



Environmental

Planning Issues in the North Wessex Area



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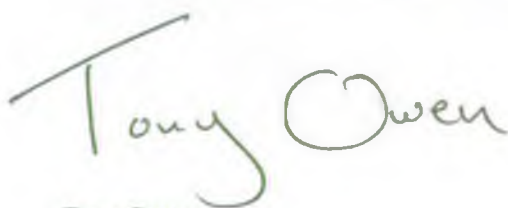
Preface

The principal aim of the Environment Agency is to protect and enhance the environment taken as a whole, so as to make a positive contribution towards achieving sustainable development. Environment Agency, 1995

The Environment Agency holds a great deal of information about the state of the environment, the pressures acting upon it and the impact that certain types of development proposals may have. The problem until recently was that this information was held in a number of documents. The Agency addressed this by bringing together information about specific catchment areas in Local Environment Agency Plans, which also highlighted issues specific to that area.

This document and its associated maps aim to take this process one stage further and provide information based on Local Authority boundaries, and encourage early liaison with planners, developers and local communities by outlining principles and issues for sustainable development and environmental management. The maps highlight the important issues in each area, and the document provides sources of additional information and guidance.

The document is a new initiative in environmental management and we would particularly welcome your views. A Feedback Questionnaire is provided at the end of the document.



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The Environment Agency

The Environment Agency (the Agency) was set up by the Government in 1996. It has a wide range of duties and powers relating to different aspects of environmental management (See p.52,1). It is required and guided by Government to use these duties and powers in order to help achieve the objective of sustainable development.

The vision of the Agency is: A better environment in England and Wales for present and future generations.

The aims of the Agency are:

- To achieve major and continuous improvements in the quality of air, land and water;
- To encourage the conservation of natural resources, animals and plants;
- To make the most of pollution control and river-basin management;
- To provide effective defence and warning systems to protect people and property against flooding from rivers and the sea;
- To reduce the amount of waste by encouraging people to re-use and recycle their waste;
- To improve standards of waste disposal;
- To manage water resources to achieve the proper balance between the country's needs and the environment;

- To work with other organisations to reclaim contaminated land;
- To improve and develop salmon and freshwater fisheries;
- To conserve and improve river navigation;
- To tell people about environmental issues by educating and informing;
- To set priorities and work out solutions that society can afford.

The Agency will do this by:

- Being open and consulting others about its work;
- Basing its decisions around sound science and research;
- Valuing and developing its employees;
- Being efficient and businesslike in all it does.

The work of the Agency is dealt with through eight Regions, each of which is further divided into a number of Areas. There are 26 Agency Areas in all. The North Wessex Area is one of four Agency Areas within the South West Region.

The boundaries by which the Agency organises its work have been based on the catchment areas of river systems and so are different to the administrative boundaries of local authorities.

Introduction

Planning authorities and the Environment Agency have a common purpose in seeking a greater contribution to sustainability from the way that development needs are met and the environment is managed. This overarching objective can be better served by greater partnership. A partnership requires each party to understand the role of the other and to have confidence in what it does. Planning authorities and the Environment Agency need to exchange information and views about the choices that have to be made in planning, particularly in making development plans.

This document and the maps that accompany it are intended to help this dialogue take place. The document explains how the Agency believes that the environmental issues it deals with affect the matters planning authorities deal with, and how they can best be taken into account.

Though a lot of information is provided by the document and the maps, the document is intended as an invitation to seek the Agency's involvement rather than as a substitute for discussion.

The Agency's North Wessex Area has produced the document. It is designed to be useful to all of the planning authorities whose areas are within the North Wessex Area, though the information should also be of interest and use to all concerned with making a better environment, and contributing to greater sustainability.

Map 1 shows the relationship between the Agency's North Wessex Area and the boundaries of the 17 district councils and unitary authorities. Five county councils and Exmoor National Park have at least part of their area within North Wessex Area.



20 0 20 Kilometres

Map 1: Relationship of North Wessex Area with district council and unitary authority boundaries.

Section 1

Sustainable Development

The Environment Agency (the Agency) shares a common purpose with local planning authorities in seeking to ensure that development taking place is in a form which contributes to greater sustainability in the long term (See p.52,2).

PPG1: General Policy and Principles 1997 says that 'a key role of the planning system is to enable the provision of homes and buildings, investment and jobs in a way which is consistent with the principles of sustainable development'.

The Environment Act 1995 states that the principal aim of the Agency is to discharge its functions so as to protect or enhance the environment taken as a whole, and to make the contribution that Ministers consider appropriate towards achieving sustainable development.

This means:

- emphasising conservation when considering proposals affecting areas which are important for biodiversity or nature conservation;
- promoting the reduction of emissions of greenhouse gases and of the use of ozone depleting substances;
- developing a close and responsive relationship with the public, local authorities, local communities and other public bodies with environmental responsibilities;
- becoming a recognised centre providing clear and accessible advice on best environmental practice;
- taking a holistic approach to the protection and enhancement of the environment, striving through its actions to optimise benefits to the environment as a whole;

The Environment Agency, Sustainable Development and the Planning System

- seeking to take account of any longer term implications and effects, particularly those which appear likely to be irreversible, or which would threaten the resources left to following generations.

The Government set out the principles of sustainable development in Sustainable Development: The UK Strategy (1994). The Government has since explained its view of sustainable development based on four broad objectives:

- effective protection of the environment;
- prudent use of natural resources;
- social progress which recognises the needs of everyone;
- high and stable levels of economic growth and employment.

These objectives demonstrate that the integration of human needs and the environment within which we live is at the heart of sustainable development. The first and second objectives are central to the Agency's interests.

The Planning System

The Agency is a statutory consultee on development plans and planning applications and seeks to influence development proposals to achieve enhancement to the environment. The Agency is a strong supporter of the plan-led system and believes the environment will be best served by a planning system where the location and form of development are strongly influenced by properly formulated development plans.

Development plans are intended to provide for development to take place, and the environment to be managed, in ways which are consistent with the principles of sustainable development.

Working with the Agency

The implications of and for the environment can be difficult issues to grasp in making a planning decision. The Agency can help however. It knows about air, land and the water environment.

It knows a lot about what is there, and about how some types of development decisions will affect the environment.

This knowledge is available to local authorities when they are determining planning applications,

but with a plan-led system there are great benefits to be had from tapping into this knowledge when producing development plans.

With the help of the Agency, development plans and development decisions can minimise the impact on the environment, and seek enhancement.

The Agency can help by providing:

Information

Detailed information on environmental matters is available;

Advice

The Agency can advise upon the implications for the environment of different choices;

Support

The Agency will act to promote the interests of sustainable environment through the planning system. This includes providing expert witnesses to support Councils at planning inquiries. The Agency's involvement in planning is complemented by the way it discharges the other statutory responsibilities that it has.

Using the Document

This document is about the ways in which local planning authorities can get help from the Agency in making development plan decisions.

The document:

- explains the issues that the Agency is concerned about that may be affected by planning choices (section 2);
- demonstrates how the greatest environmental benefits can be achieved from some of the decisions most commonly faced in planning (section 3);
- suggests how the water environment can be a positive opportunity around which to develop proposals in a development plan (section 3);
- identifies who are the right people to contact in the Agency (section 4);
- draws attention to the documents produced by the Agency (and others) that are likely to be most useful in providing advice on handling some environmental issues in plan making (section 4). These documents are listed on page 52.

Using the Maps

Differing boundaries need be no obstacle to the use of Agency information by local planning authorities, because this document and the accompanying maps are based on district council rather than Agency boundaries. The boundaries on the maps with this document are related directly to local plan boundaries.

The maps contain information that can be represented spatially and which ought to be taken into account in choosing development locations in plans, or in determining planning applications. The type of information included on the map is listed in Box 1. Use of the information on the map is explained in the relevant parts of this document.

As well as the maps a CD - which covers district council areas - is available on request. The CD

contains all of the information that the Agency holds which can be represented on a map base.

This is only the beginning!

This document and the maps are intended as a starting point for those involved in the planning process and seeking information and advice on environmental issues. There are many other Agency documents and the Agency will sometimes refer to these in addressing a particular issue raised by a consultation or inquiry. Foremost amongst the Agency's other documents that provide information about the environment are the Local Environment Agency Plans, or LEAPs. The areas covered by LEAPs for the North Wessex Area are shown on Map 2 and their purpose is described in Box 2.

Box 1

Information provided on the accompanying maps

Individual maps have been produced for each district area which falls wholly or primarily within the North Wessex Area of the Agency at 1:50,000 scale.

The material included on the maps is:

- the river network, distinguishing main and other rivers;
- reaches of river which have failed their water quality objectives;
- areas liable to fluvial (river) flooding;
- coastal (tidal) flood zones;
- areas where water is drawn from underground sources – Source Protection Zones (SPZs);
- sites where waste has been disposed of to licensed landfill;
- stretches of river where conditions of low flow occur which might be exacerbated by further abstraction;
- the location of public sewage treatment works;
- sites subject to Integrated Pollution Control (Authorised Industrial Processes);
- Radioactive substances sites.



Map 2: Areas covered by LEAPs in North Wessex Area.

Box 2

Local Environment Agency Plans (LEAPs)

The purpose of LEAPs is to produce a local agenda of integrated action for environmental improvement so that the Agency can deploy its resources locally to best effect and optimise benefit to the local environment. They have evolved from the National Rivers Authority Catchment Management Plans (CMPs).

LEAPs aim to support the achievement of integrated planning at the operational level by:

- taking into account the views of local government, communities and industry;
- translating national policies and priorities into local actions by identifying the full range of environmental management issues within a meaningful and spatially specific geographical area;
- providing data and information to enable a deeper understanding of key issues;
- setting local targets for improving environmental quality;
- assessing the costs and benefits of proposed actions;
- enabling partnerships for solving environmental issues in connection with Local Agenda 21 initiatives;
- promoting the Agency's own work through education and interface with local planning authorities;
- initiating further ideas.

