local environment agency plan

ISLE OF WIGHT LEAP

CONSULTATION DRAFT

MARCH 1999

ENVIRONMENT AGENCY

YOUR VIEWS

With this Consultation Draft LEAP the Agency hopes to establish the views of the public and other external organisations regarding the relative importance of the identified issues. It is likely that new issues will be raised in this process and these will be considered by the Agency in formulating an Action Plan for the Isle of Wight LEAP area. The Action plan will be published following the three month period of public consultation.

The Agency would welcome your views on:

- Are all the issues valid?
- Have any issues been missed out?
- Do you agree with the ranking of the issues?

The ranked list represents the priorities of our AEG, advising the Agency as to where we should concentrate our activities over the next five years and to help us develop an Action plan.

- Which issues should be moved up or down the ranking?
- Have you any other suggestions for actions?

Each issue has one or more actions that the Agency has identified as options to work towards solving that issue.

- Can your organisation help complete any of the Actions?

Please send your responses in writing to the following address by 25th June 1999.

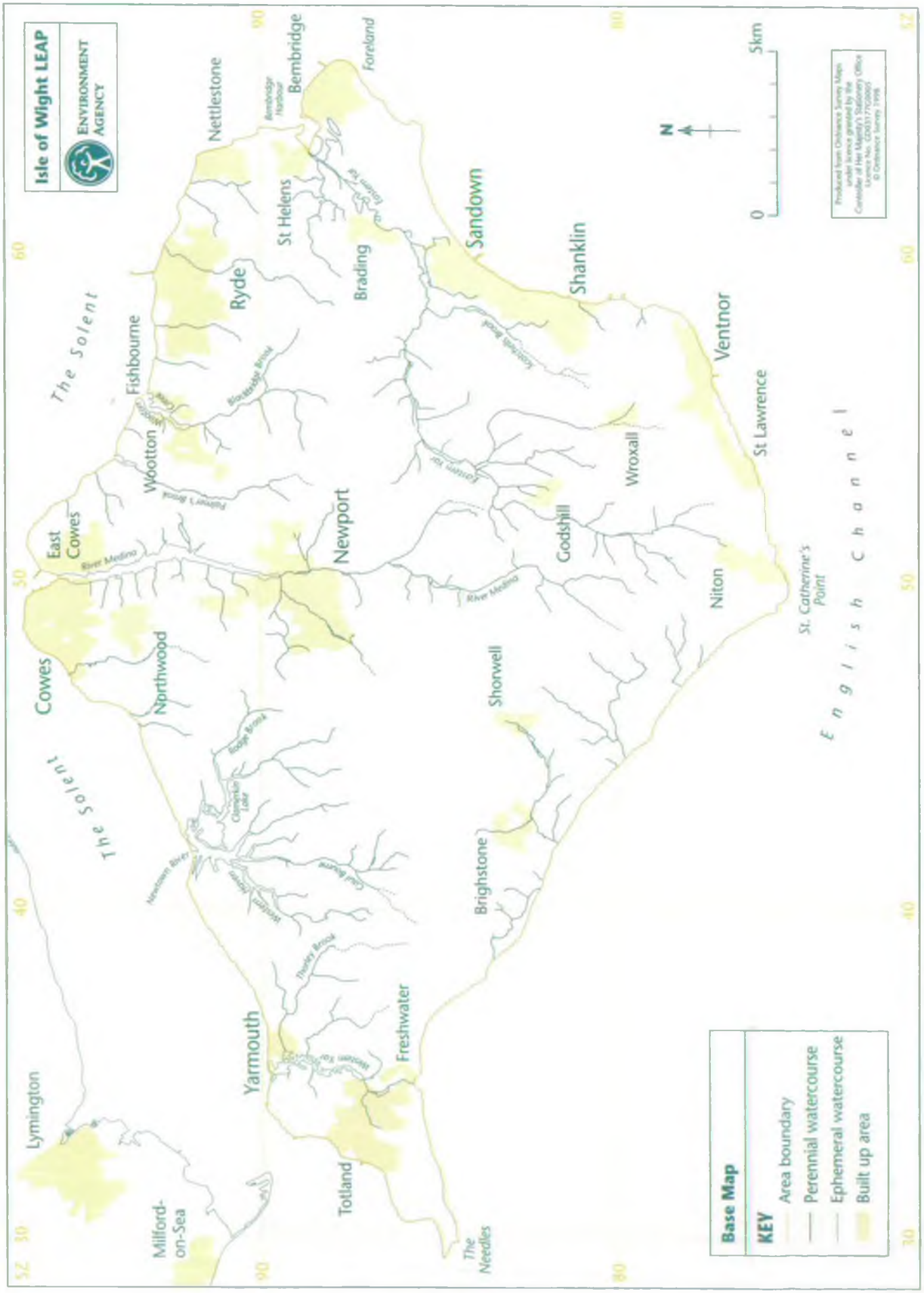
The Environment Agency
Hampshire and Isle of Wight Area Office
Customer Services
Colvedene Court
Colden Common
Winchester
Hampshire
SO21 1WP

Privacy Note

Response to this consultation is purely voluntary. The content of all responses will be used by the Agency to assist it in carrying out its statutory duties and the general details will be made public (this includes informing the applicant). Unless you specifically request otherwise or indicate that your response is confidential, we will also make public (and provide to the applicant) your name and address and a general summary of your comments in response to this consultation. If you have no objection to or would prefer the full content of your response being made public and copied freely please indicate this in your response.

Your right of access to the information held and right to apply for rectification of the information are as prescribed in current data protection legislation.

Catchment Overview



Isle of Wight Key Details

General

Area (sq km)	381
Topography (m)	High 241

Administrative Details

Population (1995)	125,000

Water Resources

Largest Rivers (km)

Medina	17
Eastern Yar	27

Average Annual Rainfall (mm)	840 - 740

Licensed Abstractions

Surface Water	33%
Groundwater	67%

Water Companies

Southern Water services	33%

Conservation

Sites of Special Scientific Interest (with wetland interest)	20
Areas of Outstanding Natural Beauty	189km^2
Special Areas of Conservation	4
Special Protection Areas	1
Ramsar Sites	1
Site of Importance for Nature Conservation	300+

Fisheries

Number of EC Designated Fisheries (km):

Salmonid fisheries	0
Cyprinid fisheries	2

Water Quality

RQO objective (km)	stretches
RE1	2
RE2	9
RE3	3
RE4	0
RE5	4
None	2

Chemical GQA (km) 1997	stretches
A	9
B	35
C	35
D	14
E	6
F	1

Pollution Prevention & Control

EC Designated Bathing Beaches	13
Waste Management Facilities	32
Major Effleuent Discharges (<1000m3 / day)	10
IPC processes	4

Flood Defence

	Length (km)
Coastline	127.5
Main River	114
Agency Sea Defences	4.65

EA - Southern LEAPs

1 FOREWORD

The Environment Agency has a wide range of duties and powers relating to different aspects of environmental management. It is required and guided by Government to use these duties and powers in order to help achieve the objective of sustainable development. At the heart of sustainable development is the integration of human needs and the environment within which we live. The Agency therefore has to reflect this in the way it works and in the decisions it makes.

Taking a long-term perspective will require the Agency to anticipate risks and encourage precaution, particularly where impacts on the environment may have long-term effects, or are irreversible. The Agency must also develop its role to educate and inform society as a whole, as well as carrying out its prevention and enforcement activities, in order to ensure continuing protection and enhancement of the environment.

Although the Agency only has duties and powers to protect some environmental resources, it will need to contribute to other aspects of environmental management even if these are, in the first instance, the responsibility of others. The Agency can only do this effectively by working in partnership with and through others in order to set common goals and to achieve agreed objectives.

