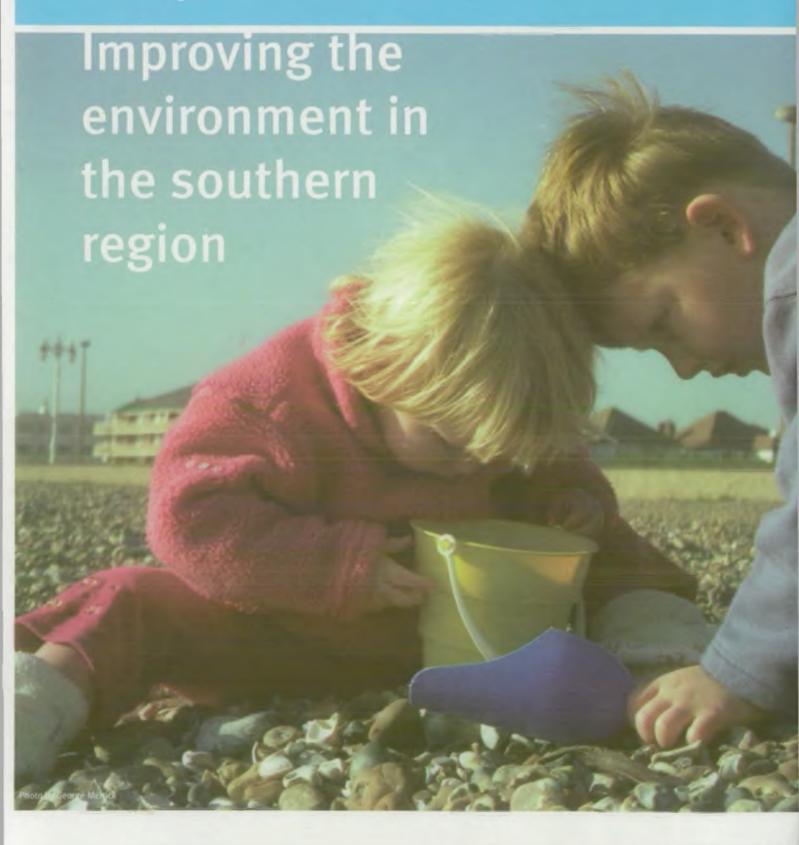


Creating a better place

Southern Region Local Contribution 2006/11



We are the Environment Agency. It's our job to look after your environment and make it a better place - for you, and for future generations.

Your environment is the air you breathe, the water you drink and the ground you walk on. Working with business, Government and society as a whole, we are making your environment cleaner and healthier.

The Environment Agency. Out there, making your environment

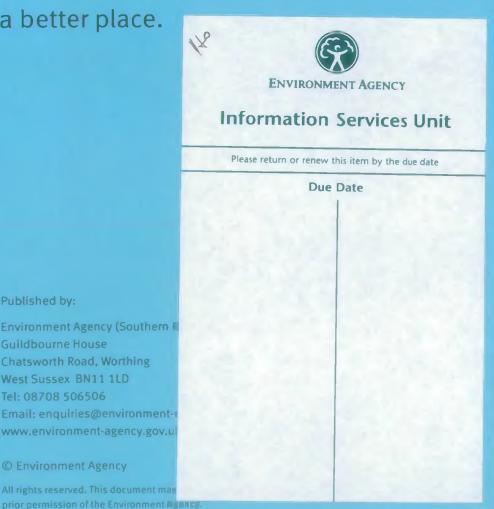
a better place.

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Howard Davidson

Howard Davidson

Regional Director

Foreword

We have an environmental vision – a better place for people and wildlife. Our corporate strategy 'Creating a better place' explains how we will work towards that vision and sets out our goals for the next five years. This work will happen nationally, regionally and locally. This is the contribution of the southern region.

In the south of England we are fortunate to share one of the finest environments in the country. We recognise how important our role is in creating an even better place. To achieve this, we are extremely committed to our vision and the work we set out in this document.

Our 1250 kilometres of coastline include some of the cleanest bathing beaches in Europe, with stretches of outstanding beauty and sites of international importance. We have 11,000 kilometres of rivers, some internationally renowned such as the Test, Itchen and Medway. Most are now the cleanest they have been since the Industrial Revolution and are home to a vast range of wildlife as well as supporting many leisure activities. Large areas of the region are formally protected, with 40% classed as an area of outstanding natural beauty. There are 49 European sites protected under the Habitats Regulations and 378 sites of special scientific interest. We also have the New Forest National Park and another is proposed for the South Downs.

It isn't surprising that lots of people want to share this environment. Almost 4.7 million people live here and proposed development will bring hundreds of thousands of new homes. This popularity brings pressures which influence our priorities and plans over the next five years.

Our five main priorities for the environment are responding to development pressure and managing water resources, flood risk water quality and waste. Managing health and working safely will always be a priority. We will also concentrate on modernising our regulatory work, improving our focus on customers and being more efficient in the way we work. We will also lead by example and aim for the highest standards for our own environmental performance.

Our work to develop 'state of the environment' assessments will continue. We will use reports and on-line information to track changes in the environment and encourage others to take action and use resources wisely.

We asked all our teams what they could do to create a better place in the southern region and we talked to our main partners to find out what they wanted us to do. This is a summary of their feedback and how we are turning it into action. To support this document, we have a five-year plan showing what we will do and how we will go about achieving all of our aims. We will use it to set out more detailed business plans for all our teams and track progress from year to year. In this way, Creating a better place will be an essential part of our work until 2011.



Our strategy creating a better place

We published our 20-year vision for the environment in 2001 - 'a better place for people and wildlife for present and future generations'.

What we want

To achieve our vision, we will meet nine environmental goals.



We want:

- 1 better quality of life for people; and
- 2 a better environment for wildlife.

This means we need to protect and improve the three elements of the environment and provide:

- 3 cleaner air for everyone;
- 4 improved and protected inland and coastal waters; and
- 5 restored, protected land with healthy soils.

To do this, we also need to make some major changes and help everybody achieve:

- 6 a greener business world; and
- 7 wiser, long-term use of natural resources.

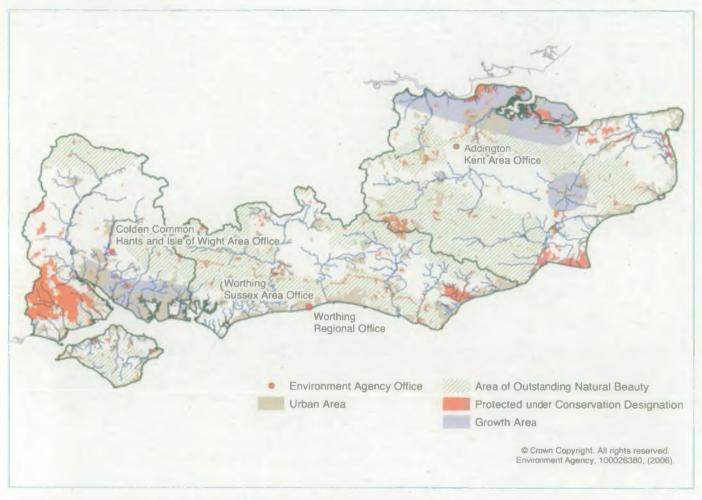
We need to manage two very real risks by:

- 8 limiting and adapting to climate change; and
- 9 reducing flood risk.