The implications of the issues outlined in this document (Section 2) can be further understood through reference to the North Wessex Area LEAPs (See p.52,3).

Section 2

Introduction

This section explains:

- the nature of the environmental issues with which the Environment Agency is involved;
- the way in which these issues relate to choices made through the planning system;
- how planning choices can bring about the best protection and enhancement of the environment.

The environmental issues discussed here cover the full range of the Agency's work. The issues covered are concerned with:

- **Water management**, which embraces the issues of:
 - Flood risk
 - Water resources
 - Fisheries and recreation
- **Environmental protection**, which covers the issues of:
 - Water quality
 - Waste management
 - Air quality
 - Contaminated land
- **Conservation** of wildlife, landscape and the architectural and archaeological heritage, which is an issue to be addressed in every area of the Agency's work

For each of these issues, the following pages explain the issue and its potential relationship to planning decisions. The ways in which planning can best address the issues are demonstrated. For each of the issues a number of current concerns are listed which apply to or are specific to the North Wessex Area. These may be known to local authorities and they are matters of common concern to local authorities and the Agency.

Environmental Issues

Flood Risk

Flooding occurs when river or sea water inundates an area, because the river banks or sea defences have been breached or overtopped, or because drainage from the area is inadequate for the inflow of water.

High rainfall levels increase the risk of river flooding and in coastal areas the risk of sea water flooding is increasing as sea levels rise as a consequence of global warming. Box 3 (page 14) provides a description of the possible implications of global warming for the risk of flooding.

Flooding of property puts lives at risk, is a cause of misery, and imposes extensive property costs. Water accumulates if it is entering the system at a greater rate than it can be discharged and remains there until capacity is sufficient downstream. The temporary storage of water on floodplains is a necessary and natural part of a managed approach to the drainage of an area.

When considering flood defence works a balance is struck between a predictable risk and the engineering works which would be needed to increase the downstream capacity and increase the flood defences. Flood defence works can change the landscape, are costly, require maintenance, and may be harmful to nature conservation interests.

The task for planning authorities and the Agency working together is to minimise the amount of development affected by flooding in accordance with Government guidance (DoE Circular 30/92 Development and Flood Risk) (See p.52,4).

The Agency can identify areas which are liable to flooding by marking the floodplain on maps. The Agency's view is that any development within a floodplain should be avoided. However, if development must take place in the floodplain it may be possible to protect it from flooding by increasing the defences (new development will need to provide all necessary flood mitigation infrastructure), but the flood storage will be lost. Unless this is fully compensated for in the system, the development will have increased the risk of flooding somewhere else (See p.52,5).

The Environment Agency South West Region has provided every District Council with Indicative Floodplain Maps under Section 105 of the Water Resources Act 1991. These maps identify the estimated extent of flooding which would occur along main river reaches in the type of event which we would expect, statistically to happen once every 100 years (every 200 years for tidal reaches). They also show the areas defended against this type of flooding event. This information should be shown on the proposals maps of development plans.

The Agency has mapped low lying coastal areas which are at risk from flooding, and this information is presented on the maps accompanying this document. Development in coastal areas where there is a risk of flooding should be avoided even if it would be otherwise acceptable. Rising sea levels will increase the extent of coastal areas at risk and must be taken into account.



Development should not take place without a full flood risk assessment.



Development that is not in a floodplain can also increase the risk of flooding, and this possibility must also be considered. Increasing the proportion of hard surfaces increases the proportion of water running off into the drainage system rather than soaking into the ground. This can increase the peak flow in the receiving watercourse and also the frequency and duration of flooding.

Development should not take place without a full flood risk assessment. Development which would interfere with the integrity and hence the capacity of the watercourses which make up the drainage network should be resisted. The introduction of obstructions to flood conveyance and the culverting of watercourses will be resisted by the Agency.

The adverse affects of inappropriate development, however small, are cumulative and can lead to significant problems in the longer term.



Flood Risk

Consideration of the issue of **flood risk** in making planning decisions should mean:

- resisting new development in the floodplain;
- assessing the implications of any new development to ensure that it causes minimal change to flood risk elsewhere;
- minimising the effects of run off from new development through best management practices (See p.52,6 & 7) and ensuring these can be properly maintained;
- preventing interference to the flood conveyance capacity of watercourses and drainage channels;
- retaining and, where practicable, restoring natural floodplain areas to enable them to fulfil their natural flood storage function;
- making what contribution can be made through planning to the reduction of greenhouse gases and hence to climate change.

Current Flood Risk Issues in the North Wessex Area

- tidal flood risk, sea level rise and their potential effect on new and existing development;
- coastal zone protection and 'set back' of tidal defences;
- increased surface water run off in urban areas from development;
- integration of agency flood mapping into the planning system;
- provision of new or uprated defences by new development rather than through public expenditure.

Box 3

The Implications of Climate Change for Flood Risk

It is estimated that because of global warming, sea levels worldwide will rise by more than 500mm in the next 100 years. The current rate is calculated to be about 5mm every year in the South West. With a rise of, say, 5mm per year, tide levels which have the statistical probability of occurring once every 200 years on average at Avonmouth will be twice as frequent (once in 100 years) by 2006 and twice as frequent again (once in 50 years) by 2016. The Agency uses these probabilities to design target standards for different land uses. Hence, a scheme designed to meet the standard of protection for high-density urban development would, by 2016, only meet that appropriate for rural communities, if additional action was not taken. The improvement of defences will take place within the strategic framework of Shoreline Management Plans.

In addition, some scientists believe that storms will become more frequent and more violent as a result of global warming. Storms can raise sea levels above predicted levels (surge) and generate increased wave action, causing overtopping and increased erosion of existing defences.

Water Resources

Water is an essential but finite resource which needs careful management to ensure its availability; it is increasingly important as a planning issue. Demand for water is forecast to increase as water-using appliances become more commonplace in the home and the Region's population increases. The water companies have a duty to manage this demand and to promote water efficiency to their customers. As every new home is automatically fitted with a water meter, installation of simple water efficient measures at the construction stage can reduce both the householders water bill and the effect on the environment. Excessive demand on water resources can have serious environmental consequences. Over abstraction can result in low flows in rivers and reduced ground water levels. These can lead to changes in natural habitats. There are a number of low flow sites within the North Wessex Area, and these are identified on the accompanying maps.

If additional water requirements are forecast in an area, for example because of a new development, water companies have a number of options for meeting the demand.

These include:

- Managing both the current demand and the forecast demand to minimise the water required;
- Making additional water available from the source currently supplying the area;
- Making additional water available from other sources;
- Providing water from a new source.

The water company has to apply for a licence to abstract any additional water that is not already licensed. This Agency is responsible for the granting of those licences.

In granting abstraction licences the Agency has to have regard to a number of factors. Water companies first have to prove the need for the water to the Agency. This involves demonstrating that they have applied effective resource and demand management measures as well as leakage control. The sustainability of the abstraction has to be considered to eliminate the possibility of any further low flow sites occurring and an environmental cost benefit calculation has to be carried out.

The Agency would therefore wish to see planning decisions made only after the planning authority is satisfied that the proposed development will not have serious implications for the supply and quality of water resources or the associated environment. The Agency can assist in assessing the implications of meeting the increasing demand.

The provision of supply has to be planned ahead, along with the planning of development. The process of forecasting future requirements is dealt with by the Asset Management Planning (See p.52,8) process which looks 10 years ahead, and by the associated Water Resource Plans in which the Agency and the companies look at supply and demand for the next 25 years.





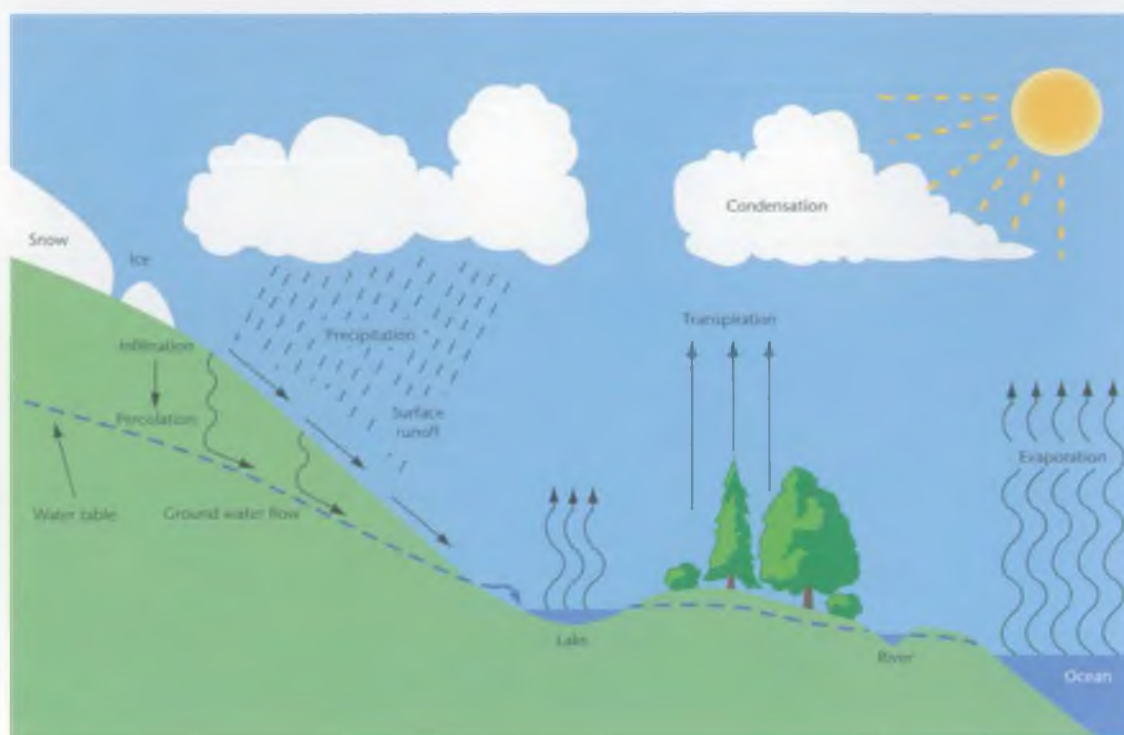
Water Resources

Consideration of the issue of **water resources** in making planning **decisions** should mean:

- examining the consequences of development for additional **abstraction**, and assessing the environmental implications;
- promoting measures for the conservation of water, by retaining **run-off** and for reusing grey water (See p.52,9);
- identifying rivers, wetlands or groundwater which are subject to **low** flows or levels, or where the risk of such conditions exists;
- participation with the Agency and the water companies in Asset **Management Planning**, through the joint consideration of future housing provision, in **order** to relate investment for water resources to foreseeable demand.

