

water for life and livelihoods

River basin planning: summary of
significant water management issues
South East River Basin District



Foreword

The environment in the South East River Basin District is very special. It is a major reason why people want to live in this part of the country, and our coasts, estuaries, rivers and lakes attract visitors from all over the world.

However, the environment continues to face some important challenges. We want to protect waters in our River Basin Districts, and improve their quality for the benefit of people and wildlife. The new river basin planning approach is a great opportunity to do this in partnership with many people and organisations.

'River Basin Planning: Working Together', published in December 2006, was the first step in developing a Management Plan for our River Basin District. This *'Significant Issues'* report is the next step, and summarises the main issues affecting the water environment. It has been prepared with the South East River Basin District liaison panel, whose members endorse it for consultation.

We want more naturally functioning urban and rural waters, providing a full range of services including clean water for drinking, bathing, communities and economic use. There must be more sustainable amounts of water in rivers, groundwater and wetlands, and diverse habitats for wildlife that lives in and around these places. We want a protected and improved natural landscape, and will promote the value of recreation and contact with the natural world.

We want to do this by using cost-effective and innovative solutions, dealing with pollution at source where possible, and making sure that everyone plays their part.

I hope you will join us in this work, and help us create a better place.



Howard Davidson

**Regional Director, Environment Agency Southern
Chair, South East River Basin District Liaison Panel**

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Cover image: View of the river Rother from the church tower at St Mary the Virgin, Rye

1 River basin planning

River basin planning¹ is a new approach to managing our water environment. It gives us the chance to manage and improve all our water bodies, including rivers, lakes, groundwater, estuaries and our coastal waters, as a single whole. This great opportunity is what lies at the heart of the Water Framework Directive.

The Water Framework Directive provides a valuable structure for introducing climate change impacts into water management and river basin planning. It offers the opportunity to better assess impacts on our water environment and can co-ordinate not only the demand for water in various sectors but also their capacity for supporting water management adaptation.

To bring this new way of working about, the Environment Agency will need to identify specific environmental objectives for each water body (see Annex 1 in the Supporting Document) and develop a River Basin Management Plan which sets out what we and others need to do to achieve them.

One of the most important first steps is to identify the significant water management issues for our River Basin District. Set out below are the headline objectives at a national level, but we want your help to deliver these locally.

We want to see over time:

Clean water for drinking, bathing, communities and economic uses	Protecting water from point source pollution, including discharges from sewage treatment works and industry. Protecting water from diffuse pollution, including the impacts from activities such as farming and transport.
Wiser, sustainable use of water	Ensuring enough water supply for public and commercial use whilst managing the impact on aquatic life caused by abstraction and other artificial flow pressures.
Better habitats for wildlife that lives in and around water	Improving rivers, estuaries and shorelines where they have been damaged by navigation, flood defences and the legacy of our industrial past.
Protected and improved native aquatic wildlife	Protecting ecosystems from the damage caused by the introduction of alien plant and animal species. Reducing pollution generally associated with farming and industrial activities. Protecting and improving the condition of wetlands.
Protected natural landscapes and more opportunities for recreation	Protecting and improving characteristic and valuable landscapes and recreational features.

¹ River Basin Planning is a key element of the Water Framework Directive (2000/60/EC)

2 Why we want your views

The South East River Basin District liaison panel², which is made up of key organisations, wants to create a better environment in the River Basin District (RBD). We would like you to play your part by getting involved in the river basin planning process.

This consultation document sets out what we believe are the most significant issues that face the South East RBD. These are raised early in the process to give you time to consider how best to address them. The information and proposals may affect you, your environmental interests or your business, and we want to know what you think. Your comments will help us to prioritise the work and identify the areas where environmental improvements are needed most.

Over the next two years, we will work together with different sectors, including industry, conservation groups and organisations, farming representatives and others who have an interest in our work and how we intend to manage the water environment in the future. Through the river basin planning process we will discuss and agree what we can do to make the environmental improvements we seek, who will need to get involved and how we will pay for it.

By contributing to this consultation you will be helping to improve our water environment in the South East. We aim to make it as straightforward as possible for you to do this.

Thank you for helping us to create a better place now and for future generations.