In our first corporate strategy, Making it happen, we set out plans for our first five years. We achieved a great deal. Working with businesses, we have controlled and reduced harmful releases to the environment. Our air and water in rivers and on the coast is now cleaner and safer than it has ever been. Otter and sea-trout populations are slowly increasing. More waste is recycled and composted than ever before. More people are protected against flooding and more people receive a better flood-warning service.

Creating a better place describes what we will do to work towards our vision over the next five years. We can't achieve our aims alone. So, this document explains what we will do and how we will work with others from 2006 to 2011.

About us



The Environment Agency in the southern region

It's our job to look after your environment and make it a better place to live. We work with businesses, industry and farmers to reduce waste and prevent pollution. We manage water resources and monitor water quality to make sure it's safe and clean and supports healthy habitats and wildlife. We also manage, build and look after flood defences, warn people of the risks of flooding, and advise on development relating to flood risk and where lack of water is a

problem. Our work covers navigation, fisheries and recreation. and we work with our partners to involve more people in enjoying and caring for their environment.

The southern region is made up of three areas roughly following county boundaries – Hampshire and the Isle of Wight, Sussex and Kent. We employ nearly 1000 people across the region. Over the next five years we will invest around £275 million to reduce flood risk and spend

about £80 million each year as an operating budget. We receive grants from the Government and raise some income from charges through our regulatory duties. We aim to get further funds from other sources and by working in partnership. We also influence millions of pounds of investment across the region by making sure our main partners place the environment at the heart of their plans for development.



New houses by Photofusion/Martin Bond

Our priorities for the environment over the next five years

New development

The south east is one of the UK's fastest-growing regions, with plans for maintaining performance alongside the world's leading regions. We have a vital role to play to make sure that the environment is at the heart of policy development and decision-making for the south east. Unless we look after our environment, we will not keep the quality of life that is so important to the region's success.

Over the next 20 years, hundreds of thousands of new homes will be built. This includes major growth in areas such as Ashford, the Thames Gateway and south Hampshire, but around 70% of new development will take place outside these areas so the challenges are widespread. We will respond to growth of the region by setting out our 20-year vision for the south east and working with our partners to make sure it is widely supported.

We will make clear recommendations about what needs to be planned and put in place before development to make sure the environment is protected and that we create communities where people want to live and work. now and in the future. This means having enough water for public supply, without damage to the environment, and adequate sewage treatment without risks to water quality and the wildlife and habitat that depends on it.

New waste-handling sites will be needed to make sure we meet tougher targets for reducing and reusing waste. There will be increasing pressure for developments in the flood plain so we need long-term plans for flood protection, looking at needs, costs and sources of funding.

Our plans for new development

must recognise the legal duties to protect the natural environment under the Habitats Regulations and Water Framework Directive. We will also work with our partners to make sure all new buildings have the best environmental standards of water and energy efficiency and with practical waste management. New building must include green spaces, allowing wildlife to thrive and more people to enjoy the environment.

Water resources

The south is one of the driest parts of the country. Making sure there is enough water for people and the environment is a difficult balancing act. With a population of almost 4.7 million, and growing, the pressures are mounting. Climate change will add to that pressure, with summers that are drier and hotter, and the changes will be felt in this region more than most.

We will make sure that both managing demand and developing new resources are more widely accepted and turned into action. We will work with our partners to deal with the growing demand for water. We have an important advisory and influencing role to help change attitudes and

behaviours towards how we use water.

We will support the use of more water meters and the marketing and wider availability of water-saving measures. Over the next five years we expect to see continuing reductions in water companies' leakage levels and will encourage plans for further cuts beyond 2011. The public will be better informed over how to conserve water. There will be high levels of water efficiency in all new homes and more water-saving devices fitted in existing homes.

We will investigate the environmental effects and benefits of a number of new reservoir proposals and work closely with water companies to decide which developments are necessary. This will give a long-term future for secure water supplies for the region, balanced against environmental need.

Meeting the Habitats Regulations brings challenges for managing water resources. All licences to take water from the environment that we show to have negative effects on important wildlife sites must be changed. We will work with water companies to carry out our recommendations and maintain secure water supplies across the region.



Weir wood reservoir - photo by Philip Prydderch, Environment Agency



Leigh barrier, holding back flood water - photo by Environment Agency

Managing flood risk

With 1250 kilometres of coastline, 3540 kilometres of main river and the effects of climate change causing rising sea levels and wetter, stormier winters, managing flood risk in the south will continue to be a major priority.

We will produce 100-year flood-risk management plans and make these a central part of our business. They will define our long-term policies and action plans to manage flood risk and we will make sure they become an important information resource for planning developments and making decisions.

We will fully understand the condition of all river and coastal defences and have clear plans for where and when they will be improved. Over the next five years, our improvement work will mean that more than 20,000 extra properties and people who live and work in them will benefit from reduced flood risk. However, we must also recognise that floods are natural events. Traditional approaches to protection aren't an answer to all risk. We have to find more imaginative solutions that bring wider benefits, to protect people and property and for health, recreation and wildlife. This will include changing the alignment or moving defences further back where this is the best way to manage flood risk over the long term.

Whatever we do, we can't remove all risks of flooding so we will continue to improve our forecasting and warning service. We will make sure that we reach all communities at risk. They will get more accurate

and better-targeted flood warnings, and people will understand what to do if there is a flood.

Water quality

Water quality is already under pressure in this region. Improvements made over the last decade are at risk as the growing population means more treated sewage wastewater needs to be released into rivers and coastal waters. Recent droughts and lower flows in summer due to climate change bring more risks for the quality of river water and the natural environment. Dealing with pollution from sources that we don't regulate, such as water from roads and agricultural land are major difficulties for the region.

We have a strategy to tackle waterquality issues for rivers, groundwater and coastal waters which will help us stay on course to meet the Water Framework Directive, By 2008, we will have identified the programme of measures to bring the necessary improvements across the region and we will work with our partners to carry them out. Finishing the work required by the Habitats Regulations will be a priority. Our work will tell us the changes that need to be made to permits and licences affecting important wildlife sites and we will work with water

companies and other licence holders to make sure these sites are restored to a favourable condition.

New development will continue to be an area we pay special attention to. There are complicated issues involved. In some cases, we are reaching the technological limits for sewage treatment. In some areas, the local rivers do not offer enough dilution for the amount of treated sewage that will be produced and we have to look at options for transferring it to other locations. Our work will help identify the investments needed so that sewage treatment is carefully planned and in place before development goes ahead.

Waste

We produce too much waste and dealing with it is an increasing problem. New development and population growth will mean waste production continues to grow unless we take action. Tougher targets, new regulations and a lack of landfill space are driving the need for change. The south east region has set out its 25-year strategy to make sure we achieve a major diversion from landfill, reduce our waste production and increase the percentage of waste recycled and reused.