Much of the UK's environmental legislation originates from the European Union. To date there have been five EC Environmental Action Programmes which have collectively given rise to several hundred pieces of legislation of relevance to environmental. Further Directives are currently under consideration, covering issues such as water management, air quality, and the management of waste using landfill.

The Agency also has to work in a wider international context because it is now generally accepted that environmental changes are occurring on a global scale. Individual countries contribute to these changes, and respond to them, in different ways. The Agency's long-term strategy therefore has to reflect these global issues, and it has to be delivered within the framework of international and national commitments which has been developed to address them.

Perhaps the major international issue is that of climate change. The UK is a contributor to the emission of gases such as carbon dioxide into the atmosphere, which are believed to contribute to long-term climate changes. The UK will also be affected in a complex way as and when the climate does change. It is therefore a signatory to the Framework Convention on Climate Change, as agreed at the Rio Summit in 1992, and is taking an active part in international negotiations to obtain commitments beyond the year 2000 for credible, effective, and achievable reductions of greenhouse gas emissions.

Another outcome of the United Nations "Earth Summit" held in Rio de Janeiro in 1992 was agreement by governments that, in order to solve global environmental problems, local action is crucial: we must all therefore think globally but act locally. The Local Agenda 21 initiative set out actions needed to achieve sustainable development, including the need to make clear the links that exist between local life-styles and the use of resources. In the UK, plans have been formulated by many local authorities and communities to and address a wide range of

environmental issues including natural resource use, pollution, health, local amenity and quality of life. These seek long-term solutions that take account of global implications, such as the use of resources that affect the global environment and thus local communities in other parts of the world.

2 INTRODUCTION

The Environment Agency is committed to a programme of Local Environment Agency Plans (LEAPs) to produce a local agenda of integrated action for environmental improvement throughout England and Wales. LEAPs help the Agency to identify and assess, prioritise and solve local environmental issues, taking into account the views of local stakeholders.

2.1 THE LEAP PROCESS

LEAPs take a long-term view of the local environment and set out a five-year plan of action for solving local issues. By the end of 1999 the Agency will have published consultation Draft LEAPs for all parts of England and Wales. But this is only the first milestone in what will be an ongoing national programme of LEAPs, which will be regularly updated, developed and improved.

Figure 1 THE LEAP PROCESS

2.1.1 The Isle Of Wight Leap Consultation Draft

The Isle of Wight LEAP Consultation Draft identifies environmental issues relevant to the Environment Agency and sets out possible options for action to restore/improve the Island's environment. The report has been structured around the Agency's nine principal environmental concerns, which aim to protect and enhance the environment in an integrated way and contribute towards the goal of sustainable development.

2.1.2 Environmental Overview

The Isle of Wight Environmental Overview, produced as a separate document, is a factual description and analysis looking at the impact of stresses on the environment. The Environmental Overview supports the LEAP Consultation Draft and provides the background to the issues. A summary of the Environmental Overview is provided in the next section.

The publication of this Consultation Draft marks the start of a three month period of formal consultation enabling external organisations and the general public to work with us in planning the future of the local environment. **This is the first output of the process and is not the final plan.**

It gives you an opportunity to:

- highlight any issue/actions not already identified within the area.
- work towards establishing and implementing a five-year action plan.

2.1.3 Leap Plan

The final LEAP Plan will take into account the results of consultation as well as national priorities. It will contain a list of actions that take account of costs and benefits, identifying timescales and partner organisations. Agreed actions will be incorporated into the Agency's annual Business Plans.

2.1.4 Annual Review

The Agency will monitor implementation of the LEAP and report on progress in a published Annual Review. The Annual Review will also identify any additional actions needed to maintain progress in light of any changes in the LEAP area and also whether any actions need removing or amending where they are no longer appropriate. After five years, or sooner if required, the Agency will carry out a major review of the progress that has been made. At this stage the Agency will produce a new LEAP Consultation Draft to reflect these changes to further improve the local environment.

2.2 PRIORITISATION OF ISSUES

To assist in the prioritisation of the issues the Environment Agency undertook a ranking exercise using the Isle of Wight Area Environment Group (AEG). The AEG are an advisory group made up of individuals from all sectors who live and / or work on the Island. The AEG's role is to advise and guide the Agency to ensure it is recognising the interests of other organisations and individuals.

2.2.1 Issues Ranking

The Area Environment Group (AEG) undertook the following process to rank the issues that had been identified in the LEAP. Following a brief presentation on each issue, each AEG member was asked to mark each issue out of 10 according to the following five factors of importance, to give a total out of 50. This methodology is adapted from the results of a National Research and Development project undertaken on the New Forest LEAP.

Issue	**Legal requirement**	**Impact upon Biodiversity**	**Sustainable Development**	**Are conditions Declining**	**Risk to Public Health**	**Total (? / 50)**
Example	5	7	6	1	8	27

A final score for each issue was obtained. The higher the score the more important the issue was percieved by the AEG. The Issues could then be ranked to show comparaptive importance.

The ranking obtained is intended to be used as a guide and a focus for discussion. The Agency would be keen to hear your views on whether you agree or disagree with this ranking.

Rank	**Issue**	**No.**
1	The Island economy is highly reliant upon maintaining bathing water quality.	10
2	Sustainable waste management cannot be achieved on the Island in the long term with the current levels of waste generation combined with the existing waste management infrastructure.	17
3	Full exploitation of abstraction licences have the potential to result in adverse environmental effects, particularly in light of climate change.	3
4	Disposal of sewage sludge and exempt waste are not adequately monitored.	9
5	Further development in low lying areas would increase the number of people and properties at risk from flooding.	13
6	The impact of the EC Nature Conservation Directives on the Agency are complex and substantial.	5
7	The aesthetic quality of the Island's estuaries and coastal waters is reduced by discharges of untreated sewage and / or chemicals from boats.	14
8	The need for sustainable management of landfill gas	1
9	Standards of flood defences need to be continually reviewed due to climate change	12
10	Additional monitoring data are required to assess the contribution to local air quality of certain emissions from industrial processes both on and off the Island.	2
11	Over-engineered rivers, particularly the River Yar, have low biodiversity value.	6
12	The traditional landscape character and features of Island's river corridors have deteriorated.	16
13	Lack of additional regulation and promotion of fisheries on the Island is potentially resulting in some unlicensed activities.	8
14	The biodiversity value of Wootton Mill Pond, situated between two SSSIs, and partly owned by the Agency, is currently low.	7
15	Opportunities for informal recreation associated with the Islands inland water environment are currently limited.	15
X	Diffuse pollution of watercourses occurs from developed areas and intensive agriculture.	11
X	If abstraction for trickle irrigation becomes licensable the Agency will need to carefully evaluate every application.	4

X – this Issue was not included in the ranking exercise.
Rank 1 = the most important, Rank 16 = least important.

3 CONSULTATION

With this Consultation Draft LEAP the Agency hopes to establish the views of the public and other external organisations regarding the relative importance of the identified issues. It is likely that new issues will be raised in this process and these will be considered by the Agency in formulating an Action Plan for the Isle of Wight LEAP area. The Action plan will be published following the three month period of public consultation.

The Agency would welcome your views on :

- Are all the issues valid?
- Have any issues been missed out?

The ranked list of issues represents the priorities of our AEG, advising the Agency as to where we should concentrate our activities over the next five years and to help us develop an Action plan.

- Do you agree with the ranking of the issues?
- Which issues should be moved up or down the ranking?

Each issue has one or more actions that the Agency has identified as options to work towards solving that issue.