Gathering your views

This consultation runs from 24 July 2007 to 24 January 2008.

At the [end of the document](#) we set out the questions we would like you to consider and give details about how to return your comments.

² You can find more information about the Water Framework Directive, the South East River Basin District and liaison panel at www.environment-agency.gov.uk/wfd.

Figure 1 Main stages of the first river basin management cycle

Name of document	Main content of document	Purpose of document	
River Basin Characterisation (Article 5 Characterisation Report)	Analysis of the characteristics of each River Basin District, a review of the impact of human activity on the condition of surface water and groundwater, and an economic analysis of water use.	To establish an initial characterisation of the River Basin District and to direct future monitoring.	December 2004
River Basin Planning: Working Together (Statement of Steps and Consultation Measures)	A timetable, stakeholder engagement and proposed work programme for the production of the River Basin Management Plan,	To shape how we will engage with private and public sector organisations whose activities and interests are likely to be affected by the River Basin Management Plans.	December 2006
River Basin Planning: Summary of Significant Water Management Issues	An early overview of the main pressures and impacts that will need to be addressed in the River Basin Management Plans and the likely implications of doing so for specific sectors and groups.	To consult on the main issues that will need to be addressed by the River Basin Management Plans and engage those who will be affected by measures to address them.	July 2007
River Basin Planning: Draft River Basin Management Plan	The proposed environmental objectives for water bodies and proposed programmes of measures required to achieve them, including some different approaches.	To show the reasons for and consult on the proposed objectives for water bodies, and on the measures that will be required to meet them.	December 2008
River Basin Planning: River Basin Management Plan (2009-2015)	The environmental objectives identified for water bodies in the River Basin District and a summary of the programme of measures required to achieve them.	To provide a strategic plan that sets out broad policies and proposals to underpin the management of the water environment in each River Basin District.	December 2009

3 The South East River Basin District

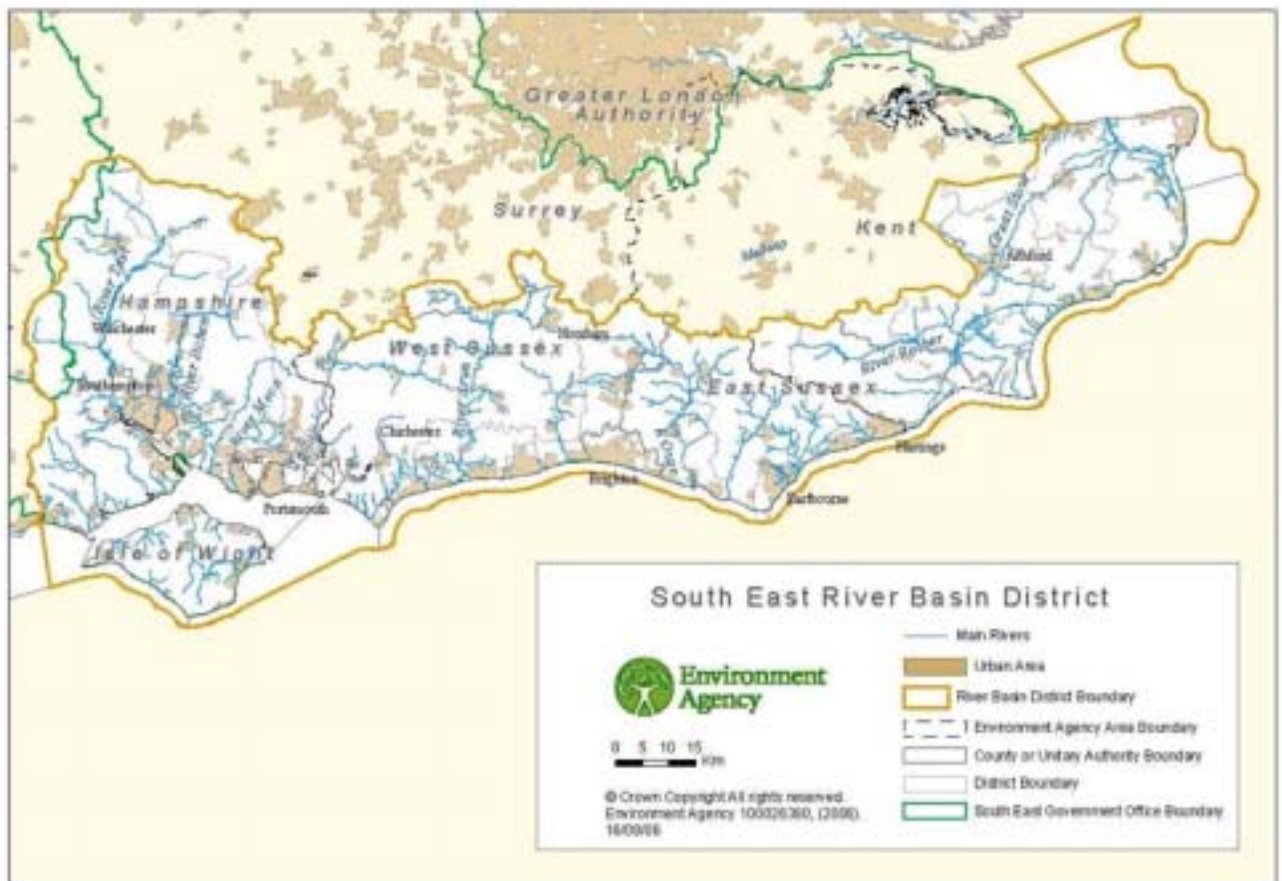
Our River Basin District is home to over 3.1 million people, and covers over 10,000 square kilometres from Hampshire and the Isle of Wight to eastern Kent. The landscape, which includes the rural heritage of the South Downs, is rich and varied. Our long busy coastline includes the major urban centres of Brighton and Hove, Southampton and Portsmouth.

