in upper reaches of Hart	1. Investigate situation and formulate appropriate solutions	1. Undertake targeted fishery surveys.	Medium	95/6	NRA		3
		2. Formulate recommendations.	Medium	94/5	NRA		1
		3. Implement recommendations.	Medium	94/5 onwards	NRA		

Note: Costs shown are those attributable to the NRA are indicative and subject to detailed project justification.



RIVER WHITEWATER ACTION PLAN

ISSUE	STRATEGY	ACTION	PRIORITY	TIMING	LEAD	OTHERS	COST (£K) 1994/99
WW1. Water quality on River Whitewater	1. Investigate cause of apparent low dissolved oxygen	1. Undertake studies.	High	94/5	NRA		2
		2. Implement recommendations.	Medium	94/5 onwards	NRA		
WW2. Degraded habitats	1. Formulate and implement enhancement programme	1. Undertake River Corridor Habitat Survey.	High	94/5	NRA		2
		2. Undertake fisheries survey.	High	Complete, 97/8	NRA		2
		3. Prepare management and enhancement strategy incorporating geomorphological survey information.	High	95/6	NRA		20
		4. Undertake habitat enhancement works.	Medium	94/5 onwards	NRA	CC, BC, DC, Landowner	
WW3. Concern over low flows in upper Whitewater	1. Investigate, monitor and review situation	1. Assess river using NRA standardised methodology.	High	Complete	NRA	MSWC	3
		2. Monitor flows and review situation.	Medium	94/5 onwards	NRA	MSWC	5
WW4. Recognition of special value of Whitewater valley	1. Consider designation of Whitewater Valley Countryside Heritage Area	1. Promote consideration of benefits, implications and cost of such designation.	Medium	93/4	NRA	HCC, HDC, BDBC	1

Note: Costs shown are those attributable to the NRA are indicative and subject to detailed project justification.

## BASINGSTOKE CANAL ACTION PLAN

ISSUE	STRATEGY	ACTION	PRIORITY	TIMING	LEAD	OTHERS	COST (£K) 1994/99
BC1. Balance between ecological value and recreation/amenity use	1. Formulate multidisciplinary management strategy	1. Increase participation by NRA in Basingstoke Canal Authority Liaison Group.	High	93/4 onwards	NRA	BCA, EN	1
		2. Continue fisheries survey programme.	High	93/4, 98/9	NRA		10
BC2. Dependence of ecological value on water quality	1. Maintain water quality	1. Monitor water quality.	High	93/4 onwards	NRA	BCA, EN	5
		2. Investigate silt load in run-off into canal.	Medium	95/6	NRA	BCA	
BC3. Proposed increased navigational use	1. Assessment of implications for water demand	1. Consider conditions for abstraction licence.	Medium	Dependent upon BCA	NRA	BCA	1
	2. Assessment of proposals to increase navigable length	1. Safeguard Greywell Tunnel as a nationally important habitat for bats.	High	Ongoing	EN	NRA	

*Note: Costs shown are those attributable to the NRA are indicative and subject to detailed project justification.*



**FLEET POND ACTION PLAN**

ISSUE	STRATEGY	ACTION	PRIORITY	TIMING	LEAD	OTHERS	COST (£K) 1994/99
FP1. Continued long term deterioration of ecological value	1. Ensure appropriate management of pond and MoD land upstream on Gelvert Stream	1. Evaluate MoD silt traps.	High	Ongoing	NRA	MoD, HDC, FPS, NRA, HDC, FPS	2
		2. Investigate further options to prevent silt pollution.	Medium	Ongoing	MoD		
		3. Finalise Draft Management Plan.	High	94/5	FPS	HDC, EN, HWT, NRA, HDC, FPS	1
		4. Prepare Fishery Management Strategy.	Medium	97/8 future	NRA		
		5. Monitor the status of Macrophyte Communities.	Medium	Ongoing	EN		
		6. Set SWQO for Pond.	Low	Dependent upon DoE	NRA	HDC, FPS, MoD	1

*Note: Costs shown are those attributable to the NRA are indicative and subject to detailed project justification.*

## KEY TO ABBREVIATIONS

BBONT	Berkshire, Buckinghamshire and Oxfordshire Naturalists Trusts
BC	Borough Council
BCA	Basingstoke Canal Authority
BDBC	Basingstoke & Deane Borough Council
BVRCMS	Blackwater Valley Recreation and Countryside Management Service
CC	County Council
CoCo	Countryside Commission
CWT	County Wildlife Trust
DC	District Council
DO	Dissolved Oxygen
DoE	Department of the Environment
EC	European Community
EN	English Nature
FPS	Fleet Pond Society
HCC	Hampshire County Council
HDC	Hart District Council
HWT	Hampshire Wildlife Trust
MoD	Ministry of Defence
MSWC	Mid-Southern Water Company
NRA	National Rivers Authority
RBC	Rushmoor Borough Council
R&D	Research and Development
SCC	Surrey County Council
STW	Sewage Treatment Works
SWQO	Statutory Water Quality Objectives
SWT	Surrey Wildlife Trust
Sp Co	Sports Council
TWUL	Thames Water Utilities

## CONTACTING THE NRA

The Blackwater River Catchment lies within the South East Area of the Thames Region of the National Rivers Authority. General enquiries should be addressed initially to:-

*National Rivers Authority*

*Mr Adrian Birtles*

*Area Manager-Thames Region South East Area*

*Riverside Works,*

*Fordbridge Road,*

*Sunbury on Thames,*

*Middlesex, TW16 6AP.*

**Tel: 01932 789833 Fax: 01932 786463**

Enquiries regarding Catchment Management Plans should be directed to Mr Mark Hodgins Catchment Manager at the above address.

**A NATIONAL NRA EMERGENCY HOTLINE IS AVAILABLE TO REPORT POLLUTION, POACHING, FLOODING OR ANY SIGN OF DAMAGE OR DANGER TO THE NATURAL WATER ENVIRONMENT. THE FREEPHONE NUMBER FOR USE ANYWHERE IN ENGLAND OR WALES IS:**

**0800 - 80 70 60**