- Have you any other suggestions for actions?
- Can your organisation help complete any of the actions?

PLEASE SEND YOUR RESPONSES IN WRITING TO THE FOLLOWING ADDRESS BY 25TH JUNE 1999.

The Environment Agency,
Hampshire and I.O.W. Area Office,
Customer Services,
Colvedene Court,
Colden Common,
Winchester,
Hampshire,
SO21 1WP.

THE ENVIRONMENT OF THE ISLE OF WIGHT: AN OVERVIEW

4.1 A UNIQUE AND SPECIAL PLACE

By virtue of its location, geology and climate the Isle of Wight has a distinctive and attractive environment. For such a small island it is also remarkably varied, with a great diversity of landscape, flora and fauna.

The Island's special character is widely recognised by residents and visitors alike. It is also formally acknowledged at the national and international level through the system of environmental designations.

Like elsewhere however, the environment of the Island is subject to a range of pressures. These result mainly from human activity, but also from the forces of nature, which have shaped and influenced the Island over many centuries.

The following paragraphs provide a summary of the Isle of Wight Environmental Overview.

Geology And Topography

Until well after the last ice age the Isle of Wight was part of the mainland. A major river is believed to have flowed eastward along the line of what is now the Solent and rising sea levels and coastal erosion eventually breached the isthmus connecting the Needles to Purbeck. The river valley was drowned by the sea, creating a diamond shaped Island bounded by the Solent to the North and the English channel to the South.

A central Chalk ridge bisects the Island from east to west, terminating in the Needles rocks. A further outcrop of chalk forms the Southern Downs.

South of the chalk ridge erosion has produced a broad valley of sandstones and mudstones. To the north, the chalk is overlain by a thick sequence of sands, clays and gravels. To the southeast, most of the chalk has been eroded to expose a varied sequence of lightly sandy soils drained by small spring-fed streams. The southerly coastline of the Island is prone to erosion and landslips, made worse by the instability of the cliffs caused by groundwater moving through the soft rocks. Whilst in Victorian times it was possible to walk down to the sea at Blackgang Chine, there is now a cliff over 100m high, and fields, roads and properties are continuing to be lost to the sea.

The topographical divisions largely follow the geology, forming distinctive areas:

- the high central ridge of chalk downs, and the Southern Chalk Downs;
- the greensand ridge;
- northern clay pastures; and
- intensively managed southern coastal plains, river valleys, estuaries and a dramatic coastline.

Hydrology, Rivers And The Coast

With the exception of a few brooks on the south coast and the Eastern Yar, all the Island's streams flow northwards. Altogether, more than fifty separate catchments drain to tidal

waters. The Island's major rivers are the Medina and Eastern Yar, both of which rise as chalk springs from St. Catherine's Down in the South. The Western Yar is effectively an estuary whose freshwater catchment has been destroyed by coastal erosion (an extreme example of 'river capture').

River engineering and land drainage in the past has had a major impact on virtually all of the Island's rivers with loss of associated riverside, wetland and floodplain landscapes, damage to SSSIs and separation of wetland hydrology from the river.

The Agency plays a key role in safeguarding flood defence standards for the protection of people and property in defended areas and to the preservation of flood storage capacity in river channels and flood plains.

The Island is exposed to the full force of the English Channel and is heavily protected by sea defences. The south coast of the Island suffers particularly from coastal erosion. The northern areas of the Island suffer from flooding when meteorological conditions such as low atmospheric pressure, wind speed and direction combine with topography to produce tide levels that are greater than the defence levels. The most significant sea defence on the Island is the sea wall at Sandown, whilst the Agency also maintains flood defences at Bembridge and Yarmouth.

Landscape, Wildlife And Cultural Heritage

The Island has a small scale, intimate landscape with a mixture of varied and distinctive landforms, diverse land cover types and often sudden and dramatic views of the sea. The varied geology, farming practices and patterns of settlement concentrated around the coast form a rich tapestry across the landscape.

The chalk downs are characterised by rolling pasture and arable land with pockets of unimproved grassland on steeper areas. Heathland/acidic pasture exists in a vale on the greensand between the two ranges of chalk downs. Dairy farming, creating lush, irregular fields bounded by mature hedgerows and coppiced woodland, dominates the northern pastures. Along the north coast are numerous harbours, creeks, salt marshes and tidal mudflats, fringed by woodland. The southern coastal plain is dominated by an intensively managed arable farmland with large open fields and few trees. The undercliff and coastal chines along the southern coastline are a particularly unusual and distinctive landscape feature.

This variety and interest is reflected in the protection that is afforded to the geology and wildlife of the Island through designation at the European and national scale, and to the landscape of the Island through designation in large part as an Area of Outstanding Natural Beauty (AONB) and as Heritage coast

The Island's coast is extremely diverse and includes examples of several internationally important habitats and many nationally rare species. Key habitats include chalk grassland, ancient woodland, heathland, neutral grassland and rivers and wetlands. The Island has a large number and area of European designated conservation sites. Of the 43 Sites of Special Scientific Interest (SSSIs) on the Island, 20 are water dependent.

The Island also has a rich archaeological heritage, both on land and within its coastal waters. Carisbrooke Castle, famous for its donkey well, was used for many years as a secure place of refuge, and included King Charles I amongst its inmates.

The popularity of the Island as a holiday destination is also a tribute to its physical environment and cultural heritage, as are the numerous references in the literary works of Keats, Tennyson and Dickens amongst others.

Water Resources

The major aquifers on the Island are the Chalk, the Upper Greensand and Lower Greensand. The two largest rivers are the Eastern Yar and the Medina, from which abstractions are taken for public water supply.

The Isle of Wight has historically suffered water supply problems due to its limited surface and groundwater sources and high summer population. During the 1976 drought, the Island suffered significantly unreliable public water supplies caused by low yields from groundwater and surface water sources, compounded by the inadequate distribution system.

Supply restrictions were therefore imposed and Southern Water Authority carried out significant investment in mains reinforcement, leakage reduction and developing new sources of supply - including the Cross-Solent Main, which involves the pumping of water from the Testwood Reservoir in Hampshire.

Water Quality And Fisheries

In terms of water quality, the Island's rivers are mostly of good quality although there are some stretches of poor quality, while groundwater is of average quality. Particular stretches of rivers periodically suffer poor water quality, caused by specific discharges (e.g. from sewage treatment works). Water quality is difficult to maintain in the Eastern Yar, which is affected by low flows.

Tidal and estuary waters are generally of good quality. To assist in improving bathing water quality, and to conform with the requirements of the Urban Waste Water Treatment Directive, Southern Water is currently undertaking major investment to provide new wastewater treatment facilities for the Island, including the 'Seaclean Wight' project. In summary, this will involve the transfer of sewage flows from a number of small treatment works on the north coast of the Island to a modified existing works at Sandown, from which treated wastewater will be discharged through a new long sea pipeline into the deep waters of the English Channel.

The small size of the Island's rivers limits their potential for coarse fishing and they are not actively fished for salmonid species. Stretches of the Medina and Eastern Yar are designated as cyprinid fisheries and are typified by species such as roach and dace. The small headwater streams of these rivers contain populations of rainbow trout.

4.1.6 Air Quality

Although there is little monitoring of ambient concentrations, surveys undertaken indicate that air quality on the Island is generally very good. Only minor, short-term deteriorations occur and these are believed to be mainly attributable to road traffic. Current evidence suggests that industrial sources (both on the Island and on the mainland) have very little impact on air quality. The Agency is undertaking further assessment to confirm this view.