Current Water Resources Issues in the North Wessex Area

- Asset Management Planning (AMP 3 year 2000-2010) for water **companies** and investment for water resources;
- The Water Resources Strategy for the South West (See p.52,10) **being** reviewed to take account of AMP 3 and climate change;
- public water supplies in Somerset and groundwater sources in **Wiltshire**;
- low river flows from over-abstraction; water companies co-operating on Environment Agency trials to develop sustainable remediation strategy;
- effects of increased abstractions on river flows due to development **needs**;
- impacts of quarrying on quantity and quality of groundwater and **spring** flows in East Mendip and its subsequent impact on biodiversity;
- developments proposing spray irrigation will need to consider **winter** storage of water to reduce demand in the summer.



The cyclic movement of water from the sea into the atmosphere and its subsequent return to the earth by precipitation, where it percolates into the ground, runs off into streams and collects in lakes, is called the hydrological cycle. The above diagram demonstrates its key elements. An understanding of the relationship between these elements is essential in the management of water resources.

Fisheries and Recreation

It is the Agency's duty to maintain and develop fisheries and to regulate them for the purpose of conservation and management. The Agency monitors the status of stocks of migratory salmon and freshwater fish, restricting exploitation of stock where necessary to maintain base populations.

Fish populations are a good indicator of river quality, and indicators are being used increasingly for environmental monitoring and policy reviews.

Local authorities are required to contact the Agency through its flood defence function if development is likely to be subject to flood risk. Fisheries and conservation matters may then be brought to the attention of the planning authorities following Agency communication in these situations.

However, planning authorities may not normally contact the Agency about development affecting other parts of the river network. This may mean that authorities do not benefit from the Agency's knowledge to the degree that they should. The tendency to underplay fisheries issues is a concern for two reasons:

- Spawning takes place upstream on gravel beds, often in small tributaries or headwater streams that may well be overlooked as insignificant compared to the major rivers;
- Fisheries concerns may cross district boundaries, with upstream development affecting fisheries and biodiversity downstream.

The maps accompanying this Issues Document identify the river network, distinguishing main and other rivers, and the quality of water in different stretches.

The integrity of the river environment should be maintained and enhanced where possible. On-line ponds (areas where the river is artificially widened) should be considered very carefully because:

- these can trap silt which when deposited can affect fish breeding and therefore numbers;
- maintenance of on-line ponds can cause disturbance to this sediment resulting in damage to ecosystems downstream.

The Agency would wish to see a general presumption against inappropriate use of on-line ponds. It is also opposed to the culverting of rivers, however small, because habitats in or beside the river can be lost or changed and it decreases landscape value.

The Agency supports schemes to restore continuity of the river environment where it is broken by artificial weirs, dams and other forms of development. This will support the migratory patterns of fish and other wildlife leading to higher breeding rates (See p.52,11)





Water-based recreation can contribute to the wider provision of sport and recreation opportunities. The Agency aims to promote the potential that the river environment can offer for recreation where appropriate and where it can co-exist without causing undue environmental harm.

The Agency is also required to monitor and regulate the impact of recreation activity, and other interests such as fishing on the river ecosystem. There is also a need to ensure that the provision of recreation amenities which are linked to the water environment do not contribute to and are not threatened by the potential for flooding.

Recreation development that takes place has to be very carefully sited, designed and managed.

The Agency can assist planning authorities in finding the appropriate balance between competing recreation interests to the general benefit of an area.



Fisheries and Recreation

Consideration of the issue of **fisheries and recreation** in making planning decisions should mean:

- recognition that all parts of the river network may be important at different stages in the lifecycle of fish;
- seeking opportunities for the enhancement of habitats;
- looking for opportunities for waterside access and recreation, where appropriate;
- sympathetic management of conflicting interests if **water based recreation** is introduced.

Current Fisheries and Recreation Issues in the North Wessex Area

- balancing needs of fisheries, conservation, development and agriculture on both main and non-main rivers;
- promotion of the river environment for recreation, **amenity** and for access to the countryside;
- over-abstraction and low river flows on the River Avon such as in the Malmesbury area.



Water Quality

The Environment Agency aims to assist planning authorities by advising on the potential of development to lead to a deterioration in the quality of surface, coastal, or underground water in accordance with the precautionary principle (See p.52,12).

The river ecosystem is complex and it is necessary for both the Agency and planning authorities to consider the effects of individual developments within a wider strategy of environmental protection and improvement, and to consider environmental factors alongside other interests.

There are many sources of threat to groundwater and surface water quality which should be recognised and guarded against, including:

- abstractions;
- physical disturbance of aquifers and groundwater flow;
- waste disposal to land;
- land contamination;
- wrongly connected domestic and commercial drainage;
- polluted run-off from roads and from industrial estates with inadequate oil and silt interceptors;
- disposal of liquid effluent, sludges and slurries to land;
- discharges to underground strata;
- diffuse pollution.



The Agency has identified vulnerable areas in which development could cause a hazard to important water sources. These are known as Source Protection Zones (SPZ's) and are identified on the maps provided with this document (and on the maps prepared under Sections 93 and 94 of the Water Resources Act 1991).

Whether an area is vulnerable depends on its geology and the characteristics of the soil. The hazard depends upon the nature of the development and this is something which the Agency can help assess.

Much of the public water supply within the North Wessex Area is from groundwater. Developments, which involve water abstraction or the physical disturbance of aquifers, must be given careful consideration regardless of their location, and even greater scrutiny if they lie within SPZs (See p.52,13).

Where new development is not connected to the public sewerage system, additional care needs to be taken to avoid contamination of both surface and groundwaters (See p.52,14 & 15).





Water Quality

Consideration of the issue of **water quality** in making planning decisions should mean:

- knowing where the Source Protection Zones are;
- having regard to risk and impact of **potential** water pollution in determining applications;
- pollution prevention from new **development** through the application of best management practices (See p.52,6 & 7);
- ensure that existing and proposed **sewerage** and sewage treatment infrastructure will be sufficient to meet the needs of **development** and the Local Plan programme.

Current Water Quality Issues for the North Wessex Area

- potential impacts of development on **water** quality particularly from urban run-off and industrial and trading estates;
- mitigation of the impact of **water** quality **discharges** through the integration of best management practices within **developments**.

Waste Management

Through development plans (Structure and Waste Local Plans) local authorities influence the location of facilities required for the handling, treatment and disposal of waste materials. The Agency is concerned to see:

- waste production minimised;
- the opportunities for reuse/recycling maximised;
- waste transport involving the minimum consumption of fossil fuels;
- its management and final disposal not resulting in pollution to the environment, risk to human health or detriment to the locality.

All of these should be important considerations in identifying sustainable locations for waste facilities. This means on environmental grounds the solution and location proposal may not otherwise have been the first choice.

The Agency would not wish to see the disposal of inert or other types of waste in the floodplain. The principal concern with the disposal of biodegradable waste is the risk of pollution to ground or surface water. The use of former quarries for landfill may give rise to particular risks.



Local authorities and the Agency are responsible for licensing waste management activities. A licence can only be granted where planning permission exists, but management controls exercised through the operation of the licence can complement what is achieved through planning permission with conditions and agreements.

As a consequence of its licensing responsibilities, the Agency has information on the location of waste management sites. Landfill sites are identified on the maps produced for each District Council to accompany this document. Information about these sites is available from the Agency and should be sought before making decisions that would increase the amount of housing or other sensitive development in the vicinity of a landfill site.

Current national planning guidance is that planning authorities should consult the Agency if certain types (See p.52,16) of development (including residential) is proposed within 250 metres of a site used for the deposit of waste at any time within the last 30 years.

There are an increasing number of people trying to use exemptions from Waste Management Licensing as part of their waste management strategy for a particular development or waste management facility (See p.52,17). The Agency is seeking to educate developers and waste management contractors on the role of exemptions and will need to work closely in future with the local authorities to prevent abuse of the system.





Waste Management

Consideration of the issue of **waste management** in making planning decisions should mean:

- promotion of the waste management hierarchy of reduction, reuse and recycling (See p.52,18);
- prevention and control of pollution to air, land and water by giving due weight to such considerations in site selection, and by ensuring the appropriate application of the best technologies in the design and management of facilities. These measures should be considered as part of the planning process as they could impact on the built design;
- providing for a network of sites to enable waste to be disposed of near its source;
- exerting pressure for the use of most energy efficient and least polluting methods for transporting waste;
- considering the after use and long term contribution of waste disposal facilities as part of their identification, design and approval;
- looking for opportunities for energy recovery.

Current Waste Management Issues for the North Wessex Area

- Management and final disposal of increasing waste arising from new development, particularly in the former Avon area;
- Lack of disposal options highlighting the need to formulate a strategy for:
 - Reduction
 - Reuse
 - Recovery of waste
- Highlight the potential for the reduction of transportation of waste through good planning and development practices;
- Optimising recycling of material on-site;
- Impact of landfilling former quarries particularly on groundwater.

Brownfield sites

There is a strong policy emphasis from Government to bring previously-used land back into use to help meet the foreseeable development requirement. If previously-used land is recycled more effectively, less greenfield land will be needed for development and the environment will be improved by the removal of dereliction.