There is biodiversity of national and international importance. For example, 13 sites have been designated Special Areas of Conservation under the Habitats Directive, covering a total of 694 square kilometres. Otters are returning after several years. Two of the main chalk rivers, the Test and the Itchen, have the last vestiges of wild salmon populations in this area. Many rivers support a rich diversity of fauna and flora.

However, the environment is constantly under pressure from competing demands on space and natural resources, as well as from a range of natural forces such as sea level rise.

If you want to know more about the main characteristics of the RBD, please refer to Annex 2.

Figure 2 Map of the South East River Basin District



4 What are the significant issues and how can we tackle them

The Environment Agency has worked together with the members of the South East River Basin District liaison panel to identify our significant water management issues. We think these are:

- abstraction and other artificial flow regulation
- nitrates
- organic pollution
- pesticides
- phosphates
- physical modification (estuaries and coasts)
- physical modification (rivers and lakes)
- sediment
- urban and transport pollution pressures.

To identify the significant issues for this report, we assessed a list of pressures or 'potential issues'. These may have arisen from current human activity (for example the presence of nitrate and phosphorous in rivers due to run-off from agricultural land); historic activity (for example contamination of rivers from metals usually associated with abandoned mines); or development for the future (for example increasing abstraction to satisfy demand for public water supplies).

The significant issues are those requiring the most attention – either through implementing existing measures, or developing new measures to deal with them.

The Water Framework Directive also provides a valuable structure for introducing climate change impacts into water management and river basin planning. The growth in housing and associated infrastructure, industry, and the effects of climate change has been taken into account in determining these significant issues. We will build on this work as we prepare the draft River Basin Management Plan. Managing flooding and coastal erosion are important in many River Basin Districts, these are dealt with in more detail as part of the Catchment Flood Management and Shoreline Management planning processes.

This report groups the above significant water management issues under the following headings, according to the sectors and activities involved (the relevant significant issues are in brackets):

- [Diffuse pollution from rural areas](#) (nitrates, organic pollution, pesticides, phosphates, sediment)
- [Diffuse pollution from urban areas and transport](#) (nitrates, organic pollution, pesticides, phosphates, sediment, urban and transport pollution pressures)
- [Flow problems](#) (abstraction and other artificial flow regulation, physical modification – rivers and lakes)
- [Physical modifications](#) (abstraction and other artificial flow regulation, physical modification – estuaries and coasts, physical modification – rivers and lakes)
- [Point source pollution](#) (nitrates, organic pollution, pesticides, phosphates).