4.1.7 Population And Settlement Pattern

The resident population of the Island in 1995 was some 125,000, at which time the Office of National Statistics estimated that the Island's population would rise to 129,000 by 2011. The population almost doubles in the peak of the summer holiday season. The main towns, Ryde, Newport and Cowes, are located along the coast and rivers. Transport routes follow this traditional settlement pattern, with main roads around the circumference of the Island and north-south across the middle linking Newport with Shanklin and Sandown.

4.1.8 Industry And Employment

The Island is mainly rural with mixed farming, although intensive horticulture predominates in the Eastern Yar valley. A small but robust industrial sector exists, notably in the aerospace sector, but tourism and the leisure industry are dominant in the Island's economy, with Cowes and the Solent having an international reputation for yachting and watersports.

4.1.9 Tourism And Recreation

Tourism is a major industry on the Island and the protection and maintenance of the aesthetic quality of the water environment is essential for promoting its recreational value. Attractions related to the water environment include the coast and estuaries, the coloured sands of Alum Bay, the collapsing cliffs at the Chines, and specific events of national importance such as Cowes Week. The aesthetic quality of the coastal stretches and river corridors is being improved through restoration projects, such as the Chines Project and the Eastern Yar Valley Project.

4.1.10 Administration

Since 1994, a unitary authority - the Isle of Wight Council - has administered the Island. There are, in addition, a number of Parish Councils. The existence of a single tier authority, and the 'self-containment' afforded by island status, should facilitate an integrated approach to environmental management. This is discussed further in chapter 5.

4.2 THE ENVIRONMENT AGENCY'S VISION

The Environment Agency's overall vision is to secure a better environment in England and Wales for present and future generations. Our vision of the Isle of Wight, which has guided the preparation of this LEAP Consultation Draft, is set out below. We would welcome comments on this, as well as the issues and potential actions identified in the following chapters.

The Agency's vision is of an island:

- **which continues to be renowned for its environmental character and special qualities;**
- **whose population recognises the importance of the environment to economic and social well-being;**
- **where there is an understanding of concept of sustainable development and its application within decision making processes.**

5 ENVIRONMENTAL ISSUES AND OPTIONS FOR ACTION

5.1 INTRODUCTION

This section of the LEAP Consultation Draft details the environmental issues that the Agency considers need to be addressed within the Agency's future Action Plan for the Island. This preliminary list of issues has been identified by examining the current state of the Island's environment and the pressures upon it. A copy of the Environmental Overview, which provides the background to the issues, can be obtained from the Agency on request.

The Area Environment Group (AEG), whose members represent a wide range of interests on the Island, helped to define the issues. Discussion meetings were also held with various departments of the Isle of Wight Council, English Nature, the National Farmers Union and the National Trust. The Agency invited comment by correspondence with other organisations that have a specific interest in the Island's environment. Comments and ideas have been incorporated wherever possible and the Agency is grateful for the contribution of the time and effort from respondents and consultees.

This Consultation Draft is intended to encourage debate and to seek your views on the environmental issues that face the Island. Many of the issues are inter-related and this reflects the need for integrated environmental management.

5.2 CLASSIFICATION OF ISSUES

The issues are not arranged in any particular order of relative importance but have been grouped in accordance with the Environment Agency's 'Principal Concerns' which can be summarised as:

Addressing climate change - helping to ensure that greenhouse gas emissions meet their required targets

Improving Air Quality - ensure that our air is of a quality that is not affected by discharges from major industries

Managing Water Resources - ensure that our water resources are properly managed to provide water for all reasonable needs without harming the environment

Conserving and Enhancing Biodiversity - ensure that our wildlife is protected and their habitat increased

Managing Fisheries - ensure that our diverse and invaluable fisheries are protected and their habitats increased

Delivering integrated river basin management - ensure that all controlled waters are of sustainable quality for their different uses; that land and property is protected from flooding; and that opportunities for people to enjoy the water environment are protected and improved

Conserving the land - ensure that our land is conserved and protected from contamination, and encouraging the clean-up of contaminated land where it threatens water resources

Managing waste - ensure that our waste is managed safely

Regulating major industries – ensure that adverse effects on air, land and the water environment are minimised

The Environmental Overview makes reference to a number of additional issues that have not been brought forward into the Consultation Draft. These are:

- not specifically within the remit of the Environment Agency, although they could be addressed by other organisations; or

- matters which can be addressed by the Agency through its day to day responsibilities (such as regulating water abstraction licences, issuing discharge consents, and responding to planning applications).

The issues identified below for each Principal Concern are classified into 'high' and 'low' priority. High priority issues are of strategic importance and, if addressed, would bring benefits to more than one of the Agency's Principal Concerns. Low priority issues on the other hand are those which are of local importance and, if addressed, would bring more limited benefits.

5.3 PROPOSED ACTIONS

The following section gives a brief explanation of each issue and suggests potential options for action to address the issue. The advantages and disadvantages on each option are identified, together with the likely cost to the Agency and potential partners.
The potential cost to the Agency of each action has been categorised as either:

- High (H - above £250,000); or

- Medium (M - £50,000 - £250,000); or

- Low (L - below £50,000).

Whilst the cost of a "Do Nothing" option is shown to be nil, this can be misleading. In many cases the issue will need to be addressed at some time in the future, possibly at higher cost.

5.4 ADDRESSING CLIMATE CHANGE

High priority issue:

Although Greenhouse gas emmissions are small on the Island, in the wider context they contribute to a very significant issue.

5.4.1 Issue 1: The need for sustainable management of landfill gas

The UK Climate Change Impacts Review Group (CCIRG) indicates the following possible changes for Southern England:

- a rise in temperature at the rate of about 0.2^0C per decade;
- winter precipitation will increase while summer precipitation will decrease;
- potential evapotranspiration will increase;
- sea level will rise at the rate of about 5mm per year or 500mm per century.
- an increase in storm events

From this it can be inferred that riverine floods are likely to become more frequent. A rise in sea level creates an increased risk of coastal flooding and overtopping of coastal defences. This risk would be further increased if storm frequencies increase. The impact of climate change on flooding are considered below under the heading 'integrated river basin management'.

Rising sea levels will also reduce the extent of the intertidal zone, and associated habitats, between the high tide level and sea defences (coastal squeeze). This considered below under the heading 'biodiversity'. It is difficult to assess what the impact on groundwater recharge will be. However, climate change may result in lower river flows, and consequent lack of dilution for discharges.

A known cause of climate change is landfill gas, which is the product of the decomposition of organic waste within landfill sites. Whilst it contains many trace elements which give it odour, the most significant component of landfill gas is methane. Methane is a flammable, asphyxiate and powerful greenhouse gas. There are former and current landfill sites on the Island that are producing landfill gas at rates that either detrimentally affect the locality or could contribute to the greenhouse gases in the atmosphere.

Options for Action	Advantages	Disadvantages	Cost	Potential Partners
Do nothing	No resource demand	Landfill gas will be emitted to atmosphere contributing to climate change	Nil	-
Analyse the information on landfill gas emissions from landfill sites and prioritise sites where gas can be flared or used as a fuel to produce energy	Highlights those sites where action will be most beneficial in reducing the amount of methane emitted to atmosphere	Resource demand	L	IoWC
Set up projects with the operators of key sites to manage the enclosed flaring or energy recovery from landfill gas	Partnership approach to solving an environmental problem. Will apply statutory power to the issue of gas control	Resource demand.	L	IoWC IWSL

Low priority issue:

None identified.

5.5 IMPROVING AIR QUALITY

High priority issue:

No high priority issues identified.