Some underused or derelict land is contaminated and contamination presents an extra obstacle to reuse, because of the extra costs, and the uncertainty. Good information about all contaminated, derelict and other previously used land will assist all those involved in making better use of such land in the future.

Once the Contaminated Land Regulations are brought in (proposed April 2000), the Agency will have specific duties under the Environment Act 1995 with respect to contaminated land. This is defined as any land which appears to a local authority to be in such a condition, because of the substances it contains, that water pollution or significant harm is being, or is likely to be caused. This interpretation is subject to guidance issued by the Secretary of State for the Environment (See p.52,19 & 20). Some sites may become designated as 'special sites', and these will become the responsibility of the Agency.

The process of identifying contaminated land in a

standard way across England and Wales is currently underway. The Agency has a duty to prepare and publish a report on the state of contaminated land from time to time, or if specifically requested to do so by the Secretary of State.

Periodic surveys have, however, been made of derelict land; a term which has a different meaning to contaminated land. Derelict land is land which has become so damaged by industrial or other developments that it is incapable of beneficial use without treatment. Such land includes closed and disused waste tips, worked-out mineral excavations which are not subject to enforceable planning conditions or other arrangements providing for restoration; abandoned military or service installations; abandoned industrial installations; and areas of land which are affected by actual surface collapse resulting from disused underground mining operations.

At present, most contaminated land sites are remediated either at the time of redevelopment, with controls exercised through the planning process, or voluntarily, as site owners seek to reduce their own liabilities. The Agency supports the UK approach for dealing with risks to health and the environment, which takes into account the actual or intended uses of the site. This 'suitable for use' approach concentrates resources where most needed and supports the principle of sustainable development by encouraging remediation techniques for treating contaminated materials to render them less harmful, be they chemical, physical or biological.



Photo courtesy of Crest Strategic Projects and Planning by Design.

Brownfield sites

Consideration of the issue of **contaminated land** in making planning decisions should mean:

- identifying all apparently underused, derelict and contaminated land and assessing its condition and suitability for future use;
- promoting the use or development of all previously used land for a purpose appropriate to the condition to which it can be restored;
- taking specialist advice and ensuring that proper safeguards are in place when contaminated land might be disturbed through any development activity;
- ensuring that the maximum reasonable contribution to overcoming the problems of the past use of land is achieved in any development or restoration scheme.

Current Contaminated /Brownfield sites Land Issues for the North Wessex Area

- interpretation and implementation of national and regional policy to achieve the maximum contribution to future development requirements from previously used land.

Air Quality

Air quality is an environmental issue that is both local and global. The local concern is with pollutants that make the air unpleasant and unhealthy to breathe. The long term global effects of atmospheric change through pollution is likely to be global warming, with major consequences for habitable land areas, food production and flooding.

In March 1997 the Government published a national strategy for air quality (See p.52,21) including:

- a framework of standards and objectives for the pollutants of most concern;
- a timetable for achieving objectives;
- the steps the Government is taking and the measures it expects others to take to see that objectives are met.

Local authorities have a statutory duty to manage air quality within their areas. The Government's National Air Quality Strategy (NAQS) published in 1997 (See p.52,14) sets out health based targets for seven specific pollutants (particulate matter, nitrogen dioxide, carbon monoxide, sulphur dioxide, lead, benzene, and 1,3-butadiene). Local authorities are required to undertake an air quality review and up to three stages of assessment to determine whether or not the objectives for 2005

will be met. If not, air quality management areas (AQMA) will need to be declared. The local authority must then prepare an action plan for setting out how they intend to achieve the statutory objectives.

The Environment Agency is responsible for regulating and monitoring releases to air from some 2000 of the potentially most polluting industrial processes across England and Wales, authorised under the Integrated Pollution Control (IPC) system (See p.52,22) established by Part 1 of the Environment Protection Act 1990. Emissions from these processes may impact significantly on air quality in some locations.

The IPC process has now been replaced by the Integrated Pollution Prevention and Control process (IPPC) under a EU Directive. The new process is explained in Box 4.

The Agency is concerned to see development that does take place occur in locations where it will have the least detrimental impact on air quality, and can assist planning authorities in achieving this objective by:

Adequate information exchange

Local authorities and the Agency need to ensure efficient exchange of national and local air quality, monitoring and modelling data, emission data and information on IPC processes.

Full Consultation

Local authorities and the Agency need to consult each other on air quality issues which affect each other, particularly in relation to land use planning and authorisation of industrial processes. It is particularly important to consult closely over the establishment of local air quality management areas and action plans.



Effective Implementation

Local authorities will normally need to establish Technical Steering Groups, comprising of authority staff and Agency staff, to identify factors affecting local air quality, generate and evaluate options for air quality enhancement and possibly jointly publish environmental information or action plans.

Acid rain can harm vegetation, aquatic life and buildings, including historic monuments. Man-made sulphur emissions are the principal source of acid rain in most parts of Europe, and have

contributed significantly to acidification of freshwaters and soils in many areas. Historically, the UK has put out relatively high levels of sulphur, because of early industrialisation and reliance on coal. UK emissions of sulphur have declined by nearly a half since the 1960s and reductions of 80% compared with 1980 are likely to be achieved by 2010-2015, following shifts in fuel use and the extension of clean technologies. Following these reductions, some waters are already becoming measurably less acidic - to the benefit of their fish and plant life.

Air Quality

Consideration of the issue of air quality in making planning decisions should mean:

- development should be avoided where it would create or contribute to local air pollution at the statutory level which would warrant the designation of an Air Quality Management Area;
- an emphasis on the integration of land use and transportation to bring about a long term reduction in the growth of emissions;
- considering all proposals involving emissions in the context of a long term strategy developed with the Agency in pursuit of the National Air Quality Strategy;
- liaison with Agency over IPC authorisations;
- adherence to the EU directive on Integrated Pollution Prevention and Control including new provisions on the restoration of closed industrial sites (See p.52,23).

Current Air Quality Issues for the North Wessex Area

- the combination of emissions from industry, and other sources, especially traffic, particularly in the Avonmouth Area;
- the detrimental effects of acid rain and in particular, its impact on the peat soils of the Somerset Moors;
- the appropriateness of new development in relation to existing major industry.

The application of Best Practicable Environmental Option (BPEO) to the broader environmental impact, rather than just the specific site or process.

Box 4

Integrated Pollution Prevention and Control (IPPC)

What is Integrated Pollution Prevention and Control?

The IPPC Directive is designed to prevent, reduce and eliminate pollution at source through the prudent use of natural resources. It is intended to help industrial operators move towards greater environmental sustainability.

Many of our larger industries are already familiar with the UK system of Integrated Pollution Control (IPC) legislation. Although the Directive builds on this legislation, it would be wrong to view it as IPC with an added 'P'. Like IPC, it covers emissions to air, and water as well as heat. But IPPC goes further and covers:

- Noise and vibration, energy efficiency, environmental accidents and site protection;
- Many more types of processes. It looks more widely at the pollution impact of a plant or activity, starting with the best environmental way of doing the job;
- 'installations' and not just a process or an activity.

Which Activities Are Covered?

The directive covers installations where one or more of the following categories of activities (subject to certain capacity thresholds) are carried out:

- energy industries - e.g. power stations, oil and gas refineries;
- production and processing of metals – ferrous and non-ferrous;
- mineral industry – e.g. cement works, glass works;
- chemical industry – organic, inorganic, pharmaceuticals;
- waste management – e.g. landfill sites*, incinerators;
- other activities – paper/board, tanneries, slaughter houses, food/milk processing*, animal carcass disposal, intensive pig/poultry units*, organic solvent users.

* Landfill sites, food and milk processing, and pig and poultry units are presently outside the scope of existing regulation although they may be regulated currently under other legislation such as that on waste, or water pollution.

What Will Be Required of Operators?

Operators will need to show that they will run their installations in a way that prevents emissions to the air, land and water or, where that is not practicable, reduces them to a minimum. In doing this, operations must apply on the following general principles:

- use Best Available Techniques (see below) to prevent pollution;
- minimise waste and recycle it where they can;
- conserve energy*;
- prevent accidents and limit their environmental consequences*;
- return the site to a satisfactory state after operations cease*.

* These last three points are given much greater emphasis under IPPC than IPC because they are not explicitly addressed in current IPC legislation.

Best Available Techniques - are those that prevent or minimise pollution, can be implemented effectively and are economically and technically viable while meeting the overall aims of the Directive.

Conservation

The Agency believes that the river system and its corridors are a resource that should play a significant role in influencing development strategies and that the integrity of the water environment should be maintained and enhanced wherever possible. Watercourses and wetlands are recognised for their significance as habitats and almost always have the potential to be important wildlife corridors. This includes watercourses in urban areas which may have been most neglected in the past and where the opportunities for enhancement are great.

Providing the best opportunities for wildlife to flourish in and around watercourses and wetlands should be an important consideration in planning decisions in the vicinity of a body of water.

The Agency is able to assist in managing conflicts by providing technical advice and participate in the preparation of development briefs and management plans affecting watercourses and wetlands.

The Agency acts as the contact point for 12 species of aquatic animals and plants, including the otter, the water vole, and rare species of fish, and by acting as 'the lead partner' for chalk stream rivers.



Estuaries and the coast present particular conservation issues. Coastal zones can contain significant wildlife habitats and areas which are important for their natural beauty. Wherever the coast is undeveloped, the introduction of development should be resisted, unless a coastal location is essential, no other location would do, and the full implications have been considered.

Provision for public access to the coast should be made as part of an overall management plan for coastal zones, prepared with the involvement of the Agency.

Some parts of the coast are subject to land erosion and instability. If the approach to these areas in the management plan is one of managed retreat then development is clearly to be avoided, but in any location future generations should not be committed to expensive and inflexible solutions because of insufficient caution now.