Acidification, alien species, commercial fisheries, faecal indicator organisms, mines and minewaters, metals, priority hazardous substances and chlorinated solvents, and recreation were issues not selected as significant in our River Basin District.

We want your views on whether we have correctly identified the significant issues, and whether there are others that should be included. When we consult on the draft River Basin Management Plan next year, we will consider all of the water management issues that still need solutions in more detail, even if we did not identify them as a significant water management issue.

We will all need to work together to create a comprehensive range of successful measures to tackle all these issues. New or modified measures might need existing mechanisms such as legislation and economic instruments to enforce them, or they could be voluntary and rely on local initiatives and partnerships.

Supporting information

This consultation document only contains a summary of the information that we have discussed to date. If you would like to see anything in more detail you can read the supporting information which includes:

- summary notes on the Water Framework Directive (Annex 1)
- main characteristics of the South East River Basin District (Annex 2)
- how we decided what the significant water management issues are for the South East RBD (Annex 3)
- descriptions of the pressures (potential issues) we assessed (Annex 4)
- examples of activities and sectors associated with the full list of pressures (potential issues) we assessed (Annex 5)
- possible types of measures to address the significant water management issues (Annex 6)
- how possible measures and scenarios are assessed (Annex 7).

Wider environmental issues

As well as the significant water management issues identified above, there are also wider environmental issues within the South East River Basin District, which may influence or be influenced by the River Basin Management Plan. These are identified through the Strategic Environmental Assessment scoping work and may include issues such as population, archaeology, biodiversity, soils and contaminated land, and climate change.

The Strategic Environmental Assessment scoping document will be out for consultation from late summer 2007. If you would like to see this please contact:

- Carol Peirce, NEAS, Environment Agency, Guildbourne House, Chatsworth Road, Worthing BN11 1LD.
- Email: carol.peirce@environment-agency.gov.uk

4.1 Diffuse pollution from rural areas

Significant water management issues: nitrates, organic pollution, pesticides, phosphates, sediment

Some 60 per cent of land in our River Basin District is under agricultural use. This includes some of the most important areas of England for growing vegetables, fruit, flowers, salad crops and nursery stock. Nutrients, pesticides, organic waste and sediment from farms are still polluting some water bodies in the River Basin District. The quantities from individual farms may be small, but the cumulative effect is substantial.

Agriculture in our River Basin District is a contributor of phosphate to freshwaters, along with other sources such as sewage treatment works. In high concentrations, this can lead to eutrophication, where the growth of algae and other plants reduces overall biodiversity. There is also a rising trend in nitrate pollution of groundwater due to a legacy of increased use of nitrogen fertiliser and from the post-war ploughing of grassland – which can subsequently impact on the rivers, estuaries and ecosystems supported by these groundwaters. It is expensive to treat water for public supply if it has elevated concentrations of nitrates, and it will be difficult to fund adequate measures. The Nitrates Directive Action Programme is one such measure, which may be revised to extend our ability to tackle nitrate pollution.

Organic pollution reduces the amount of oxygen dissolved in waterbodies, which can have major impacts on aquatic life. It can run off yard areas or fields and growing areas when slurry, manure, sewage sludge or manufactured fertilisers are applied. Nationally, pesticide pollution in rivers has declined owing to a combination of regulation and voluntary adoption of best practice, but it can still cause serious damage to plant and animal life. Further measures are necessary to improve pesticide storage, handling and use in rural and urban areas.

Just over half of all horticultural crops grown in Kent, Sussex and Hampshire are within areas that naturally have a medium to high risk of soil loss. Soil loss can be increased by poor land management practices. This can cause siltation, with silt particles carrying pesticides and other pollutants into waters. Sediment pollution also impacts on soil as a resource, aquatic ecosystems such as salmon and trout fisheries, and local flood risk.

Measures such as buffer strips, good soil management and changes to the timing of fertiliser application can improve the ecological status of water bodies and can be achieved through advice, information and education. Partnership projects such as the Catchment Sensitive Farming Delivery Initiative and Landcare Partnerships are examples of voluntary approaches to securing sustainable land management practices.