Low priority issue:

5.5.1 Issue 2: Additional monitoring data are required to assess the contribution to local air quality of certain emissions from industrial processes both on and off the Island

The Isle of Wight Council's "Draft Review of Air Quality on the Isle of Wight" (1997) indicates that air quality on the Island is generally good. Data measurements for Nitrogen Dioxide and Benzene indicate that current levels are below national standards. In the absence of a monitoring station on the Island there is limited background data.

Options	Advantages	Disadvantages	Cost	Potential Partners
No action (do nothing)	None	Uncertainty as to need to regulate further emissions	Nil	-
Monitoring	Firm evidence of actual combined impacts and need for further controls on emissions	Cannot monitor everywhere. Unclear as to source of high concentrations (may be off Island)	L	IoWC Industry
Modelling	Indication of combined impacts and need for further controls on emissions	Models are only indicative of a problem	L	IoWC Industry

MANAGING WATER RESOURCES

High Priority Issue:

5.6.1 Issue 3: The Islands ground and surface water resources are heavily committed, although the existing abstraction licenses are not fully utilised. Full exploitation of these could effect biodiversity and reduce the dilution of pollutants.

Full exploitation of abstraction licences have the potential to result in adverse environmental effects particularly in light of climate change. The minimum reliable yield of the Island's sources of supply in the mid 1970s was some 30 Ml/d, which was lower than the average weekday demand of 47Ml. Supply restrictions were therefore imposed and Southern Water Authority carried out significant investment in mains reinforcement, leakage reduction, and developing new sources of supply, such as the Medina-Yar Transfer Scheme and the Lower Greensand Groundwater Schemes. The most significant new source of supply, however, was the 'Cross Solent Main', which involves the pumping of water from Testwood in Hampshire to the Island via a pipe under the Solent.

There are now sufficient licensed public water supply abstractions to meet the demand for water on the Island. To ensure that its standards of service are maintained and overcome the risk of an Island source failing, however, Southern Water continues to pump water from Testwood in Hampshire. This takes the pressure off the Island's water resources which, if exploited fully, could lead to adverse environmental effects, notably loss of biodiversity.
Opportunities to recycle water on the Island, by putting treated water from sewage treatment plants into rivers or by recharging groundwater, are limited. This is because of the potential adverse impacts on water quality, where rivers have low summer flows which offer little dilution to pollution and where aquifers are heavily used for public water supply necessitating rigorous groundwater protection.

Water demand has effectively been reduced through metering and the replacement of leaking pipes. In 1988 the Island was chosen as the largest pilot scheme area for metering trials. Over 51,000 domestic properties had meters installed during the period 1989/90. The impact of metering and the initial variable tariff reduced demand by over 20%. The universal installation of meters greatly assisted in the identification of leakage in mains or consumer service pipes.

In the light of the above, the options described below focus on opportunities to reduce further the demand for water on the Island.

Options	Advantages	Disadvantages	Cost	Potential Partners
No action (do nothing)	None	Potential for full exploitation of licences, which could result in adverse environmental effects.	Nil	
Develop water resources strategy to seek to ensure more effective sustainable management of water resources by Southern Water (e.g. water re-use and recycling)	Increase retention of water in the catchment	Difficult to achieve in practice, in view of Seaclean Wight and limited dilution in the Island's rivers	M	Southern Water
Introduce licensing for trickle irrigation	Increased control of summer abstraction rates. Protection of licensed abstractions	Limitations on trickle irrigation, which would adversely affect farming	L	
Promote best practice irrigation techniques to improve the efficiency and sustainability of agricultural irrigation	Would reduce water consumption	Potential high cost to farmers	L	Southern Water, NFU

Unlicensed trickle irrigation is also an important use of water. The abstractions are centred on the Arreton Valley, where water is used extensively for horticultural purposes. Recent voluntary abstraction returns suggest that more than 250,000 m^3 is used annually and this demand is rising. The current DETR licensing review is likely to bring trickle irrigation under licence control. This is of considerable concern to growers who rely on trickle irrigation but may have difficulty in obtaining a licence under current policy.

5.6.2 Issue 4: If abstraction for trickle irrigation becomes licensable the Agency will need to carefully evaluate every application.

Options will be dependant upon forthcoming legislation.

Low Priority Issue:

None identified

5.7 CONSERVING AND ENHANCING BIODIVERSITY

High Priority Issue:

5.7.1 Issue 5: The impact of the EC Nature Conservation Directive on the Agency is complex and substantial.

The Island has a large number and area of European designated conservation sites. The Solent and Southampton Water Special Protection Area (SPA), notified under the EC Directive on Wild Birds, includes several Isle of Wight SSSIs. It qualifies for designation because of the nationally important populations of little tern, sandwich tern, Roseate tern, common tern and Mediterranean gull that the area supports.

The Island also contains four candidate Special Areas of Conservation (SACs), designated under the EC Habitats Directive: the Solent Maritime, South Wight Maritime; the Isle of Wight Lagoons; and Isle of Wight Downs. The Solent and Southampton Water SPA has also been designated as a 'Ramsar Site', under the 1971 Convention on the Conservation of Wetlands of International Importance.

The EC Habitats Directive, through the UK Habitats Regulations and Planning Policy Guidance Note 9, invests a number of responsibilities on the Agency as a 'Competent Authority' in all its capacities as an operator, regulator and influencer. In particular the Agency is required to review consents and authorisations in the light of information on their effects on conservation sites designated under the Habitats Directive (e.g. SPAs).

To provide a framework for conservation management, the Directive requires English nature to produce conservation objectives and 'Schemes of Management' for SACs.

Options	Advantages	Disadvantages	Cost	Potential Partners
No action (do nothing)		Possible non-compliance with Habitats Directive	Nil	
Train Agency staff and work with English Nature to establish a framework within which to carry out responsibilities under the Habitats Directive	Fulfilment of role as competent authority, in accordance with the Habitats Directive		M	IoWC, English Nature

5.7.2 Issue 6: Over-engineered rivers, particularly the River Yar, with low biodiversity value

The Island's rivers have been engineered (deepened and straightened) in the past to increase their drainage capacity. This has had detrimental effects on the biodiversity of river corridors and the continuity between in-stream and marginal habitats.

Substantial work has been undertaken in the Yar Valley, particularly under the East Yar Valley Project. The Project, which forms part of Island 2000 and started in 1994, focuses on areas of the Eastern Yar river floodplain designated as SSSI. As an integrated land and water management project covering 75 sq. km (one fifth of the Isle of Wight's land surface), it aims to restore the natural river and floodplain based upon a total catchment approach.

Options	Advantages	Disadvantages	Cost	Potential Partners
No action (do nothing)	None	Retention of watercourses in a damaged state	L	
Work with other interests to ensure that the objectives of the East Yar Valley Project are met.	Restoration to near-natural river and floodplain with consequent increase in biodiversity	Short-term disturbance to biodiversity in local area	H	Island 2000 English Nature
Promote greater use by farmers and landowners of the Countryside Stewardship and Salt Marsh Schemes	Some increase in biodiversity, and reduction in diffuse pollution, without adversely affecting farm incomes	None identified	L	Countryside Commission English Nature Farmers Landowners
Appoint an officer with responsibility for promotion and implementation of stewardship schemes	Greater increase in biodiversity, and reduction in diffuse pollution, without adversely affecting farm incomes	None identified	H	

Due to the expansion of intensive agriculture, the traditional grazing management of wetland pastures, which is beneficial in terms of nature conservation, is declining. Intensive agriculture also results in diffuse pollution of surface and groundwater. The Countryside Stewardship Scheme, administered by the Countryside Commission, could help to alleviate these problems by compensating for the reduced agricultural yield of the land.