Consideration of the issue of **conservation** in making planning decisions should mean:

- their restoration so that the migration of species can take place (See p.52,24)
- ensuring that accepted development respects the character of the locations **which** are important to nature conservation, and makes an appropriate contribution to conservation interests
- using appraisal techniques to expose the choices between economic, social and environmental objectives, and to identify the potential impacts
- preventing and controlling pollution from point and diffuse sources through locational choices, appropriate technology and management
- avoiding culverting and structures which act as barriers to flows, and on-line ponds which can mean the loss of river habitat and landscape value
- ensuring that development respects and where possible enhances any existing landscape, archaeological or built environment interest (See p.52,25).

Current Conservation Issues for the North Wessex Area

- new development should look for opportunities to enhance and restore biodiversity
- provision of a network of corridors to link fragmented habitats
- recognition of natural floodplain functions to conserve and enhance ecological value and biodiversity
- rehabilitation and enhancement of rivers especially in town centres
- development pressures and increased urban runoff
- protection of headwater streams to conserve biodiversity and improve ecological value
- protect and enhance the Severn estuary coastal zone from the impact of new development.

Section 3

When development is proposed there needs to be careful consideration of its implications for the environmental issues discussed in this document. If these issues are properly taken into account in making development allocations and setting the policy framework in the development plan, the development that takes place as a result should be better from an environmental point of view. If so, the plan will have made a contribution towards achieving sustainable development.

This section suggests two ways in which environmental issues dealt with by the Agency can be used to influence planning decisions.

The first presents the environment as a positive opportunity for planning, by identifying how a river corridor and its floodplain can be a 'building block' in determining the pattern of development through the development plan.

The second looks at the questions that should be asked when choices and decisions are being made about the location of development. It demonstrates how harm can be minimised by careful consideration of the options, and how benefits to the environment can be maximised.

Source control, a method for reducing the impacts of development on surface water by the use of Best Management Practices, is an important sustainable planning issue and is described in Box 5.

Planning with Environmental Issues

Box 5

BEST MANAGEMENT PRACTICES – Source Control

Best Management Practice (BMP) for source control (sometimes known as sustainable urban drainage) is an approach for managing surface water run-off from development in a sustainable manner by returning it close to where it falls (See p.52,6 & 7).

The Agency advocates the use of BMPs wherever they are considered appropriate. The successful implementation of such techniques has many benefits for the environment. These include:

- Reducing the potential impact of development on flooding by closely matching the undeveloped hydrology of the site;
- Allowing the site to continue to contribute to the recharge of groundwater;
- Removing contaminants in surface water before discharging to ground or watercourse;
- Creating or enhancing wildlife habitats.

Local planning authorities are continuing to embrace the concept of BMPs and with assistance from the Agency, starting to promote this approach through emerging development plans.

Typically development produces polluted run-off from hard surfaces such as roads, paths and car parks, especially after long dry periods. Roads, drives, car parks and industrial yards are all contaminated with oil and rubber as well as spillages of goods, chemicals, mud, refuse and organic matter. Sometimes engine oils and other polluting substances are illegally tipped down roadside gullies or foul drainage can be accidentally connected to the surface water system. Most of these sources of pollution are unavoidable in any surface water drainage system. It is not practical to provide treatment of water at each outfall so if the quality of these discharges is to be improved then the design of the surface water system must be modified. BMPs aim to do this in a way that improves the quality and minimises the quantity of the surface water before discharge.

There is a wide range of BMP options from which designers, developers, planners, drainage specialists and civil engineers may choose. It is worth bearing in mind that BMPs are usually cheaper than conventional systems - usually between 10% and 50% lower in cost.

BMP options include:

- Grass swales and filter strips
- Infiltration basins, trenches or other infiltration devices
- Detention ponds
- Extended detention ponds
- Retention ponds
- Wetlands
- Porous surfaces
- Procedural BMPs, which are part of the technical advice and working practices available to minimise pollution, especially in agricultural areas, and which include conservation ploughing techniques and new pesticide handling methods, for example.

Box 5**BEST MANAGEMENT PRACTICES – Source Control**

All runoff from a development site should be collected and stored on site, in a way that removes sediments which trap pollutants, and released slowly via natural cleaning facilities or local watercourses.

Properly designed, such features will not only provide protection against flooding and pollution and aid in replenishment of water resources but also increase the amenity of the proposal thereby increasing its intrinsic value, and provide areas for conservation enhancement.

It is recognised that traditional 'hard' sewerage systems continue to play a part in the provision of surface water infrastructure, however, this method should only be utilised once it has been demonstrated to the satisfaction of the drainage authority, that other methods would not be successful.

The planning authority should therefore expect to see applications accompanied by an assessment of the suitability of BMPs. Where it is necessary to install a 'hard' sewerage system, it must be demonstrated that this is the best option.

To ensure that appropriate designs incorporating the use of BMPs can be provided on new developments there are important considerations that must be taken into account. Namely:

- The Environment Agency wishes to work in partnership with the planning authority to achieve appropriate and sustainable surface water drainage strategies incorporating BMPs.
- Site investigations are desirable at an early stage to identify natural features, constraints and opportunities that will influence the detailed design of surface water drainage systems.
- Design of the surface water system must be linked to the proposed landscape, roads and site layout for best results.
- The responsibility for maintenance of the system must be clearly identified at an early stage.
- Outline requirement for the drainage scheme should be covered in the Site Development Brief issued by the planning authority with guidance from the Environment Agency.
- Planning conditions, possibly in conjunction with a Section 106 agreement, should be included in the planning permission for the site to regulate the works. Guidance from the Environment Agency can be obtained early in the consultation process.
- As BMPs may not be widely used at present, developers should be advised to seek specialist assistance on current best practice and knowledge.

The Opportunity of River Corridors

Development plans are encouraged to include spatial strategies demonstrating the principles that should be followed in laying out new development in relation to existing settlement patterns, the landscape, and transport facilities. Spatial strategies are intended to influence the provision of new development towards the achievement of more sustainable development.

PPG1: General Policy and Principles cites Sustainable Development: The UK Strategy (1994) in saying that a sustainable framework should "shape new development patterns in a way which minimises the need to travel", as well as "using already developed areas in the most efficient way, while making them more attractive places in which to live and work" and "conserving both cultural heritage and natural resources". Natural resources in this case are said to include wildlife, landscape, water, soil and air quality; all issues with which the Agency is concerned.

The Agency believes that the river system and the river corridors in particular are a resource that should play a significant part in influencing development strategies. Their importance is emphasised in PPG 9 and the Habitats Directive.

Many settlements were originally established and have developed around a river. Watercourses may be a landmark and a defining line, but are often an underused resource. The river corridor has great potential to act as a structural element around which to organise the pattern of development as initiatives are taken to make towns more attractive, and as they expand.

The corridor formed by a watercourse and its landscape buffer is a 'green' link between different parts of the town, or between the town centre and the urban fringe. River corridors provide

routes between built and unbuilt areas and act to link the town with the countryside. River corridors allow wildlife to colonise new habitats, to move through areas and provide a valuable habitat. River corridors bring natural elements - water, trees and wildlife - into towns, and act as green breaks between radiating wedges of development. The river corridor can become an important part of the stock of open spaces and recreation facilities in the town, adding to these and helping to link open spaces together in a network.

In many towns the waterfront has become the setting for high quality public or prestigious commercial development, and though this is clearly less likely to achieve the Agency's aspirations, significant enhancement can be achieved from such development, preferably with the Agency's involvement.

The linear and linking role of the watercourses and their corridors is important because routes alongside watercourses can be ideal for cycling and walking in a pleasant setting away from the intimidating effects of traffic. There are benefits for the water environment too from maintaining the integrity of the corridor and from an increased emphasis on management in order to maintain and enhance biodiversity.

River corridors have a lot to contribute and they should be used to their full potential in planning the layout of expanding or regenerating towns.



VIEW DOWN THE WETLANDS TOWARDS A15



RIVERSIDE PARK

TAUNTON BUSINESS PARK

Taunton Riverside (Hankridge Farm)

The Taunton Riverside Development was built on what was originally agricultural land associated with Hankridge Farm, and predominantly within the floodplain of the River Tone.

Through an ongoing process of consultation with the Environment Agency, the floodplain was modified by excavation, diverting an old flood relief channel through part of what is now the 17.5 acre riverside park, at the same time substantially elevating remaining areas of the site to provide development land above design flood levels in the river.

Agency staff worked closely with the developers to ensure that the newly created riverside park and wetland was sensitively landscaped with the planting of thousands of native trees, shrubs and aquatic plants. The area has now become an excellent shelter for fish, birds and wetland flora, whilst opening up the river corridor for recreational uses. Taunton Deane Borough Council has adopted the riverside park and wetland as public open space, and recently, a new cycle track was constructed along the river, linking the town centre to the new development. The provision of this high quality riverside park has catalysed other riverside improvements nearby, including in-channel weirs and planting, providing valuable new recreational and environmental benefits to the town.

Testing Development Proposals

This section sets out a checklist of some of the environmental matters to be considered by local planning authorities and other participants in the planning process in identifying the location and form of a development allocation. Similar questions arise when an application is to be determined.

Some of the ways in which development might affect some of the Agency's interests have been less frequently considered in the past than issues such as landscape and agricultural land quality. The information that is needed may have been unfamiliar in use. The water environment, environmental protection, and conservation should all be important considerations in determining the location and the form of new development, and the Agency can assist local planning authorities in taking these issues into account. Local planning authorities across the country are engaged in identifying how provision should be made through development plans for

the estimated 4.4 million additional homes that will be required by 2016. The provision for housing made through development plans will probably account for the greatest impact that plans will have to deal with. That being so, it is with housing provision that the greatest incentive exists to do things as well as possible, by following best practice for instance. Loss to the environment has to be minimised and the opportunity exists to seek the best contribution to environmental enhancement, and to more sustainable forms of development.

Although this section refers to housing, the types of questions set out here apply to the other important land uses for which provision is to be made. Employment is likely to be the next largest user of land.

The maps included with this Issues Document will help in examining development proposals according to this checklist.





How is the development to be supplied with water?

Can the Water Company supply the forecast demand from its existing supply to the area within its licence?

Would the additional abstraction affect river flow or groundwater levels in environmentally sensitive areas?