Where these issues occur:

58 per cent of the length of river water bodies in our River Basin District (RBD) is either at risk or probably at risk of failing Water Framework Directive objectives by 2015, due to diffuse agricultural pressures. For pesticides and sheep dip this figure is 26 per cent. About 70 per cent of the area of groundwater is at risk or probably at risk from diffuse nutrient nitrogen.

Monitoring by the Environment Agency has shown high nitrate concentrations in groundwater at Littlehampton and Arundel.

Chalk rivers in the RBD are particularly sensitive to the impacts of diffuse pollution, with concerns ranging from poor plant diversity to health of fly life.

Soil loss from a field in the South East River Basin District**What we already do about this:**

- enforce requirements of regulations including Nitrates Directive (Nitrate Vulnerable Zones, Source Protection Zones), Groundwater Regulations, Silage Slurry and Fuel Oil Regulations, Sludge (Use in Agriculture) Regulations
- Sheep Dip Pollution Reduction Programme
- environmental stewardship schemes
- codes of good agricultural practice
- Catchment Sensitive Farming on the Rivers Itchen and Test, Pevensey Levels, Sandwich Bay to Hacklinge Marsh and Walland Marsh
- partnership project work such as Landcare on the Isle of Wight and in Sussex
- National Pesticides Voluntary Initiative.

additional measures we could put in place:

- The Treasury to review the case for taxes
- Land use policies to reflect social and economic value in agricultural production
- amended Sludge (Use in Agriculture) regulations
- Nitrate Vulnerable Zone extension if announced following 2006 review
- review and consider raising minimum requirements for nutrient and soil management under Cross Compliance and environmental stewardship entry
- extend assurance schemes such as Assured Combinable Crops (ACC), Red Tractor and LEAF
- extension of National Pesticides Voluntary Initiative
- extended use of Catchment Sensitive Farming
- local voluntary initiatives and partnerships for example to promote flagship agri-environment schemes
- develop/improve catchment approaches to delivering farm specific advice.

Sectors involved:

- agriculture
- forestry
- conservation
- fisheries
- Government agencies
- industry
- water industry.

4.2 Diffuse pollution from urban areas and transport

Significant water management issues: nitrates, organic pollution, pesticides, phosphates, sediment, urban and transport pollution

As economic, industrial and housing development continues, we are seeing increasing problems related to runoff from urbanisation and roads. Over 200,000 additional dwellings are planned in the River Basin District between 2006 and 2026, along with associated infrastructure. Road traffic is projected to grow by 28 per cent by 2016 across England.

Diffuse nutrients such as phosphate and other pollutants such as pesticides and sediment can enter waters via misconnections to the sewerage network. Rain and other water draining from hard surfaces also carries pollution into rivers, groundwater, lakes, estuaries and coasts. This includes runoff from roads, driveways, roofs, car parks, construction sites and gardens, litter, car washing and industrial spills. In many places, 'combined' sewers receive this surface water runoff. In rural locations, highway runoff often discharges to fields, which makes problems associated with agricultural runoff worse. Extreme runoff events are likely to become more frequent in the south east as predicted climate change impacts are more strongly felt.

Discharge of sewage in storm conditions through Combined Sewer Overflows may also be damaging. Although diluted by rainwater, the diluted sewage contributes nutrients and has been found to reduce dissolved oxygen levels by stirring up sediments. Climate change will worsen impacts with more severe storm events.

We need to plan growth and investment so that it doesn't impact on our ability to manage sewerage networks and improve water quality. In the right places, sustainable urban drainage systems (SUDS) will have a role to play. The SUDS approach may help us control the quantity and quality of run-off by slowing rates of runoff and trapping pollutants. It may also help us manage water resources better by allowing us to hold onto our water for longer.

Where these issues occur:

14.7 per cent of the length of river water bodies in our River Basin District is at risk or probably at risk from diffuse urban pollution.

Following restoration of a length of the Hermitage Stream in Hampshire in 1999, it continued to fail its River Quality Objectives and biological quality was poor. The Environment Agency worked with Southern Water to reduce misconnections from surface water outfalls, and as a result the Biological Oxygen Demand is now complying with the RQO standards. Biological Oxygen Demand (BOD) is a measure of the degree of pollution by biodegradable organic matter.