The Salt Marsh Scheme, which forms one of the options under 'set-aside', aims to restore saltmarsh areas. It could provide a useful mechanism for the implementation of the Eastern Yar Valley Project, and is also applicable in the Western Yar Estuary and the Medina Estuary and could make a positive contribution to biodiversity on the Island.

Low Priority Issue:

5.7.3 Issue 7: The biodiversity value of Wootton Mill Pond, situated between two SSSIs and partly owned by the Agency, is currently low

Wootton Mill Pond, which lies between the Wootton Creek and Firestone Copse SSSIs, is partly owned by the Agency. The biodiversity value of the pond is currently low, and it is considered to have an adverse effect on the two adjacent SSSIs.

Options	**Advantages**	**Disadvantages**	**Cost**	**Potential Partners**
No action (do nothing)	None identified		L	
Examine why the biodiversity value is low and establish programme for restoration	Increase in biodiversity and amenity value	None identified	L	Joint owner IoWC

5.8 FISHERIES

High Priority Issue:

5.8.1 Issue 8: Lack of additional regulation and promotion of fisheries on the Island is potentially resulting in some unlicensed activities.

Despite the availability of high quality fishing on the Island, it is not widely perceived as an important venue for fishing. There is some evidence of unlicensed removal of eels and fish from the Island and illegal sale of fish brought in from the mainland.

Options	Advantages	Disadvantages	Cost	Potential Partners
No action (do nothing)	None	Continued illegal activities	Nil	
Produce publicity and information about fishing on the Island, drawing attention to the Agency's role and the need for licences	Could help to promote the Island's fisheries and reduce illegal activities	May not be effective at reducing illegal activities	L	Fishing clubs
Increase resources based on the Island	Island based regulation and promotion of Island's fisheries	Cost	M	Fishing clubs

Low Priority Issue:

None identified

5.9 DELIVERING INTEGRATED RIVER BASIN MANAGEMENT (WATER QUALITY)

High Priority Issue:

5.9.1 Issue 9: Due to the existance of Nitrate Vunerable Zones (NVZ) on the Island and the Groundwater Regulations, the disposal of sewage sludge and exempt wastes needs to be closely monitored.

In view of the increasing landfill costs and the statutory cessation of disposing sewage sludge at sea, appraisal of other disposal and recycling options must be undertaken. The recycling of sewage sludge to agriculture may represent the best practicable environmental option for sludge in many cases, but all other options must be considered (e.g. landfill and incineration) in each individual situation. Agency policy is to support the use of sludge in agriculture where this recycling route is the best option. Monitoring is required to ensure that it is carried out in ways, and in places, that do not cause harm to the environment.

Agreement has been made such that, as a precautionary approach only treated sewage sludge will be allowed to be spread on agricultural land and a matrix drawn up detailing safe spreading.

The Environment Agency Southern Region has recently agreed a Regional Strategy for the Disposal of Sewage Sludge on Farmland. In summary, this seeks to ensure compliance with exemption conditions and appropriate enforcement by the Agency's Environment Protection officers.

Options	Advantages	Disadvantages	Cost	Potential Partners
No action (do nothing)	None	Potential harm to the environment, resulting from lack of knowledge and inappropriate recycling of sewage sludge on land	Nil	
Develop increased monitoring programme.	Awareness of potential harm to the environment and remedial action. Improved public perception	Resource implications	M	IoWC Landowners / farmers

5.9.2 Issue 10: The Islands community and economy places considerable reliance upon Bathing Water Quality.

The Island economy is highly reliant upon maintaining Bathing Water Quality.

The Bathing Waters Directive (76/160/EEC) protects the environment and the health of bathers using identified bathing waters by reducing pollution entering identified bathing areas (of which there are 13 around the Isle of Wight). The Directive contains standards for 19 microbiological, physical and chemical parameters to assess bathing water quality.

One EC Bathing Water on the Island failed to comply with the Directive in 1996 and three failed in 1997. In 1997 two Bathing Waters complied with the more stringent guideline standards. Whilst achievement of guideline standards is not a statutory driver, the Agency endeavours to ensure compliance with them. It is recognised that there is a need for investment in sewage treatment works and combined sewer overflows (CSOs), and this is being addressed through Southern Water's Seaclean Wight project and other initiatives.

Options	Advantages	Disadvantages	Cost	Potential Partners
No action (do nothing)	-	Lower probability of compliance with Directive	Nil	
Ensure that Southern Water's investment programme meets outstanding and new commitments within agreed timescales	Greater probability of compliance with Directive		L	Southern Water

Low Priority Issue:

5.9.3 Issue 11: Diffuse pollution is known to occur on the Island although the precise scale is unknown.

Diffuse pollution of watercourses occurs from developed areas and intensive agriculture.

The following non-consented discharges are known to have an adverse effect on the Island's water quality:

- possible leaching/pollution from former landfills in chalk/sand quarries;
- intermittent break out of leachate into the Medina from Stag Lane closed landfill;
- potential pollution of groundwater and surface watercourses from leakage of septic tanks (domestic effluent is discharged to septic tanks in rural areas, from approximately 30,000 households);

- diffuse pollution from urban land uses and construction sites;
- pollution of surface watercourses and groundwater from pesticides, nitrates and diffuse pollution sources from agricultural intensification

Options	**Advantages**	**Disadvantages**	**Cost**	**Potential Partners**
No Action (Do Nothing)	-	Continued problem of diffuse pollution	Nil	
Influence planning decisions and promote use of best practice	Implementation of good engineering features. Amelioration of rapid run-off Environmental gain	Cost and land availability	M/H	IoWC Highways Authority Farmers & NFU Land Owners
Pollution Prevention Campaigns	Raises awareness of causes of pollution. Highlights potential means to deal with them	Time and resources	L/M	IoWC Highways Authority Farmers & NFU Land Owners

5.10 DELIVERING INTERATED RIVER BASIN MANAGEMENT (PROTECTION AGAINST FLOODING)

High Priority Issue:

5.10.1 Issue 12: Standards of flood defences need to be continually reviewed due to climate change

The most significant sea defence on the Island is the sea wall at Sandown. The Agency also maintains flood defences at Bembridge and Yarmouth. The principal areas currently at risk from coastal flooding are in Sandown, St Helens, and Cowes. Also some areas of marsh and agricultural land are at risk, as is reclaimed land between St Helens and Bembridge.

The future planning of sea defences needs to take account of possible sea level rise due to climate change. Changes to mean sea level are much smaller than the short-term changes due to tides, surges and waves. However, only a slight rise in mean sea level may amplify the frequency of extreme water levels caused by storm surges. MAFF allows for an increase of 6 mm/year when appraising its flood defences in the Agency's Southern region and this value is taken into account and schemes are designed for 60 years of sea-level rise.

Options	Advantages	Disadvantages	Cost	Potential Partners
No action (do nothing)	Short term cost savings	Defences would deteriorate and fail, with low lying areas on the coast becoming inter-tidal	L (short term - long term could be H)	-
Detailed risk assessment and input to SMP Strategy Plans	Reduction of future risk	May be seen to conflict with SMP, which is intended to be an agreed Plan	H	IoWC

5.10.2 Issue 13: Further development within areas liable to flood will increase the scale of Issue 12, and will increase risks and costs to society in the future.

Further development in low lying areas would put people and property at risk from flooding

New development, redevelopment, and landraising can have significant implications for flood risk. Within river and coastal floodplains, new development may be liable to flooding and increase the risk of flooding (including tidal inundation) elsewhere by reducing the storage capacity of the floodplain and impeding flood flows.