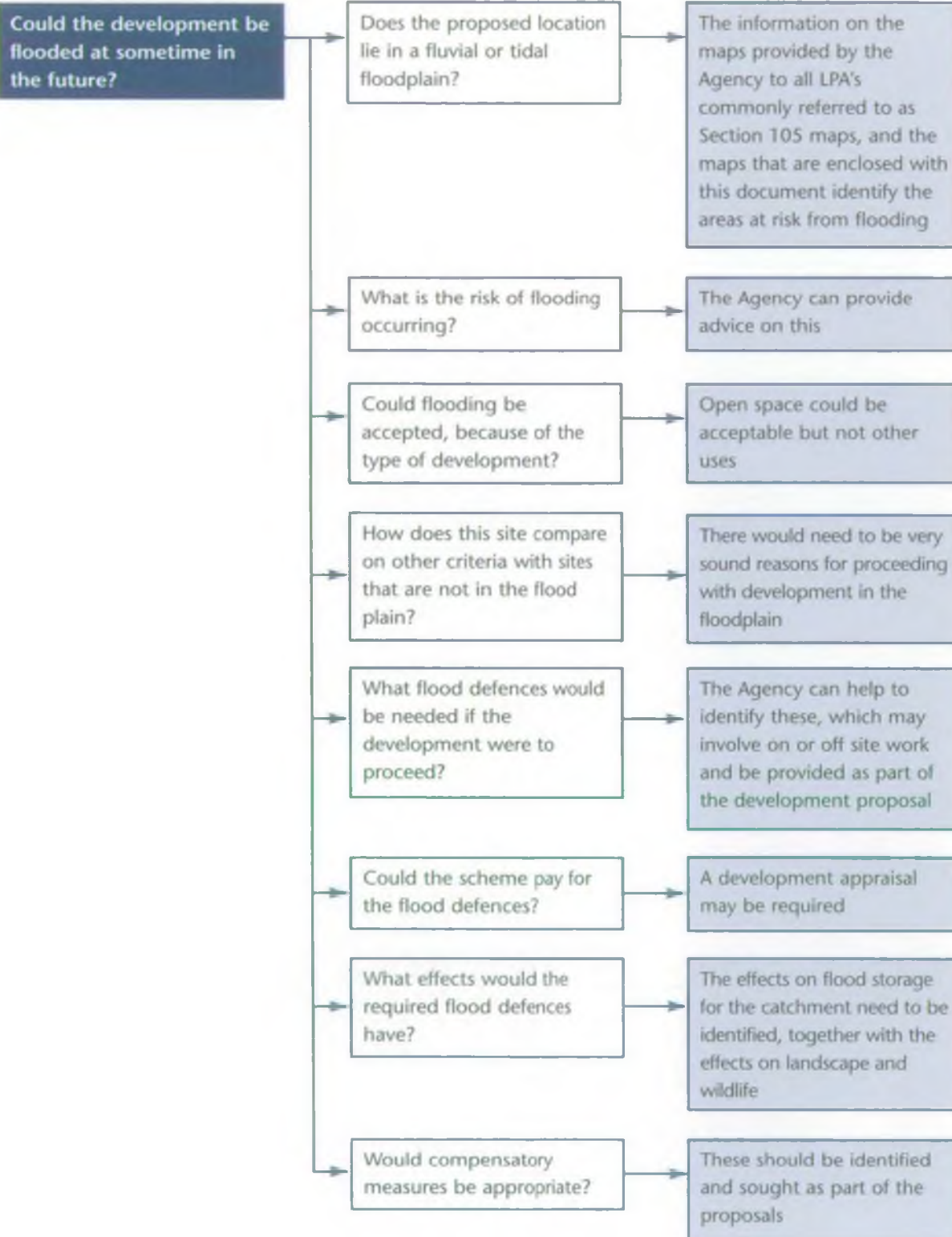
If new supplies are needed will the necessary provision be made in time and are the works included in the Asset Management Plan?

An assessment by the water companies and the Agency is needed to identify the implications of the additional demand

Would meeting the requirement ultimately have detrimental environmental effects?

Are the consequences sufficient to affect the choice of location ?

Is every opportunity being taken to promote water conservation in the design of the development?



Will the development increase the risk of flooding elsewhere?

Is there sufficient capacity in the drainage system to accommodate the additional run off?

Run off analysis is required

Is the scheme designed or to be controlled to minimise run off?

Best management practices can be identified to minimise levels of run off and to retain water on site

Will the development have any affect on water quality?

Is the location within a Groundwater Protection Zone as identified on the maps provided?

The Agency's advice is needed on the implications of this type of location

Could a different location be identified?

An appraisal of all the factors affecting the choice of sites should be carried out

If the development is accepted in this location, are all measures in place to prevent pollution?

The construction period is a time of risk, particularly if there is any possibility of the land being contaminated

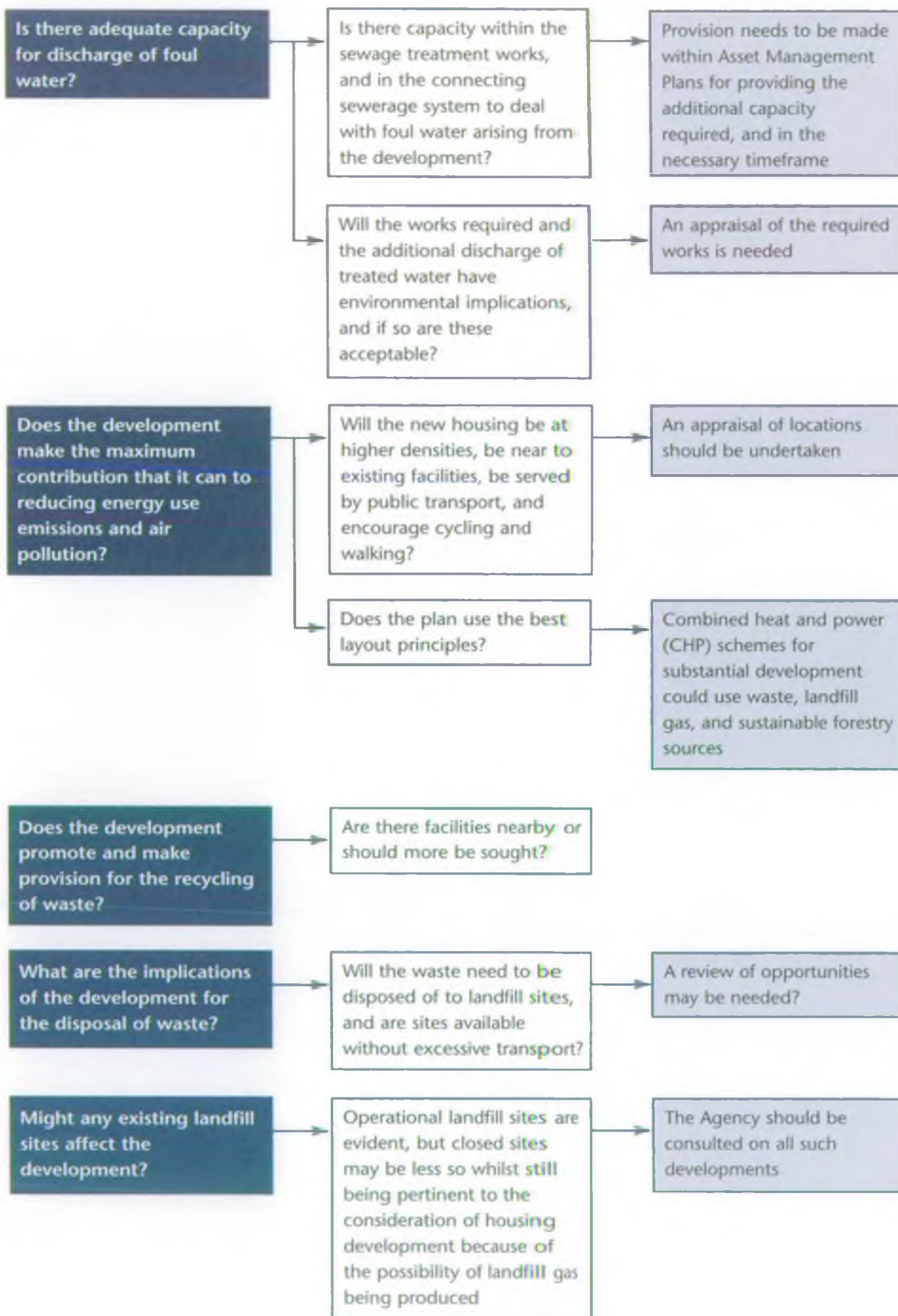
Best management practices should be followed in the design and operation of the site