We have an important role to help with meeting these aims. We will make sure we collect good-quality information and use it to interpret latest trends and report on progress. We will also work with our main partners in the Regional **Assembly and Regional** Development Agency to support business growth in handling, processing and reusing waste. We will advise district and county councils on carrying out their responsibilities, and we will especially concentrate on managing agricultural, dangerous and construction and demolition wastes. We will target our resources where the risks to the environment are the highest and will take a strong line on environmental crime and illegal activities.

The following pages give a summary of the main aims we want to achieve between 2006 and 2011. These support the priority work areas as well as other important issues we want to tackle. Our fiveyear aims are organised under the environmental goals and as improvements in how we will carry out our work.



Water quality sampling - photo by Ray Kemp



Photo by Environment Agency

A better quality of life

'Everyone will have the opportunity to enjoy a high-quality environment now and for future generations. More people will care for, use, appreciate and enjoy their environment.'

A clean and healthy environment, rich in wildlife, is one of the biggest contributors to a better quality of life. All of our work under the nine environmental goals will help this aim but there are specific areas and issues we want to tackle to bring about 'quality of life' improvements.

We will help to improve some of the poorer local environments across our region by involving more people in caring for and improving their local environment, particularly in disadvantaged communities. We will concentrate on where our regulation work can help. We will also promote healthier lifestyles

through increased recreation opportunities and we will improve our information and monitoring to help others to act.

We will make sure the environment is given more emphasis in development planning, and draw especially on our experiences on the Ashford and Thames Gateway plans. Urban areas will have more green spaces, and development will take place along with creating more habitats and recreation opportunities.

We will achieve this by doing the following.

 Setting out our 20-year vision for the south-east region and the needs of the environment. We will ask for the support of all major partners including the Regional Assembly, South East England Development Agency, Ofwat, the water companies and others, and

work closely with them to turn the vision into a reality.

- Influencing all major plans and strategies affecting the region. Our environmental messages will be included with economic and social issues at the heart of the South East Plan, the Regional Economic Strategy, sustainable community strategies, and local area agreements, investment frameworks and development frameworks.
- Promoting environmentallyfriendly and efficient construction and design methods and getting them adopted as normal practice. All new development in the region will be built to at least EcoHomes Very Good standards (for water and energy efficiency) or the equivalent standard under the Code for Sustainable Homes.



Allington tock, Medway Navigation - photo by Environment Agency

- Influencing new major development and regeneration schemes so that these contribute to an improved environment and more recreational opportunities. We will object to proposals for unsuitable development in floodrisk areas. We will make sure that new development includes green spaces for wildlife, public access and recreation and uses drainage systems which control run-off close to where the water comes from.
- Increasing our work with primary care trusts, the Health Protection Agency and local authorities. The positive and negative effects of the environment on health will be part of regional health strategies. plans and operations. Our partners will value our contributions to health protection and improvement.
- Developing better relationships with communities so that we help people understand our work and involve them in taking care of and enjoying their local environment. Our communications will be clear and easy to understand and will help people understand and value the quality of their environment.
- Increasing the size and reach of the World Environment Day campaign from what we achieved

- in 2005 by 20%. With each year, we will see more staff, members of the public and organisations involved in the campaign.
- Working with councils and the police (for example, through campaigns such as 'Clean Kent') to raise the profile of waste crime and reduce the amount of waste dumped illegally. We will target hotspot areas and give clear messages on the effects for the environment and quality of life for us all.
- · Working with local authorities and gas, water and electricity companies to improve the management of environmental and flooding emergencies, we want to reduce the effect of emergency events on people's lives and help them feel more secure. We will influence community risk registers and integrated emergency plans and make sure that flood plans are prepared and exercises carried out for the main communities at risk of flooding.
- Carrying out projects to encourage more people to take up angling, particularly in disadvantaged areas and for under-represented groups. Our rod-licence applications will be simplified and we will work with angling groups

- to increase the number of qualified angling coaches in the region. We aim to increase our rod licence sales by 10% on 2005 figures and we will invest the extra income in improving fisheries across the region.
- On our own sites and in projects we are involved with, improving access for water use and recreation, including for people with disabilities.
 - We will make improvements at Barcombe Mills, Park Wood, Pagham Harbour and Tonbridge Town Lock and make sure our health and safety standards are in place at all sites.
 - We will improve access and upgrade our facilities along the Medway and promote this local asset for recreation and tourism. Our aim is to increase the number of boat users in the region by 7% on our 2005 figures.
 - We will work with local communities, councils and others to improve our urban rivers, lakes and ponds. 'Urban blue spaces' will provide a place where people can enjoy fishing, learn about wildlife and care for the environment.

- Tourists made 21 million trips to the south east in 2004 generating nearly £4.5 million in income.
- Inland waterways are an important asset for recreation, tourism and wildlife and add to our quality of life in the south. The Medway, Itchen and Arun rivers all have navigable stretches. The region's reservoirs provide places for watersports and fishing and are valuable nature reserves.



Photo by George Merrick



Collecting invertebrates to assess water quality - photo by Environment Agency

A better environment for wildlife

Our vision

'Wildlife will thrive in urban as well as rural areas. Habitats will be improved and extended so that priority species will no longer be threatened. Everyone will understand the importance of protecting wildlife and keeping ecosystems in good condition.'

Our region is rich with many types of high-quality habitat and wildlife sites. These are invaluable in their own right and vital to the local economy, for fishing, agriculture, forestry, tourism, recreational and cultural activities.

Nature conservation is an important part of our business. In our own work and through partnerships with others, we will help to protect and improve wildlife and habitats as a natural resource. Meeting the Habitats Regulations and the Water Framework Directive will be top priorities. We will make sure we protect and improve sites designated for their conservation importance and meet Biodiversity Action Plan targets by looking at all environmental effects in a combined way.

We will achieve this by doing the following.

- · Improving the condition of wetland sites of special scientific interest (SSSIs). As a priority we will make sure that 95% of the SSSI land we own is in a favourable condition by 2010. We will also put water-level management plans into action to improve 14 priority SSSIs, helping to meet the Public Service Agreement target by 2010.
- Improving our priority wildlife sites in line with the Habitats Regulations by reviewing and, where necessary, changing all activities we authorise.
- Developing monitoring programmes, under the Water Framework Directive, including fisheries programmes in estuaries and harbours. These will help us identify the environmental improvements needed to protect and improve fisheries and other wildlife.
- Meeting our Biodiversity Action Plan commitments. We will carry out our regional biodiversity strategy, make sure other strategies and plans include measures to create and improve habitats and we will work with partners to use external funding for more environmental targets.