Whilst the Agency does not have the powers to prevent development in areas liable to flood, it can object to such proposals through its role as statutory consultee with respect to development plans and planning applications. The Agency is currently preparing a planning strategy for the Hampshire and Isle of Wight Area which will address the issue of

development in the floodplain in some detail. Section 105 maps, indicating areas liable to flooding, are currently being prepared by the Agency. The Isle of Wight UDP contains a policy that seeks to resist development in areas liable to flooding.

Development pressures on low lying areas around the Island's towns can be considerable because of the emphasis on regeneration and the need to avoid major development in areas protected for their landscape value. Despite the efforts of the Agency and its predecessor the NRA to resist these pressures, some development in areas liable to flooding has occurred in recent years - notably in the Yaverland area to the north of Sandown.

Options	**Advantages**	**Disadvantages**	**Cost**	**Potential Partners**
No action (do nothing)	None	Potential for further development in areas liable to flooding and loss of biodiversity value	Nil	-
Publicise the issue of flooding in local papers	Reduction in proposals for development in areas liable to flooding	None	L	IoWC, developers and the general public
Ensure that the IoWC, through responses to consultation on planning applications, is fully aware of the potential consequences of development in areas liable to flooding, and the impact of development on flood risk elsewhere.	Reduction in planning permissions for development in areas liable to flooding	None	M	IoWC, developers and the general public

Low Priority Issue:

None identified.

5.11 DELIVERING INTEGRATED RIVER BASIN MANAGEMENT: PEOPLE'S ENJOYMENT OF THE WATER ENVIRONMENT

High Priority Issue:

None identified.

Low Priority Issue:

5.11.1 Issue 14: The Island is famous for its boating activities and the aesthetic quality of its coastal landscape. The importance of these resources to the Island is clear environmentally and financially.

The aesthetic quality of the Island's estuaries and coastal waters is reduced by discharges of untreated sewage and/or chemicals from boats.

Whilst normal quantities of untreated sewage and/or chemicals discharged from boats does not pose a significant threat to water quality, it can be unsightly and detracts from people's enjoyment of the estuaries and coastal waters. Current problems are reported at Bembridge, Cowes, Newport and Yarmouth.

Options	Advantages	Disadvantages	Cost	Potential Partners
No action (do nothing)	-	Decline in aesthetic quality	-	-
Raise awareness of the issue amongst boat owners/clubs	Could reduce discharges into the estuaries/coastal waters	None identified	L	Harbour Masters Yacht clubs
Promote the improvement of facilities for safe disposal at moorings	Beneficial to the image of the Island	Difficult to achieve in practice; odour problems etc.	M	Harbour Masters Yacht clubs Southern Water

5.11.2 Issue 15: Opportunities for informal recreation associated with the Island's inland water environment are currently limited

The Agency has a commitment to provide for and promote informal water recreation, having regard to other environmental factors. This is particularly relevant in areas where the Agency owns or has control over land or water. Whilst the Island has a well-developed network of public rights of way, there is scope to improve opportunities for informal recreation (such as walking and cycling) and interpretation facilities associated with rivers and inland waterbodies, and make best use of existing facilities, such as the Newport-Sandown railway.

Improved access to the Island's inland water environment for informal recreation, for example through the provision of 'greenways' along river corridors, could also help to reduce people's reliance on the car for short journeys and also contribute to opportunities for green tourism.

Options	Advantages	Disadvantages	Cost	Potential Partners
No action (do nothing)	None	Limited opportunities for informal recreation	Nil	
Identify and promote opportunities for informal recreation in association with flood defence schemes and conservation projects	Improved opportunities for informal recreation associated with the inland water environment	Health and safety considerations. Agreement of landowners.	L	IoWC Landowners Ramblers clubs Tourist Board
Seek to ensure, through the planning process, that access for informal recreation is made or protected within new developments.	Improved opportunities for informal recreation associated with the inland water environment	Health and safety considerations. Agreement of landowners.	L	IoWC Landowners Ramblers clubs Tourist Board

5.12 CONSERVING THE LAND

High Priority Issue:

5.12.1 Issue 16: The traditional landscape character and features of the Island's river corridors have deteriorated

The combination of extensive river engineering, land drainage for agricultural purposes, and insensitive development has reduced the character and quality of the Island's river corridors and floodplain areas. Partly as a result of this, the distinctiveness of the Island's separate catchments has diminished.

Changes in the Island's landscape character are noted in the landscape assessment work undertaken by the Countryside Commission. Additional, more detailed landscape assessment information is required to inform the Agency's day to day activities and to provide a basis for a programme of restoration and enhancement.

Options	**Advantages**	**Disadvantages**	**Cost**	**Potential Partners**
No action (do nothing)	-	Absence of landscape assessment information	Nil	-
Liaise with Island 2000 with respect to Agency involvement in landscape restoration/enhance -ment projects	May result in improvements to the Island's rivers and floodplain areas	Improvement likely to be piecemeal, rather than strategic	L	Island 2000, IoWC
Undertake detailed landscape assessment of river corridors and floodplain areas	Would inform the Agency's day to day activities and provide a basis for a programme of restoration and enhancement	None identified	M	Island 2000, IoWC

5.13 MANAGING WASTE

High Priority Issue:

5.13.1 Issue 17: Sustainable waste management cannot be achieved on the Island in the long term with the current levels of waste generation combined with the existing waste management infrastructure

The solid waste produced from quarrying, construction and demolition, agriculture, other industry and commerce, and households, presents a significant stress on the Island's environment. The Refuse Derived Fuel (RDF) plant at Newport currently helps to achieve recycling targets and to divert large quantities of waste away from landfill.

Island Waste Services currently promotes waste minimisation and recycling (through separation at source). There is also a current Waste Management Licence application for a green waste composting facility.

The potential for increasing the amount of municipal waste recycled or composted on the Island will depend on a number of factors including finding suitable sites for collection banks, instigating kerb-side recycling schemes, and increasing public participation. However, the relatively small amount of waste generated on the Island limits the economic viability of running recycling plants and the market on the Island for the recycled products is small. Transporting of waste or recycled products on or off the Island is expensive and may not be the Best Practical Environmental Option. In summary, there are both economic and practical difficulties in encouraging further recycling.

Options	Advantages	Disadvantages	Cost	Potential Partners
No action (do nothing)	None	Increased pressure on existing resources and need for landfill sites in sensitive areas	Nil	
Promote waste minimisation through education of the public and industry	Amount of waste is reduced	None identified	L	Island Waste Services IoWC
Support IoWC initiatives to improve recycling facilities at household waste site and kerbside collection of recyclable waste	Increased recycling of waste	Land use planning requirements	L	IoWC
Help to assess Best Practical Environmental Option for waste	A more sustainable approach to waste management	BPEO may be difficult to establish and implement; also may be public perception problems with some options	L	Island Waste Services IoWC

5.14 REGULATING MAJOR INDUSTRIES

High Priority Issue:

None identified

Low Priority Issue:

None identified

5.15 SUMMARY OF ISSUES FOR THE LEAP

1. The need for the sustainable management of landfill gas.
2. Additional monitoring data are required to assess the contribution to local air quality of certain emissions from industrial processes both on and off the Island.
3. Full exploitation of abstraction licences have the potential to result in adverse environmental effects particularly in light of climate change.
4. If abstraction for trickle irrigation becomes licensable the Agency will need to carefully evaluate every application.
5. The impact of the EC Nature Conservation Directives on the Agency is complex and substantial.
6. Over-engineered rivers, particularly the River Yar, have low biodiversity value.
7. The biodiversity value of Wootton Mill Pond, situated between two SSSIs and partly owned by the Agency, is currently low.
8. Lack of additional regulation and promotion of fisheries on the Island is potentially resulting in some unlicensed activities.
9. Disposal of sewage sludge and exempt waste are not adequately monitored.
10. The Island economy is highly reliant upon maintaining bathing water.
11. Diffuse pollution of watercourses occurs from developed areas and intensive agriculture.
12. Standards of flood defences need to be continually reviewed due to climate change.
13. Further development in low-lying areas would increase the number of people and property at risk from flooding.
14. The aesthetic quality of the Island's estuaries and coastal waters is reduced by discharges of untreated sewage and/or chemicals from boats.
15. Opportunities for informal recreation associated with the Island's inland water environment are currently limited.
16. The traditional landscape character and features of the Island's river corridors have deteriorated.
17. Sustainable waste management cannot be achieved on the Island in the long term with the current levels of waste generation combined with the existing waste management infrastructure.