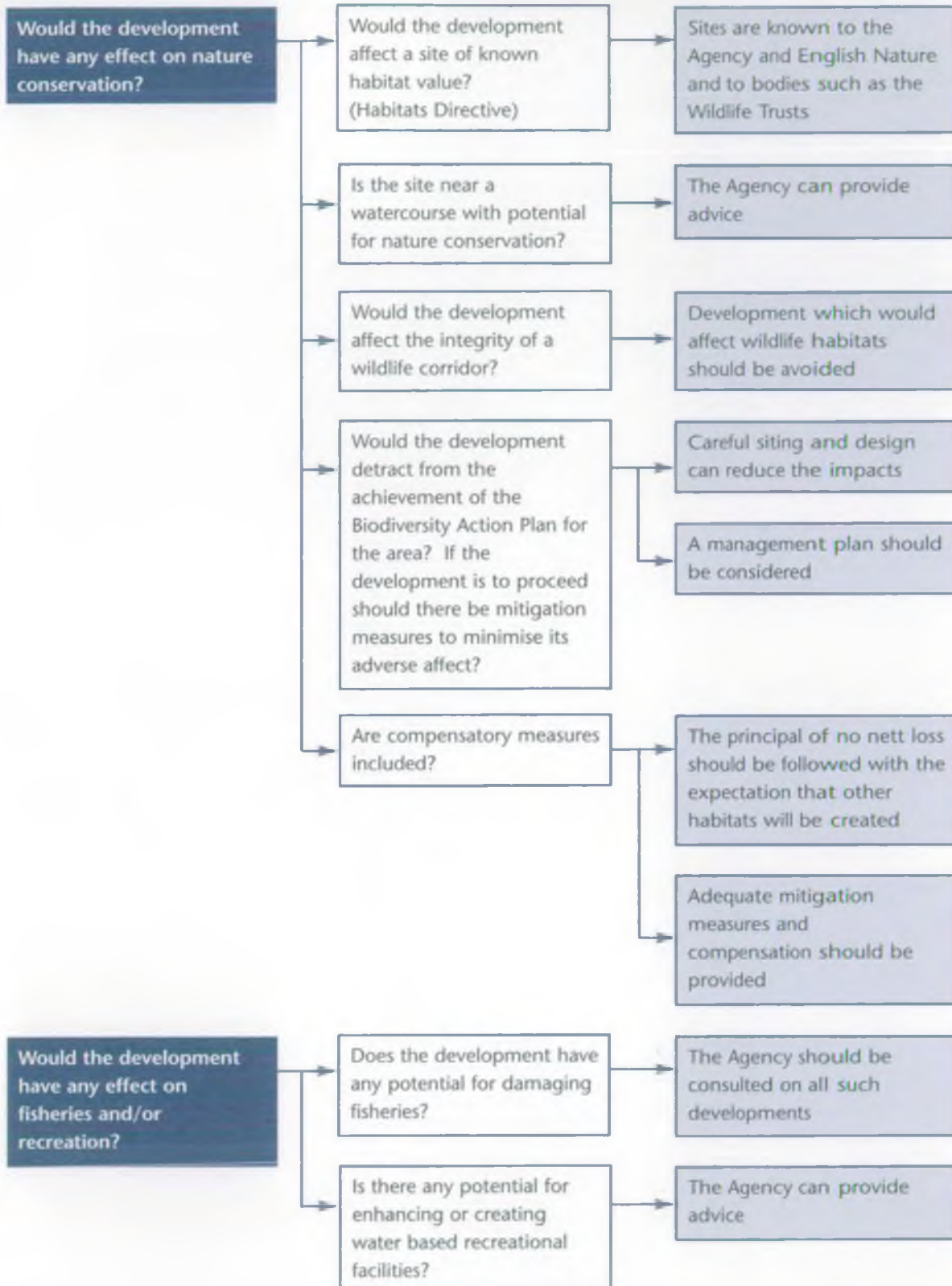
Could additional measures be taken to conserve water?

Is the scheme designed according to best principles for reducing water use?

Preferred practices include water metering (now standard in new houses) and provision for the reuse of 'grey water'

Is everything being done to promote water conservation?





Section 4

Introduction

This section of the document is intended to make it easier for local authorities to use information available from the Agency and to obtain advice and assistance from the Agency in order to carry out their planning work. The material which follows includes:

- clarification of the relationship between the Agency and other organisations, where there are complementary responsibilities
- an explanation of how the Agency is organised, with the Regional and Area Office functions explained
- a description of the maps which accompany the Issues Document and which are prepared for each of the district local authority areas within the Agency's North Wessex Area
- the definition of terms used in the document to assist in attributing common meaning to these terms.

Involving the Agency

The Agency and other Responsible Bodies

The best results will be achieved if there is a mutual appreciation of the different but complementary roles of different bodies. The tables that follow seek to demonstrate the extent and limits of the Agency's role relative to those of other bodies.

Agency Duty	The Agency has powers to:
<p>Water Resources</p> <p>The Agency has a duty to conserve, redistribute, augment and secure the proper use of water resources.</p>	<p>Grant or vary water abstraction and impoundment licences on application. Revoke or vary existing licences to reinstate flows or levels to surface waters or groundwater which have become depleted as a result of abstraction, and are subject to a liability for compensation.</p>
<p>Flood Defence</p> <p>The Agency has a duty to exercise general supervision over all matters relating to flood defence.</p>	<p>Control, through Land Drainage consents, development in or within 8 m of main river (16 m for tidal Thames and tributaries) (Water Resources Act 1991, Section 109) or construction of a structure that would affect the flow of an ordinary watercourse (Land Drainage Act, 1991 Section 23). Produce flood risk maps for all main rivers under S105 of Water Resources Act 1991. Undertake works to main rivers using permissive powers. Issue flood warnings relating to main river to the public, local authorities and the police. Consent mineral working within 16 m of main rivers.</p>
<p>Water Quality</p> <p>The Agency has a duty to monitor, protect, manage and, where possible, enhance the quality of all controlled waters including rivers, groundwaters, lakes, canals, estuaries and coastal waters through the prevention and control of pollution.</p>	<p>Issue discharge consents to control pollution loads in controlled waters. Regulate discharges to controlled waters in respect of water quality through the issue and enforcement of discharge consents. Issue 'works notices' where action is required to reduce the risk of pollution. Prosecute polluters and recover the costs of clean-up operations.</p>
<p>Air Quality</p> <p>The Agency has a duty to implement (Part 1 of the Environmental Protection Act 1990).</p>	<p>Regulate the largest technically complex and potentially most polluting prescribed industrial processes such as refineries, chemical works and power stations including enforcement of, and guidance on, BATNEEC and BPEO. Have regard to the government's National Air Quality Strategy when setting standards for the releases to air from industrial processes.</p>

The Agency has an interest (but no powers) in:	Partnership
<p>The more efficient use of water by water companies, developers, industry, agriculture and the public and the introduction of water efficiency measures and suitable design and layout of the infrastructure.</p>	<p>The Agency is committed to water-demand management and will work closely with water companies and developers, local authorities and relevant organisations to promote the efficient use of water. The Agency acknowledges that new resources may be needed in the future and supports a twin-track approach of planning for water resource development alongside the promotion of demand-management measures. The Agency seeks to influence planning decisions for new development by encouraging the inclusion of water conservation measures in new properties, particularly in areas where water resources are under stress, and by ensuring that planning authorities allow for the lead time for resource development.</p>
<p>Granting of planning permission throughout a catchment but especially floodplains where development can significantly increase flood risk. Installation of surface water source control measures e.g. flood attenuation structures. Supervising the maintenance of ordinary watercourses which is a local authority remit, but may impact on main rivers. Installation of buffer zones which reduce flood risk and have significant environmental benefits. Urban and rural land use and measures that can reduce flood risk or the need for watercourse maintenance.</p>	<p>As a statutory consultee on planning applications within main river floodplains, the Agency offers advice based on knowledge of flood risk. It also advises on the environmental impacts of proposed floodplain development. The Agency will encourage best practice, including source control measures and common standards, among local authorities and riparian owners to protect and enhance the environment. The Agency works with the civil authorities to prepare flood warning dissemination plans and supports their endeavours to protect communities at risk.</p>
<p>The control of runoff from roads and highways. This is a Highways Agency duty. The greater use of source control measures to reduce pollution by surface water runoff. Prevention and education campaigns to reduce pollution incidents.</p>	<p>The Agency will liaise with local authorities, developers, the Highways Agency, industry and agriculture to promote pollution prevention and the adoption of source control measures. As a statutory consultee on planning applications, the Agency will advise local planning authorities on the water quality impact of proposed developments.</p>
<p>The vast number of smaller industrial processes which are controlled by local authorities. Control over vehicular emissions and transport planning.</p>	<p>The Agency provides data on IPC processes and advice on planning applications to local authorities. The Agency is willing to offer its technical expertise to local authorities on the control of air pollution. The Agency wishes to liaise with local authorities in the production of their Air Quality Management Plans. The Agency will advise and contribute to the government's National Air Quality Strategy.</p>

Agency Duty**The Agency has powers to:****Radioactive Substances**

The Agency has a duty under the Radioactive Substances Act 1993 to regulate the use of radioactive materials and the disposal of radioactive waste.

To issue certificates to users of radioactive materials and disposers of radioactive waste, with an overall objective of protecting members of the public.

Waste Management

The Agency has a duty to regulate the management of waste, including the treatment, storage, transport and disposal of controlled waste, to prevent pollution of the environment, harm to public health or detriment to local amenities.

Vary waste management licence conditions. Suspend and revoke licences. Investigate and prosecute illegal waste management operations.

Contaminated Land

The Agency has a duty to develop an integrated approach to the prevention and control of land contamination, ensuring that remediation is proportionate to risks and cost-effective in terms of the economy and environment.

Regulate the remediation of contaminated land designated as special sites. Prevent future land contamination by means of its IPC, Water Quality and other statutory powers. Report on the state of contaminated land.

Conservation

The Agency will further conservation, wherever possible, when carrying out water management functions; have regard to conservation when carrying out pollution control functions; and promote the conservation of flora and fauna which are dependent on an aquatic environment.

The Agency has no direct conservation powers but uses its powers with regard to water management and pollution control to exploit opportunities for furthering and promoting conservation.

Landscape

The Agency will further landscape conservation and enhancement when carrying out water management functions; have regard to the landscape when carrying out pollution control functions; and promote the conservation and enhancement of the natural beauty of rivers and associated land.

The Agency must further the conservation and enhancement of natural beauty when exercising its water management powers and have regard to the landscape in exercising its pollution control powers.