- Gaining habitats through our work to reduce flooding. We will create new habitats to compensate for those lost at important wildlife sites due to the sea level rising and our practices for managing the risk of flooding (for example, at the Cuckmere estuary, Selsey Peninsula and Rye Harbour Nature Reserve). We will restore rivers and create freshwater and coastal habitats, and aim to beat our yearly targets for new habitat (42 hectares in 2006/2007 with at least 50% being inside the tide range).
- Finishing the regional fisheries strategy and putting salmon and fisheries action plans in place. We will improve the chemical quality of estuaries and develop measures in river basin management plans, which improve fish movement and health and boost their numbers in rivers, estuaries and coastal waters.
- · Working with partners and landowners to control non-native, invasive species. Our control programmes will tackle species such as floating pennywort, giant hogweed, Japanese knotweed, Himalayan balsam, azolla, crassula, signal crayfish and mink.

- 40% of the south is classed as an 'area of outstanding natural beauty'. There are 49 European sites protected under the Habitats Regulations, 378 sites of special scientific interest and 72 kilometres of heritage coast.
- The total area covered by sites of special scientific interest is increasing and their overall condition is improving.
- Otter and sea-trout populations are slowly recovering but the numbers of wild birds, water voles and salmon are falling.



Cleaner air for everyone

Our vision

'We will have cleaner and healthier air. The amount of pollutants released into the atmosphere will decline greatly and will be below the level at which they can do significant harm to people's health and the environment.'

Air quality has improved a great deal over recent decades, but is still a concern for people's health and the environment, in some parts of the south and at certain times of the year. Road traffic is the main threat to further progress, but industrial sources and ammonia from farm manures and slurries also have local effects.

Our aims for improving air quality concentrate on our regulatory work and building closer working relationships with others, especially development and transport planners. We will control emissions where our powers allow us to do so. However, we have no power to regulate pollution from traffic. Here we can help with better use of information to monitor trends, and highlight the need for action in areas of poor air quality. By working together, we need to improve how we monitor air quality, understand its effects better and take action to reduce the effects of poor air quality on people's health and important wildlife sites.

We will achieve this by doing the following.

- Working closely with local authorities to develop air-quality assessments. We will support the actions they identify and take action to improve air quality where our powers allow us to do so. Examples include the local airquality action plans, for Brighton and Pebsham, and our work with the air-quality steering group of the Portsmouth City Council Local Strategic Partnership.
- Improving air quality information within our state of the environment report. We will use local authority information to report pollution hotspots and monitor trends in air quality. Our findings will help us contribute to air-quality partnerships and their action plans for improving air quality.
- Making sure accurate and up-to-date information is widely available from our regulated sites and encouraging planners and policy-makers to take account of air quality in decisions at local and regional level.
- · Making sure the activities that we regulate meet European Union

- limit values or UK air-quality targets. For activities that do not need to be regulated, such as spreading treated waste on land, we will work with farmers to reduce the effect of odour on nearby communities.
- Working with Natural England to identify wildlife sites at risk from air pollution and developing plans for their improvement. Our pollution prevention and control regulation will make sure that the requirements of the Habitats Directive and the Public Service Agreement target for improving SSSIs are both met.
- Reducing ammonia emissions from pig and poultry farms, through our pollution prevention and control regulation. We will promote good examples of using fertiliser and nutrients, and encourage farmers to sign up to environmental management systems. By 2011, ammonia emissions are expected to be down by 15% compared with 2005 levels.
- Monitoring releases from landfills to make sure they meet national guidelines. We will also share good examples of gas management to encourage the highest standards across the region.

- Air quality continues to improve but there are still periods of increased air pollution. In summer these are often due to higher concentrations of ozone created by hot and sunny weather. In winter most problems are caused by particulate matter (such as dust and soot) and nitrogen oxides, mainly from road traffic.
- Road traffic is higher in the south east than any other region. Each year we travel over 85 billion kilometres by road and there has been a 25% increase in traffic from 1992 to 2003.

Improved and protected inland and coastal waters



Raising the oxygen levels in a fishing lake - photo by Ray Kemp, Environment Agency

Our vision

'Our rivers, lakes and coastal waters are cleaner and richer in wildlife. They will support healthy ecosystems and provide for recreation and the needs of communities and the economy. Land and water will be managed together, with a full understanding of the risks.'

Water, whether in rivers, lakes, groundwater, estuaries or the coastal. is vital to all life. Water quality is one of our priority work areas. Over the next five years, the Water Framework Directive will influence a large part of our work and work for our partners. We will make further improvements to water quality in our rivers and bathing beaches and will concentrate on tackling sources of groundwater pollution.

Our work in dealing with pollution from 'point sources' will continue and we

will work on reducing the effects of pollution from agricultural and urban sources that are spread over wider areas (known as 'diffuse pollution'). By combining these activities with highquality information and expert advice, we will influence planning and decisionmaking to make sure the water supply and sewage treatment needs for new and existing homes are met.

We will achieve this by doing the following.

- Working with others to put river basin management plans into action under the Water Framework Directive. We will carry out a risk assessment of pressures and their effects on water. We will have new monitoring programmes and will work on the programme of measures needed to achieve ecological and chemical objectives.
- Significantly reducing

groundwater pollution (including from petrol and diesel). Our region depends on groundwater for 75% of its public water supply and for many of its rivers and wetlands. Pollution is a major risk across most of the region. We will improve people's and businesses' awareness of groundwater issues in vulnerable areas such as the East Kent, Itchen and Arun catchments. Our campaigns across all three areas will target domestic and commercial hydrocarbon pollution, industrial estate chemical care, pollution from septic tanks and herbicide pollution.

 Working with our partners in local petroleum licensing authorities to set up a database for current and disused petroleum sites. We will use this to assess the progress of clean-up operations and help

- protect sites at most risk from groundwater pollution.
- Reducing soil loss and pollution from farmland and roads. We will work with the National Farmers' Union, the Farming and Wildlife Advisory Group and others, to raise awareness of the issues and give expert advice on managing land in a way that doesn't harm the environment. Through responses to planning consultations, we will also aim to limit the effects of urban run-off by using drainage systems and measures to avoid and contain spillages. This will help to improve water quality in rivers, coastal waters and groundwater.
- Working with water companies and planning authorities to make sure new sewage treatment needs are assessed, planned and in place before new development takes place. Our studies of the effects of housing growth will help identify the investments needed so that increased sewage wastewater does not harm water quality and wildlife.
- Identifying the need for further improvements in the quality of

- bathing water. We will target Margate, Broadstairs, Bexhill, Brighton, Worthing, Southsea and Bembridge to tackle failures against legal standards. More sites will meet guideline standards - 90% in Kent and Sussex and 95% in Hampshire and Isle of Wight. Marine waters will also meet our water quality standards.
- Improving the water quality of the rivers and targeting more sites where we know we can make the most gains. Priority rivers are the Beult, parts of the Medway, Great Stour, eastern Rother, western Rother, Ouse and Hermitage Stream. We will set local targets and a regional target of 87% of assessed river lengths to achieve river-quality targets by the end of 2008, to help to meet the Public Service Agreement target.
- Working with our partners to tackle problems caused by high nutrient levels in estuaries and harbours. We will make sure agreed sewage treatment improvement schemes are finished and will carry out 'sensitive area' investigations to

- assess further needs. This will help to stop the spread of 'green tides' (nuisance algae) in places such as Pagham, Chichester, Langstone and Portsmouth harbours, and the Medina. Hamble and Medway estuaries.
- Sharing groundwater information with water companies and using this to accurately review 'nitratevulnerable zones'. We will use this knowledge to influence water use and land management to make sure areas at risk are protected.
- Working with others to make sure that the high levels of dangerous substances in some marine areas do not become a threat to wildlife. These substances can be released by dredging operations at ports, harbours and marinas, or by new development.
- Investigating the effect of hot summers and low rainfall on water quality in estuaries and on marine ecology. Recent droughts give us the opportunity to improve our understanding of these issues and will give us better information to use when deciding on new discharge permits, in light of climate change.