Draining surface water run-off from an urban area and roads, Sussex



What we already do about this:

- upgrade combined sewer overflows through Water Company Asset Management Plans
- capital maintenance works to address leaking sewers
- consider drainage issues in the development planning process
- place buffer strips and other pollution control measures on the road network
- cleanse gully-pots to remove sources of bacteria
- regulate disposal of waste to land
- pollution prevention work including targeted campaigns
- partnership projects such as the Green Blue to help deal with boating issues.

Additional measures we could put in place:

- General Binding Rules for activities that contribute to urban diffuse pollution, for example to require sewerage misconnections to be dealt with at change of house ownership
- further works to improve combined sewers through the Asset Management Plan process
- factor the effect of climate change into sewer design
- more integrated planning of urban drainage
- greater use of sustainable urban and road drainage systems in appropriate areas, and retrofitting measures such as rainwater tanks where feasible.
- new voluntary codes of practice aimed at septic tank users.

Sectors involved:

- conservation
- fisheries
- Government agencies
- industry
- local authorities
- power generation
- recreation, culture and sport
- urban and transport, including developers
- water industry.

4.3 Flow problems

Significant water management issues: abstraction and other artificial flow regulation, physical modification (rivers and lakes)

The way we use water in our homes, gardens and businesses has a direct impact on the water environment. We need to manage water use sustainably, to provide long term protection for the environment and a resource for society.

About 66 per cent of the water used for potable supply in the South East River Basin District comes from groundwater. The rest comes from rivers and reservoirs. The district has the small reservoirs of Weir Wood, Darwell, Powder Mill, Bough Beech, Ardingly and Arlington, which contribute to the public water supply and agriculture. There are a few water transfer schemes within the region to ensure that sufficient water is available for public supply.

By far the largest demand for water in the River Basin District comes from public water supply, although there are a large number of smaller abstractions that supply agriculture and industrial uses. Southern Water is the main Water Company operating in the River Basin District. Bournemouth and West Hampshire Water, Folkestone and Dover Water, Mid Kent Water, Portsmouth Water, South East Water and Sutton and Surrey East Water also supply water in the district.

Unsustainable abstraction causes ecological problems in rivers and estuaries by reducing river flows and levels, and can lower the level of groundwater. The South East region is currently water stressed both in terms of overall water resources, and the public water supply. Climate change is expected to exacerbate water stress in the region. There is potentially enough water in the south east to meet the rising demand for new housing and domestic consumption, but only with the timely provision of new water resources and high water efficiency savings in existing and new homes.

Restricted or low flows can lead to the concentration of nutrients such as phosphate and nitrate in waters. This can result in eutrophication. More frequent periods of low rainfall are expected under current climate change scenarios, and this will increase the environmental impact of flow problems.

Physical modifications such as canalised, over-widened or poorly managed river channels, and structures such as weirs, can also cause flow problems. These artificial changes in flow can affect the ecology of rivers and lakes.

Where these issues occur:
Our River Basin District (RBD) has 15 rivers and 32 out of 44 Water Resource Management Units that are either unsustainably abstracted or over licenced.
Approximately 11 per cent of river water bodies, and over 55 per cent of the area of groundwater water bodies in the RBD are either at risk or probably at risk of failing Water Framework Directive objectives as a result of abstraction and other artificial flow regulation.



What we already do about this:

- water resources regulation, including licencing, consenting and prohibition practices
- Water Company Water Resource Plans including development of new water resources and demand management
- Environment Agency Catchment Abstraction Management Strategies
- 'Restoring Sustainable Abstraction' programme
- review abstraction consents under the Habitats Directive
- encourage water efficiency and domestic rainwater harvesting.

Additional measures we could put in place:

- more effective demand management, for example installing meters in existing and new properties, influencing building regulations, use of smart tariffs, and market development for water efficiency devices
- spatial planning to favour development in areas with a sustainable water supply
- examine role of effluent re-use
- water industry and agriculture to develop additional storage
- habitat restoration.