The Agency has an interest (but no powers) in:	Partnership
The health effects of radiation.	The Agency will work with users of the radioactive materials to ensure that radioactive wastes are not unnecessarily created, and that they are safely and appropriately disposed of. The Agency will work with MAFF to ensure that the disposal of radioactive waste creates no unacceptable effects on the food chain. The Agency will work with the Nuclear Installations Inspectorate to ensure adequate protection of workers and the public at nuclear sites. The Agency will work with the HSE on worker protection issues at non-nuclear sites.
The siting and granting of planning permission for waste management facilities. This is conducted by the waste industry and local planning authorities. The Agency, as a statutory consultee on planning applications, can advise on such matters.	The Agency will work with waste producers, the waste management industry and local authorities to reduce the amount of waste produced, increase reuse and recycling and improve standards of disposal.
Securing with others, including local authorities, landowners and developers, the safe remediation of contaminated land.	The Agency supports land remediation and will promote this with developers, local authorities, and other stakeholders.
The conservation impacts of new development. These are controlled by local planning authorities. Protection of specific sites or species, which is a function of English Nature. The Agency does, however, provide advice to local authorities and developers to protect the integrity of such sites or species. Implementation of the UK Biodiversity Plan for which it is the contact point for 12 species and 1 habitat.	The Agency supports action to sustain or improve natural and man-made assets so that they are made available for the benefit of present and future generations. Many development schemes have significant implications for conservation. The Agency will work with developers, local authorities, conservation bodies and landowners to conserve and enhance biodiversity.
The landscape impact of new development, particularly within river corridors. This is controlled by local planning authorities.	The Agency produces River Landscape Assessments and Design Guidelines which it uses when working with local authorities and developers to conserve and enhance diverse river landscapes.

Agency Duty	The Agency has powers to:
<p>Archaeology</p> <p>The Agency has a duty to consider the impact of all of its regulatory, operational and advisory activities upon archaeology and heritage, and implement mitigation and enhancement measures where appropriate.</p>	<p>The Agency must promote its archaeological objectives through the exercise of its water management and pollution control powers and duties.</p>
<p>Fisheries</p> <p>The Agency has a duty to maintain, improve and develop salmon, trout, freshwater and eel fisheries.</p> <p>Recreation</p> <p>The Agency has a duty to promote rivers and water space for recreational use.</p>	<p>Regulate fisheries by a system of licensing. Make and enforce fisheries byelaws to prevent illegal fishing. Promote the free passage of fish and consent fish passes. Monitor fisheries and enforce measures to prevent fish entrapment in abstractions. Promote its fisheries duty by means of land drainage consents, water abstraction applications and discharge applications.</p> <p>The Agency contributes towards its recreation duty through the exercise of its statutory powers and duties in water management.</p>

The Agency has an interest (but no powers) in:	Partnership
The determination of planning applications which could affect fisheries.	Many development schemes have significant implications for fisheries. The Agency will work with anglers, riparian owners, developers and local authorities to protect fisheries.
Promotion of water sports. This is carried out by the Sports Council and other sports bodies.	The Agency will work with the Countryside Commission, the Sports Council, British Waterways and other recreational and amenity organisations to optimise recreational use of the water environment.

Protection through Partnership

The Agency works in partnership with many organisations and individuals concerned with the protection and enhancement of the environment. In the UK as a whole, much has been achieved already, but much more is possible by working closely with others. The Agency is essentially a regulatory body and does not give grants, so to achieve some of its aims it must co-operate with others with financial resources and technical expertise such as the local authorities and Ministry of Agriculture, Fisheries and Food (MAFF).

The Agency can also work towards its objectives by working with voluntary groups such as the local wildlife trusts and recreational associations. In some cases, partnerships are already well established with other statutory bodies, especially where there is joint responsibility such as the Internal Drainage Boards (IDBs).

This section outlines some of these partnerships and indicates opportunities for further development.

Links with local authorities - The Agency advises local planning authorities on the impact of proposed development, and identifies requirements for environmental protection. The Agency also seeks to ensure that suitable policies



to protect and enhance the environment are incorporated within development plans, land drainage schemes, flood warning procedures, oil pollution plans and emergency plans.

Air quality - The Agency and local authorities are both responsible for aspects of air quality monitoring and management. Although local authorities are responsible for producing and implementing Local Air Quality Management Plans, the Agency will work with local authorities and others to develop and implement these.

Amenity and recreation initiatives - Local authorities often own the riverside land in towns and the Agency will support the provision of landscaping, walkways and riverside seating to enhance the town centre river corridor. The enhancement or creation of wildlife habitats can be part of such schemes.

Local Agenda 21 - Across the catchment, many local authorities are assisting their communities in developing local strategies and action plans for sustainable development. The approach adopted varies from district to district, with many Local Agenda 21 groups looking at specific issues. The Agency is currently providing information and advice to a number of these groups and will use this experience to assist other local communities.

Shoreline Management Plans (SMPs) - SMPs are being produced by a range of groups with statutory interests working together. They provide a forum for an integrated review of coastal processes and develop sustainable coastal defence policies to set objectives for the future management of the shoreline.

Working with businesses - The Agency is working in partnership with local businesses to promote pollution prevention and waste minimisation. Examples include:

- the '3 Es' campaign (Emissions, Efficiency, Economics) which aims to reduce waste, packaging, effluent and energy use and thereby both help the environment and save money for the business;
- farm waste management plans developed with farmers and the Farming and Rural Conservation Agency (FRCA);
- the oil care campaign;
- a training video for construction workers;
- work with the Farming and Wildlife Advisory Group (FWAG) to promote environmentally friendly farming practices;
- South Gloucestershire Waste Minimisation Club.

Conservation - The Agency welcomes partnerships with other bodies to maintain and enhance the biodiversity of rivers and wetlands. An example of this is the Bristol Frome Action Plan - a long running project to protect and enhance the River Frome corridor

Education - the Agency recognises that broad-based education covering the community, educational and industrial sectors will result in a more informed society that is better able to understand the environment, its needs, and the impact of human activity. In particular to promote a sustainable environment and culture there is a need to:

- educate young people to equip them to make informed judgements about future environmental decisions;
- educate industry through consultation, collaborative activities and targeted campaigns to promote a culture of prevention rather than cure;
- raise public awareness of environmental issues to engender in society a common ownership of the environment and its challenges.

A wide range of information is provided to all sectors of society through publications, talks and presentations. The Agency has published a leaflet entitled 'Green Shoots - Our Vision for Environmental Education'.

LEAPs in the community - Each LEAP is guided by a Steering Group whose members are drawn from our key customers locally and typically include: English Nature, Country Landowners Association, National Farmers Union, Internal Drainage Boards, local authorities, industry, waste management companies, Wildlife Trusts, fisheries interest, British Canoe Union and water companies.

The Agency operates a 24-hour service for receiving reports of, and responding to, flooding and pollution incidents and emergencies in the air, water and on land. The Incident Hotline is 0800 80 70 60.



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Getting in touch

The Agency is here to help, so that in co-operation with local authorities and others, useful progress can be made towards sustainable development. This document has explored the relationship between the environmental issues with which the Agency is involved, and planning decisions, particularly at the development plan level. It is intended to promote greater dialogue, and the Agency wants to hear from local authorities and others with planning and environmental issues that need a joint approach.

The area planning liaison team at the North Wessex area office in Bridgwater should be the first point of contact.

The area planning liaison team works with other Agency staff from its functional teams.

Issues Maps

The maps produced by the Agency, which accompany this document, are individual to each district planning authority area. They provide information on those aspects of the Agency's role that can be represented in a spatial form.

The maps complement the Issues Document. They are intended to identify where the general issues the Agency is concerned with ought to be a specific issue for the planning authority. With the Document and the maps, the issues can be taken into account in making planning decisions after discussion with the Agency.

The maps are an invitation to local planning authorities to liaise with the Agency, to access the Agency's information and knowledge and to assist the authority in making the best decision.

Further and more detailed information than can be included on the maps is available on request for each district on a CD.

Useful Documents

The Agency's preference is that when local planning authorities are aware of an issue with which the Agency can help, they should approach the Agency direct.

The Agency does produce many documents setting out its policy, and advising on Best Management Practices. These may provide useful reference material. Documents produced by the Agency and by other organisations which can assist in the consideration of the issues discussed in this document are listed below.

1. Environment Agency Information Pack (Who We Are And What We Do)
2. The Environment Agency and Sustainable Development : DOE/MAFF/Welsh Office 1996
3. North Wessex Area LEAPs available :
West Somerset Rivers
River Tone
River Parrett
Rivers Brue and Axe
North Somerset Rivers
Bristol Avon
Severn Vale
4. Development and Flood Risk : DOE Circular 30/92
5. Policy and Practice for the Protection of Floodplains : Environment Agency
6. Sustainable Urban Drainage - an introduction : SEPA / Environment Agency
7. Natures Way (booklet and video) : SEPA / Environment Agency
8. A Price Worth Paying : Environment Agency
9. Water Consumption and Conservation in Buildings : Environment Agency
10. Tomorrows Water : Environment Agency
11. Fisheries Habitat Improvement : Environment Agency's National Coarse Fisheries Centre
12. Pollution Prevention Guidance Notes : Environment Agency
13. Groundwater Protection Policy : Environment Agency
14. Planning Requirement In Respect Of The Use Of Non Mains Sewerage Incorporating Septic Tanks In New Development: DETR Circular 03/99
15. Septic Tanks and Small Sewage Treatment Works : CIRIA technical note 146 (0171 2228891)
16. Planning And Waste Management : DETR Planning Policy Guidance 10 (draft Dec 1998)
17. Waste Management Licensing Regulations 1994 (as amended)
18. A Way With Waste : DETR 1999
19. Contaminated Land Remediation : Environment Agency's National Groundwater and Contaminated Land Centre
20. Planning and Pollution Control : DETR Planning Policy Guidance 23
21. The United Kingdom National Air Quality Strategy : DOE 1997
22. Integrated Pollution Control – an introductory guide : Environment Agency
23. Bringing in Integrated Pollution Prevention and Control : Environment Agency
24. Nature Conservation : DETR Planning Policy Guidance 9
25. The New Rivers and Wildlife Handbook : RSPB 1994. ISBN 0903138700

*All Environment Agency publications are available from our general enquiry line on 0845 933 3111.
A full list of Environment Agency publications can also be obtained from this number.*

Let us know what you think

Please complete a copy of this form and send it to:
The Planning Liaison Officer, Environment Agency, North Wessex Area
Rivers House, East Quay, Bridgwater, Somerset TA6 4YS,
or fax to 01278 452985

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