- After long-term improvements, nearly 90% of rivers in the south are classed as good or fair quality. But there has been a slight dip in quality (2002 to 2003) and there are increasing risks from diffuse pollution, climate change and development.
- Nitrate concentrations in some of the region's groundwater sometimes don't meet standards for drinking water. Pollutants such as pesticides, hydrocarbons, bacteria and sewage are a threat to groundwater quality.
- The quality of bathing water quality is good, with no beaches consistently failing standards since 1998.

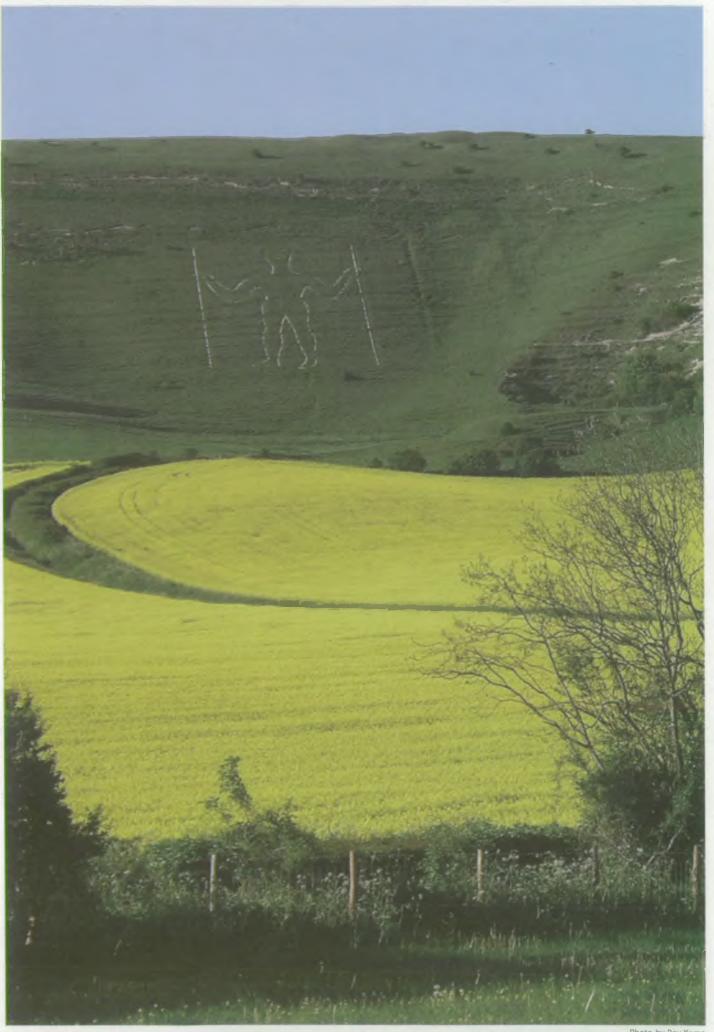


Photo by Ray Kemp

Restored, protected land with healthier soils

'Land and soils in towns and the countryside will be exposed to fewer pollutants. Land will support a range of uses without risk to the environment or people's health. Contaminated and damaged land will be restored and protected.'

Our land is under increasing pressures from agriculture, development and former waste and industrial sites. Good land management and healthy soils are vital for a healthy environment. They help to reduce pollution and local floods by reducing run-off, erosion and the build-up of fine sediments in river beds. They allow us to grow food and timber, filter and help top up our water supplies, and break down and lock away substances that would otherwise be harmful to us and wildlife. We need to do more to value this important resource and restore areas of neglect.

The Water Framework Directive will make sure we deal with land and water issues together so many of our other aims will also contribute to better land and soil management. Our work focuses on promoting good land management, advising on using and regenerating land, and improving our understanding of the

state of land and soils to help target actions.

We will achieve this by doing the following.

- Influencing how the Government's environmental stewardship schemes are used. We will identify and prioritise the areas where the environment needs protecting most and encourage farmers to take up 'resource protection options' as part of the schemes. Our aim is for 50% of farms in the region to be on entry level environmental stewardship by 2011.
- Increasing awareness of the importance of good landmanagement to help reduce pollution and the risks of local floods by:
 - using our catchment flood management plans to work with planners and landowners;
 - supporting partnership projects such as the Sussex and Hampshire Landcare projects;
 - working with the Government and Natural England on the **Catchment Sensitive Farming** programme and carrying out the strategy for sustainable farming and food in the south east.

- · Promoting recycling and the benefits of using organic waste on farmland without harm to land or water quality and without odour problems for people living nearby. We will also make sure that these are registered and meet with latest regulations, where they must. At least 95% of registered activities will meet the targets assessed during our inspections.
- Publishing a regional position statement to influence how previously-developed land is used. We will use this to set a target for reusing this land and have this included in the South-East Plan and the Regional Economic Strategy.
- Developing a geographical information system to assess the type and distribution of past land use and potential future uses of previously-developed sites. This will help us influence decisions on the most suitable way of cleaning up and reusing land.
- Working with local authorities, developers, consultants and landowners to help clean up contaminated land (for example, at Rochester Riverside and along the Alvervalley in Hampshire).

- Agriculture is the main land use in the south and has a major influence on the environment. The quality of soil, surface water and groundwater is being harmed by pesticides, fertilisers and organic wastes being used on land. Agricultural pollution sources account for most of the nutrients, sediment, pesticides and bacteria in our waters.
- More new homes are being built on previously developed land, but the area of derelict land and empty buildings has also increased. This means there is room for more efficient use of previously developed land in the region.

A 'greener' business world



Joint winner of Environmental Business of the Year 2005 for their racing car engine running on bio-ethanol fuel. In the Le Mans 2004 race, the driver was the best-placed Briton and the car was fastest on the straight - Photo by McNeil Engineering, Sittingbourne

Our vision

'Businesses will value the benefits that come from a rich and varied natural environment and recognise their own contribution to getting positive results for the environment. They will reap the benefits of good business practices, improve their competitiveness and value to their shareholders, and gain the trust of the wider community. Regulation will be simpler and more efficient with reduced administration but will still make sure that industry improves its environmental performance'

We can achieve more for our local environment by working closely with businesses and industry, developing better regulation, increasing our work with partners and offering our own environmental performance as a model of good practice. We will continue to modernise our approach and reduce the administrative burden on our customers. We'll concentrate on better regulation, targeting our resources where the risks to the environment are the greatest. And we will continue to educate, influence and work with our partners to make sure

businesses, industry and agriculture reduce their effects and have good environmental management practice at the heart of their work.