Sectors involved:

- agriculture
- conservation
- fisheries
- Government agencies
- industry
- local authorities
- power generation
- urban including developers
- water industry.

4.4 Physical modifications

Significant water management issues: physical modification (rivers and lakes), physical modification (estuaries and coasts)

The South East River Basin District is one of the most heavily modified parts of the country, and many modifications are essential to sustainable development – for example, 11 per cent of land in the South East region is at risk of flooding. Managing flooding will continue to be necessary, especially in light of predicted sea level rise and the increased storm surges and more frequent heavy rain associated with climate change, and will require increased funding.

Physical modification can affect the ecological health of our waters by preventing natural habitats forming and migrating. For example, hard flood defences can hinder the conservation of saltmarshes and mudflats, and constrain the ecological potential of rivers. Dredging of rivers for land drainage or navigation purposes has the potential for significant ecological impact. In estuaries and coastal areas, dredging has been closely regulated and monitored for many years. Where appropriate, we should review dredging practices to ensure we meet Water Framework Directive objectives. Weirs and other structures in river channels can stop migratory fish such as salmon from getting to their traditional spawning grounds. Some alterations such as over-widening rivers can cause flow problems, as mentioned in [section 4.3](#)).

Over recent years we have been developing environmentally friendly ways of managing waters by creating new wetlands and coastal habitats, restoring rivers and enabling sustainable drainage. The planned Marine Bill should offer provide additional mechanisms for addressing Water Framework Directive objectives on coasts.

Some water bodies with physical alterations will be designated as either ‘artificial’ or ‘heavily modified’. We will designate these in 2009.

Where these issues occur:

It is estimated that 76 per cent of coastal area in the RBD is at risk from morphological pressures. 84 per cent of the length of river water bodies, and 96 per cent of estuarine area is at risk or probably at risk.

In the Solent the distance between high and low tides has reduced by between 50 per cent and 90 per cent in places. This consequence of hard sea defences is known as ‘coastal squeeze’.

Nun’s stream, Winchester



What we already do about this:

- produce Catchment Flood Management Plans and Shoreline Management Plans that agree policies for sustainable flood risk management
- regulate and consent dredging activity to reduce the risk of harm to the environment
- promote river naturalisation through the development planning process
- habitat enhancement work such as installing eel and fish passes and buffer strips.

<p>Additional measures we could put in place:</p> <ul style="list-style-type: none"> • remove and modify obstructions to fish passage including weirs and tidal gates • switch to soft flood defences in floodplains and on coasts • restore natural floodplains and coastal environments and re-naturalise rivers and intertidal habitats • modify dredging regimes, especially in rivers, and review dredging practices where appropriate • raise awareness to prevent bank damage by river boat traffic, livestock, horses and aquaculture. 	<p>Sectors involved:</p> <ul style="list-style-type: none"> • agriculture • forestry • conservation • fisheries • Government agencies • industry • local authorities • recreation culture and sport • urban and transport, including developers • navigation • ports.
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4.5 Point source pollution

Significant water management issues: nitrates, organic pollution, pesticides, phosphate

Sewage and industrial effluent is controlled in order to limit releases of nutrients and other pollutants to the environment. Altogether there are over ten thousand consented discharges in the South East River Basin District.

Pollutants from 'point sources' still cause environmental impact on surface waters and groundwater in our RBD. In places, the environment is coming close to reaching its capacity to accept any more treated sewage. [Urban and transport diffuse pollution](#) that runs into drains and discharges from combined sewer outflows also falls under point source pollution.

Sewage is primarily composed of organic matter, which can lower oxygen levels in water as it is broken down by micro-organisms. Ammonia, a component of organic pollution, can be highly toxic to fish and other aquatic life. Work is needed to reduce the level of pesticides entering the wastewater network, through work with urban land managers and others.

The impact of phosphate is most apparent in fresh waters, and usually originates from human sewage and phosphate in detergents. Sewage treatment is a major point source contributor of nitrates to groundwater, coastal waters and estuaries, where it can also lead to eutrophication. Locally, agricultural and industrial sources can also produce nitrate pressures on the environment.