6 A BETTER ENVIRONMENT THROUGH PARTNERSHIP

Many of the issues addressed in this LEAP Consultation Draft relate closely to the principles of 'sustainable development'. In other words, they are concerned with the needs and aspirations of future generations of Island residents and visitors, as well as our own. They aim to:

- address the causes of climate change, such as landfill gas emissions, and its likely effects, such as rising sea levels and the implications of this for the Island's flood defences;
- secure positive management and protection of the Island's landscape character and significant nature conservation resources, whilst respecting economic concerns;
- enhance the environment where it has been degraded in the past, including many of the Island's rivers which have lost their natural character due to insensitive river engineering, low flows, and diminished water quality;
- encourage more efficient use of the Island's water resources;
- reduce the amount of waste generated on the Island, and encourage an integrated approach to waste management;
- increase opportunities for people to enjoy the natural environment and to travel around the Island by means other than private cars.

The Agency alone cannot achieve these aims; we have neither the statutory powers, nor the resources and technical expertise. For this reason we will continue to work in partnership with the Isle of Wight Council and other agencies.

6.1 THE PARTNERSHIP APPROACH

The Environmental Overview makes reference to a variety of current projects involving partnership between the Agency and different organisations. These include initiatives with: Island 2000 with respect to environmental conservation and enhancement projects, notably

- The Eastern Yar Valley Project;
- English Nature with respect to Estuary Management Plans;
- The Council and others with respect to coastal management, the Shoreline Management Plan and oil spill contingency planning;
- English Nature and the Council to ensure that the requirements of the EC nature conservation directives are met;
- Southern Water with respect to water demand management and leakage control;
- The Council and Island Waste Services Ltd with respect to waste minimisation.

Indeed, the Island has a strong track record in integrated environmental management. For this reason, and because of the advantages afforded by its island status and the presence of a single tier local authority, the Agency believes that there is every opportunity to promote the

Island as a place at the forefront of the application of the principles of sustainable development.

To meet this challenge will require the Agency and partner organisations to develop an appropriate policy framework, together with high a level of public interest and support. The Agency's proposed contribution to this process is outlined below.

6.2 LEAP PLAN

The final LEAP Plan will take account of the results of consultation and will be produced by December 1999. It will contain a list of actions for the Agency to take in partnership with a range of organisations. Chapter 5 of this Consultation Draft LEAP already identifies potential partners.

6.3 ISLE OF WIGHT STATE OF THE ENVIRONMENT REPORT

The Agency will support the production of the Council's State of the Environment Report. This will help develop people's understanding of environmental and sustainability issues on the Island, and thereby equip them better to participate in the Local Agenda 21 process (see below). It will also complement the LEAP in providing an information base and set of principles against which to assess policies and initiatives put forward by the Council and others.

6.4 LOCAL AGENDA 21 PROCESS

The Agency recognises that the Local Agenda 21 process, one of the main outcomes of the 1992 World Summit on the environment, should play a key role in defining and seeking to resolve environmental issues of concern to people on the Island. We will therefore assist in developing the process on the Island, by providing information and support as appropriate.

6.5 LIAISON WITH THE ISLE OF WIGHT COUNCIL

The Agency relies on the Council's co-operation with respect to certain issues, such as the protection from development of areas liable to flood. To assist this, we are consulted on development plan policies and proposals and certain planning applications. A successful partnership between the Agency and the Isle of Wight Council is essential in developing integrated policies and initiatives that accord with the principles of sustainable development. The Agency will therefore liaise regularly with the Council officers and elected members with a view to developing rapport and mutual understanding of each other's concerns.

6.6 AREA ENVIRONMENT GROUP (AEG)

The AEG comprises representatives of a wide range of interests on the Island including Council Officers and elected members, landowners, farmers, industrialists, and voluntary organisations. The Group meets on a quarterly basis at different locations on the Island. Its purpose is to advise the Agency on local environmental issues and opportunities for partnerships, and to provide feedback on Environment Agency initiatives, including the LEAP. To this extent, the AEG is a form of partnership with the public. Its contribution is highly valued by the Agency.

6.7 AGENCY OFFICE ON THE ISLAND

Environment Agency representation on the Island is limited, and most liaison is through correspondence with the Agency's Area Office in Winchester. We recognise that this limits the effectiveness of our work on the Island. The problem has been highlighted specifically with respect to the promotion and regulation of the Island's fisheries.

Budgetary constraints are such that it is not feasible to provide a 'one-stop-shop' type of arrangement on the Island, whereby all the Agency's functions are accessible to the population. However, we will endeavour to enhance rapport and people's knowledge of the Agency by devoting more staff resources to the Island and by publicising the Agency's activities more extensively.

MANAGEMENT AND CONTACTS:

The Environment Agency delivers a service to its customers, with the emphasis on authority and accountability at the most local level possible. It aims to be cost-effective and efficient and to offer the best service and value for money.

Head Office is responsible for overall policy and relationships with national bodies including Government.

Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol BS32 4UD
Tel: 01454 624 400 Fax: 01454 624 409

Internet World Wide Web www.environment-agency.gov.uk

ENVIRONMENT AGENCY REGIONAL OFFICES

ANGLIAN
Kingfisher House
Goldhay Way
Orton Goldhay
Peterborough PE2 5ZR
Tel: 01733 371 811
Fax: 01733 231 840

MIDLANDS
Sapphire East
550 Streetsbrook Road
Solihull B91 1QT
Tel: 0121 711 2324
Fax: 0121 711 5824

NORTH EAST
Rivers House
21 Park Square South
Leeds LS1 2QG
Tel: 0113 244 0191
Fax: 0113 246 1889

NORTH WEST
Richard Fairclough House
Knutsford Road
Warrington WA4 1HG
Tel: 01925 653 999
Fax: 01925 415 961

SOUTHERN
Guildbourne House
Chatsworth Road
Worthing
West Sussex BN11 1LD
Tel: 01903 832 000
Fax: 01903 821 832

SOUTH WEST
Manley House
Kestrel Way
Exeter EX2 7LQ
Tel: 01392 444 000
Fax: 01392 444 238

THAMES
Kings Meadow House
Kings Meadow Road
Reading RG1 8DQ
Tel: 0118 953 5000
Fax: 0118 950 0388

WELSH
Rivers House/Plas-yr-Afon
St Mellons Business Park
St Mellons
Cardiff CF3 0LT
Tel: 01222 770 088
Fax: 01222 798 555

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

ENVIRONMENT AGENCY GENERAL ENQUIRY LINE
0645 333 111

The 24-hour emergency hotline number for reporting all environmental incidents relating to air, land and water.

ENVIRONMENT AGENCY EMERGENCY HOTLINE
0800 80 70 60

ENVIRONMENT AGENCY

SO - 03/99 - 0.4k - C - BDMO Printed on Recycled Environment Agency Coated Paper