We will achieve this by doing the following.

- Continuously improving our own environmental performance and setting an example to others. This will include:
 - increasing recycling and reuse of equipment, and using and promoting local materials in all our projects;

- reducing our mileage and carbon dioxide emissions, and reducing the energy and water we use and waste we produce;
- converting our battery-powered monitoring sites to alternative energy sources, such as wind or solar power.
- Promoting environmentallyfriendly business practices among our suppliers and contacts. Examples will include:
 - carrying out an environmental management system audit on all of our high-risk suppliers before awarding them contracts;
 - developing a guide to buying goods and services which puts good environmental principles at the heart (we will share this with others working in the same area in local authorities and small and medium-sized enterprises); and
 - running a workshop, with the Regional Assembly, to promote environmentally-friendly practice when buying goods and services.
- Influencing the Regional **Economic Strategy so that** measures within it take account of environmental and social factors.

- We will also encourage the use of tools that promote policies consistent with the Government's sustainable consumption and production strategy.
- · Carrying out our new duties under the End of Life Vehicles and Waste **Electrical and Electronic** Equipment regulations. We will also enforce the Transfrontier Shipment of Waste Regulations so that organisations involved in importing and exporting waste are fully aware of the regulations and work with us through all of the region's ports.
- Encouraging more small and medium-sized enterprises to use environmental management systems. We will use our links through sustainable business partnerships, Business Links and Envirowise to encourage better environmental performance. We will run targeted campaigns in hot-spot areas and support a number of business awards based on environmental performance (for example, Green Island Awards, West Sussex Business Awards and the Environmental Awards for Kent Business).
- Working with our partners on the **Business Resource Efficiency and** Waste (BREW) programme and

- National Industrial Symbiosis Programme (NISP). BREW will guide businesses on getting rid of waste legally and improve NetRegs (a website for businesses) to give in-depth online information and resources. Businesses taking part in NISP will be exchanging materials, energy, water and waste to reduce their effects on the environment.
- Tackling environmental waste crime across the region, especially waste being dumped illegally. We will target hot-spot areas, identifying people and businesses who present the biggest risks. We will prosecute all offenders. We will run publicawareness campaigns on the environmental dangers of illegal waste dumping to help reduce the problem in the long-term.
- Improving our enforcement work by making better use of information we receive. We will make better use of our information and systems to target our work, get the right response from those we regulate and track the environmental performance of businesses across the region.

- Across the region, the number of pollution incidents is reducing but there are still about 2500 every year. One-third are due to unauthorised activity such as rubbish being dumped illegally.
- Our regulation has helped to substantially cut pollution from businesses. However, emissions of lead, nitrogen oxides, volatile organic compounds (chemicals which quickly turn into gases), 1-3 butadiene (common in car exhausts) and carbon dioxide have risen since 1998.



Measuring water flow - photo by Ray Kemp, Environment Agency

Wiser, long-term use of natural resources

Our vision

'Businesses, organisations and individuals will reuse and recycle more and so reduce the waste they produce. They will use energy and materials more efficiently. They will reduce the amount of water they waste.'

The rate at which we use resources and the amount of waste we produce are particularly high in this region. Major changes are needed and we have a central role to play through our regulation, influencing and advisory role. New development, water resources and waste are three of our priority areas.

Over the next five years we will aim for a more informed and responsible public. We will regulate to make sure that waste is recycled, reprocessed and reused in line with the law. We will see a massive move away from landfill. Waste will be recognised as a resource, with more local markets for recycling and reprocessing. Many more existing homes will be water and energy-efficient, and planners and builders of new homes will allow better use of water, energy and waste.

We will achieve this by doing the following.

- Contributing to partnerships and groups for Ashford, the Thames Gateway, South Hampshire and other growth areas. We want to see environmental improvements put in place on development sites throughout the region. The Code for Sustainable Homes will be widely adopted and we will work with and influence local businesses to reduce pollution and waste.
- · Using partnerships, local working groups, improved communications and campaigns to help wider understanding and influence change in behaviour

among the public and businesses. We will encourage people to use water and energy more efficiently, to reuse and recycle waste, and to reduce their effects on the environment. We will continue to support the GROW project (which looks at environmental issues in 'growth areas' across the European Union) to help achieve these aims.

- Increasing our work with others to influence greater water and energy efficiency in new and existing homes and businesses across the region.
 - We will work with water companies on water-demand management and campaigns to reduce how much water the public use. We need increased levels of water metering and compulsory metering in areas of water shortage.
 - New Building Regulations and the Code for Sustainable Homes will apply to new bathrooms and kitchens installed in existing homes. The code will be accepted as compulsory by all planning authorities and developers across the region.
 - We will make sure policies that encourage water-saving devices to be fitted are put into action by influencing the Government and supporting local authorities.
 - By 2011, we want to see nonhousehold water use down by 10% (compared with 2004 levels) and the long-term growth in household water use reduced and better understood.
- Working with water companies and giving strong leadership to the Water Resources in the South East group, to make sure there are long-term and secure water

supplies for the region. We will investigate a number of waterresource developments and assess the environmental effects and benefits of each site. These include possible reservoir developments at Bewl, Broad Oak, Clay Hill, and Havant Thicket, as well as a desalination plant at Newhaven.

- Finishing our Effluent Re-Use project. This will allow us to assess the benefits and risks of reusing treated wastewater, alongside other resource development options.
- · Making sure our region is prepared for periods of drought and that they are managed effectively when they happen. We will review water companies' drought plans and our own plans and work closely with the companies to make sure the plans are carried out. Through our construction and maintenance work we will also protect watercourses during drought. controlling activities such as weed cutting and operation of sluices, pumps and weirs.
- Influencing better waste management on farms without risk to land or water quality. We will work with farmers and landowners to make sure new waste regulations are successfully put into practice. We will make 85% of our farm visits in line with the Integrated Regulation of Agriculture Programme (IRAP) by 2009.
- Working with our partners to tackle the waste management issues that will arise from the Thames Gateway and Olympic developments. These will lead to a big increase in the movement, treatment and stockpiling of construction wastes. With our colleagues in the Thames Region,

- Kent County Council, local authorities and the police, we will regulate these activities to make sure that only appropriate materials are reused and that unsuitable construction waste is dealt with in line with our requirements.
- · Continuing our work under the **Restoring Sustainable Abstraction** (RSA) programme. Where our investigations show that too much water is being taken from the environment, we will work with water companies and other licence holders to make changes. This includes reviewing licences as needed under the Habitats Regulations.
- Finishing all catchment

- abstraction management strategies across our region, and using them as a guide when granting water abstraction licences. These will help with good water management locally and will also influence further work under our RSA programme.
- Working closely with water companies and Natural England, we will finish groundwater models for East Kent and all of the Hampshire Chalk. This will give better information to help with decisions on managing water resources and protecting habitats.
- Improving the quality and accessibility of our information to influence better environmental practice.
- We will be the recognised authority on reporting on the state of the environment. We will continuously update information and make it available to the public on-line. We will use local scale indicators to assess risks to the environment and help target our resources to seek measurable improvements to the environment.
- Our website will show yearly assessments of waste production across the region, allowing us to identify priority areas and help waste planning authorities develop minerals and waste development frameworks.