Industry investment has led to great progress in reducing point source pollution, but it is likely that we will need to do more to meet the aims of the Water Framework Directive. The treatment processes required to further reduce concentrations of nutrients are expensive and can have wider environmental impacts, for instance through the increased use of energy and the amount of sewage sludge produced. When planning action, these negative aspects need to be balanced with the ecological benefits of extra treatment. It will therefore be essential to make major efforts to reduce nutrient and pesticide pollution at source.

Where these issues occur:

It has been estimated that 20 per cent of the length of river water in our River Basin District is at risk or probably at risk of failing Water Framework Directive objectives by 2015. This is due to point discharges of nutrients such as phosphate and nitrate. Pressure from new development will increase the challenge.

Current discharges of nitrates from wastewater treatment works are believed to be affecting the integrity of European wildlife sites at Southampton Water, Portsmouth Harbour, Solent Maritime, Chichester and Langstone Harbours, and Solent and Isle of Wight Lagoons.

Southern Water treatment works at Ashford



What we already do about this:

- over £500M of investment in wastewater treatment between 2004 and 2009 through Southern Water's Asset Management Plan
- discharge consent permitting system managed by the Environment Agency
- activities linked to the Pollution Prevention and Control (PPC) Regulations.

<p>Additional measures we could put in place:</p> <ul style="list-style-type: none"> • national controls and customer persuasion to limit phosphorous in detergents • enhance levels of effluent treatment • improve combined sewers to reduce overflows • put in place Water Cycle Strategies • manage or reduce intensity and impact of point aquaculture emissions • complement these activities with catchment sensitive/low nitrogen farming practices. 	<p>Sectors involved:</p> <ul style="list-style-type: none"> • agriculture • conservation • fisheries • Government agencies • Industry • local authorities • urban • water industry.
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5 Your views

Thank you for your time in considering this consultation document.

If you wish to contribute, please complete the online consultation at www.environment-agency.gov.uk/wfd

By using the online consultation, you will be able to see other responses and allow people to see your responses if you wish. You will also find an electronic version of this document to download.

Alternatively you send a reply in writing to

- Lee Spicer-Howard, Environment Agency (Southern Region), Regional Strategy Unit, Guildbourne House, Chatsworth Road, Worthing, W Sussex, BN11 1LD
- Email: southeastrbd@environment-agency.gov.uk

Consultation questions

Consultation question 1

a) Have we correctly identified the significant water management issues?

Score Score 1 to 4, where 1 = strongly agree, 2 = agree
3 = disagree, 4 = strongly disagree.

b) What other significant water management issues do you think we should have identified?

c) What else would you change, and why?

Consultation question 2

a) Have we correctly identified the types of measures and the sectors involved for each significant water management issue?

Score Score 1 to 4, where 1 = strongly agree, 2 = agree
3 = disagree, 4 = strongly disagree.

b) What other types of measures not listed in this document do you think we should consider? For example, actions that you or your organisation could take?

c) What else would you change, and why?

Please let us know if you would like to receive further information about river basin management in the South East River Basin District and how you would prefer us to communicate with you.

Data Protection Notice

The information you provide will be used by the Environment Agency to produce the first South East River Basin Management Plan in 2009. We may need to use your personal information to contact you during this consultation period, in the way you indicate, in order to clarify comments. We may make your information available to members of the South East River Basin District liaison panel, or our agents/representatives to do these things on our behalf. If you do not want us to contact please let us know.

Under the Freedom of Information Act 2000 and Environmental Information Regulations 2004 we are required to disclose information that we hold on request, subject to the exemptions/ exceptions and the 'public interest test' set out in the legislation.

Compliance with the Government's Code of Practice on Consultation

This consultation is being run in accordance with the criteria set out in the [Government's Code of Practice on Consultation](#)³.

If you have any queries or complaints about the conduct of the consultation, please contact:

- Cath Beaver, Consultation Co-ordinator, Environment Agency, Rio House, Aztec West, Bristol BS32 4UD.
- Email: cath.beaver@environment-agency.gov.uk

³ <http://www.cabinetoffice.gov.uk/regulation/consultation/code/index.asp>

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incident hotline 0800 80 70 60 (24hrs)

floodline 0845 988 1188

Translation into local community languages is available on request