- The south is one of the driest parts of the UK, with an average yearly rainfall of 740 millimetres. This gives us a similar amount of water per person per year (662 cubic metres) as Tunisia and Egypt.
- The region also has some of the highest rates of water use in the UK. Average household use in 2004/2005 ranged from 155 to 173 litres per person per day compared to the national average of 150 litres.
- Levels of waste recycling are increasing but the gains are outweighed by the increase in total waste produced (up 14% between 1997 and 2004). Over 70% of this is landfilled.
- Energy use is increasing in the south. Transport has been the biggest single user of energy in the UK since 1988. Less than 1% of electricity in the south east was generated from renewable sources in 2003.



Too much waste - photo by Environment Agency

Limiting and adapting to climate change



Photo by Environment Agency

Our vision

'We have helped to meet greenhousegas reduction targets to keep temperature change to below two degrees Celsius and avoid dangerous climate change. Everybody will be

prepared to adapt to the unavoidable impacts of climate change and will take steps to prevent further change.'

Climate change is one of the most important environmental issues we face. It's happening now and the effects will be increasingly felt in our region with wetter, stormier winters and drier, hotter summers. We must limit further climate change. This needs everyone, both commercially

and privately, to look at what they do and how they affect the environment.

We will use our regulatory and advisory roles and set the right example in reducing our own effects so that we improve understanding and gain widespread commitment for the lifestyle changes needed. Adapting to climate change means being prepared for the changes happening. All of our plans and policies connected with flood risk, water resources, marine issues, wildlife and agriculture will contain the latest climate scenarios. We need to use these to share our understanding with others who have a role to play and achieve a common way forward in the face of some difficult issues.

We will achieve this by doing the following.

- Putting our flood-risk management plans into action for all rivers and shorelines. We will update these with the latest climate-change scenarios and improve our understanding of the existing and future flood processes.
- · Updating our water quality and water resources planning work with latest information on climate change. This will make our

- assessments more accurate and help us manage risks to the water environment.
- Working with partners and using our improved understanding to include consistent and accurate climate-change messages in plans and strategies for the region. These include the Regional Economic Strategy, the South East Plan, the integrated regional framework and water companies' water resource plans. We will also work with local authorities giving information and advice to make sure the effects of climate change are included in their local plans (for example, allowing for increased flood risk with new developments).
- Working with partners in the South East Climate Change Partnership to identify how we can manage climate change. The partnership will be more widely known and acknowledged by the Government as one of the main regional organisations at the forefront of adapting to climate change.
- Reducing our own carbon dioxide emissions by at least 20% from

- 1990 levels (we will achieve this by 2010 in line with national targets). We will also have plans for achieving a 25% reduction by 2015. Our offices and depots will be more energy-efficient and we will use cleaner forms of transport for the journeys we make in our day-to-day business.
- Making the public more aware of climate change through initiatives such as World Environment Day. We will be more active in promoting our role in both adapting to and reducing the effects of climate change and give consistent messages about the need for people and businesses to take action.
- Working with partners to identify good practice for adapting to climate change and make sure it is widely adopted. The BRANCH project will use science to show the need for change and then recommend policies and tools to be developed with planners. The ESPACE project will show how to include adaptation within planning for how land is used at local, regional, national and European levels. We are important partners on both these projects.

- Climate change is already happening. The 1990s was the warmest decade in the last 100 years. The three warmest years over the last century were 1998 followed by 2002 and then 2001.
- By the 2080s, summers are expected to be 2.5 to 5 °C warmer, with summer rainfall down by 20 to 60% compared with current levels. Winters are expected to be 1.5 to 3 °C warmer, with a 10% to 35% increase in rainfall, leading to more severe floods. By the same year, sea levels could rise by as much as 77 centimetres and sea temperatures by 2°C to 4.5 °C.

Reducing flood risk



Repairing flood defences at Bulverthythe - photo by Environment Agency

Our vision

'We will reduce the effects of floods on people and their property. We will use the best science to analyse and map the probability of flooding and take account of the effect of climate change. If flood risk is unacceptable, we will change development plans or stop the development. Buildings will be more resilient to flooding and people will be given adequate flood warnings. Flood defences will work with natural processes where possible, to provide benefits for communities and for wildlife.'

Thousands of homes and businesses in the south rely on our maintenance of flood defences. The effects of climate change are predicted to increase flood risk while growth in the south east will create development pressures. Reducing flood risk is one of our priority areas.

We will prioritise investment to

manage our assets and make improvements where justified. We will use our influencing skills to resist unsuitable development. The way we monitor, forecast and use information will get better, allowing us to improve the accuracy and targeting of flood warnings and assessment of flood risk. We will also improve our communications to raise awareness of flood risk and help people to help themselves, particularly with people who are vulnerable or underrepresented in our region.

We will achieve this by doing the following.

 Making flood-risk management plans a full part of our business. They will define our long-term policies and action plans to manage flood risk and we will use them to influence the South East Plan, local development frameworks and strategic flood risk assessments. They will be an

- important source of information allowing others to make good development decisions. We will use the plans in managing floods, flood warnings, development control. managing how land is used and defining flood defence needs.
- Providing good advice to planning authorities putting Planning Policy Statement 25 (Development and Flood Risk) into practice and using drainage systems to avoid any increase in flood risk due to development proposals. We will oppose all unsuitable development in flood plains.
- Using imaginative solutions to manage flood risk and achieve the widest possible benefits for wildlife, fisheries, and society. We will carry out our habitat creation programme, allowing us to meet our Habitat Regulations and Biodiversity Action Plan commitments and improve the

quality of life for people.

- . Changing the way we work to meet a new and challenging programme for managing flood risk. We will meet our targets by making sure that we have skilled, experienced and professionally qualified people, trained to the highest standards. All of our teams will recognise and promote the best solutions for long-term flood protection and the widest gains for people and the environment.
- Defining and carrying out our capital and revenue work programmes consistently, within budget and making the best use of the public's money. We will have an active and supportive Regional Flood Defence Committee and excellent relations internally and with our external partners, Natural England, local authorities and people we consult.
- Improving our flood forecasting systems and monitoring network. We will use computer models and real-time information to forecast flood levels. Our flood warnings will be more accurate, of a higher quality and better targeted. All main river catchments such as the Medway, Ouse, Arun, Rother, Test and Itchen will be covered as well

as all coastal areas.

- Improving our flood-awareness campaigns so that at least 75% of the people who live and work in flood-risk areas understand the risks and what they can do to take action. Our campaigns will reflect the people in our region and our surveys will show how we are reaching under-represented and more vulnerable groups.
- Developing our flood maps to a high standard so that they can be used with confidence by our teams, local authorities, insurance companies and the public. We will use the most up-todate computer models, so that individual householders can be sure of the level of risk they face from coastal and river flooding.
- · Making sure that dredging marine gravel and rocks does not harm our shingle flood defences. Coastal zone management plans will be a full part of our flood risk management policies.
- Managing river and coastal defences to the right standard. Our inspection of flood defences will be based on where the risks of flooding are highest and we will make sure improvement work is

- done efficiently. We will take account of natural processes in the environment, future climate conditions and the effects that our assets have elsewhere. We will know accurately the condition and standards of service that all flood defences give, whether they are maintained by us or by others.
- Reducing the number of properties at a high risk of flooding by improving the standard of protection, where this can be justified in line with national priorities. By 2011, an extra 20,000 properties will benefit from reduced flood risk, in places such as Lymington, Shoreham, on Hayling Island, on the Dungeness peninsula and at Sandwich Bay.
- Working with others (such as local authorities and water companies) to develop the Government's vision set out in 'Making Space for Water'. This is about finding comprehensive solutions to flooding problems, taking account of flooding from surface run-off, groundwater, and sewage, as well as from rivers and the sea. It will also make sure that sea defences and coastal protection are managed together.

- There are over 175,000 properties in flood-risk areas (making up 15%) of the region's land area) in the south, which rely on continued maintenance of defences.
- The biggest flood risk in the region comes from coastal floods caused by storms and tidal surges.
- Investment in flood defences and flood-warning systems are significantly reducing the effects of heavy rainfall and coastal storms, but cannot remove them.

Improving how we work



Developing the people who work for us and improving how we work will help achieve more for the environment. In this section we set out our further priority areas.

Focusing on customers

Our customers and their positive experience of dealing with us are important. We recognise that customer service is an area we need to improve on. We will find out what our customers would like us to get better at and use that information to change the way we work. We will set challenging targets, which will become specific targets for our staff. These will include making sure we meet the standards in our customer charter. High customer satisfaction will become standard practice because we prioritise our work, do what we agree we will do, give value for money and deliver on time.

We will use the latest technologies to make sure our customers have better access to useful information. We will develop our website so that our customers can use it to track the status

of current enquiries and get relevant information such as position statements on important or contentious issues. We will use plain English in everything we do. Our publications and communications will be clear and easy to understand. Our position on all issues will be clear and open. Our staff will all receive training to make sure they become skilled at communicating both in writing and face-to-face.

When dealing with us it will be clear that we are a professional organisation with high standards and value the opportunity to deliver a service we can be proud of.

Modern regulation

Our 'Modernising Regulation Change Programme' is one of our priority areas, and its principles and processes are

being included in all of our work. Its aim is to achieve environmental improvements in a cost-effective way. We will do this by targeting our work where the risks to the environment are the greatest and using fewer resources where risks are lower.

The programme covers a number of work areas. For example, the Core Regulation project will transform the way we register low-risk waste sites that don't need a licence and how we carry out waste management licensing. It will also help us improve how we handle information about waste returned to us by site operators. The programme started with wastemanagement licensing and is being extended to create a consistent 'onestop shop' for all permits, licences and registrations.

We will also improve efficiency by simplifying our processes and using information technology to carry out some tasks, automatically. Our regulation will be more focused on customers, offering a range of ways to apply for environmental permits. Our resources, training plans and skills will fully match the needs of modern regulation. This will result in more environmental benefits from our work, improved relationships with those we regulate and a more rewarding role for our staff.

Improving our efficiency and performance

Our workforce will be skilled, efficient and responsive to change. We will use the latest technologies to make our internal processes more efficient, to link systems and to reduce the time we spend on administrative tasks. Spending less time on permitting, registration and monitoring work will give us a faster, more efficient service and make savings which we will reinvest into other work.

Our information is vital to all our work. We will continue to improve its quality and make sure that all our staff understand how we use it. More people will use our information for more purposes. Sharing information and the knowledge gained from analysis and science will help others understand the environmental issues and make the right choices. We will use information to work out the true cost of the work we carry out. We can then compare ourselves with other regions, become more efficient and give better value for money.

Over the next five years our regional procurement team will make more than £5 million of savings across regional and national contracts, compared with our 2005 figures.

The aims in this document will be supported by an efficiency plan which will involve all our teams.

Developing our staff

Our staff are important to us. We value them for their range of skills, individual differences and passion for our environmental vision. People working for us will have a clear understanding of how their role links to our strategy and their future career options, and will have a personal development plan.

Our aim is to become an employer that people choose and to recruit and hold on to staff whose expertise, as specialists and as leaders, is recognised nationally and externally. Our managers will have the skills and tools they need to manage the performance of their staff and our business.

We will constantly improve our staff development programmes, which will be a significant factor in improving our overall performance. We will support the organisation to achieve the top level of Investors in People.

Our 'workforce planning' will become an important way of working and will make sure we identify the specialist skills and abilities we need to meet all of our current and planned activities. Our succession plans, for transferring knowledge and skills, will become an important influence on future significant and senior appointments. We will review how we currently recruit and attract people. We will make any changes needed to make sure our future workforce and the committees that advise us represent the community we serve.

We will work hard at making sure our terms and conditions are appropriate and attractive. We will recognise individual performance and that the 'south east factor' has a special influence for us and our staff, Our staff will be flexible and respond to our changing business needs.

We will use our local partnerships to understand and improve how we can

communicate better with our local communities. We will begin to communicate in new and different ways, and will run open days so that people can understand what we do and what opportunities we can offer.

Managing health and working safely

The health and safety of our staff, contractors and everyone we work with is vitally important to us. We will constantly work at making sure the health and safety of our people comes first in everything we do.

We will investigate all incidents, using the findings to continuously improve our approach. We will never stop checking what we are doing or why. We believe that all injuries and occupational illness can be prevented and no-one should be put at unnecessary risk, when working for us, as a result of our actions or when visiting our customers, property or sites we control.

Setting the right example

We expect high standards from those we regulate so we believe it's important to lead by example. We will work to challenging targets for how energy and resources are used, and reducing waste and increasing recycling. We will also be able to measure the financial effect of these changes and will add the savings to our efficiency programme (for example, by measuring the savings of reduced mileage targets). Our people will understand the part they play and the benefits of working together to achieve region-wide improvements. We will be recognised by others for consistently setting the right example and reducing our own environmental effects.



Working together to create a better place - photo by Ray Kemp, Environment Agency

This is the local contribution that the southern region will make to our corporate strategy 'Creating a better place'. There is a similar document for each of our seven regions and Environment Agency Wales.

If you would like details of the strategy itself, it is available as a summary and full document. You can get copies of any of these publications by calling 08708 506 506 (Monday to Friday 8am to 6pm), e-mail - enquiries@environment-agency.gov.uk or visiting www.environment-agency.gov.uk/strategy.

We will translate our strategy into action through our corporate plan

Would you like to find out more about us, or about your environment?

Then call us on 08708 506 506 (Mon-Fri 8-6)

email
enquiries@environment-agency.gov.uk
or visit our website
www.environment-agency.gov.uk

incident hotline 0800 80 70 60 (24hrs) floodline 0845 988 1188



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