

Theme 10: Natural Resources & Waste

A Sustainable Future
for the South West



The Regional Sustainable Development Framework
for the South West of England



Theme 10: Natural Resources & Waste

Headline Indicator:
Waste Management targets

have an adverse impact upon human health. Continued and lasting improvements in demand management and resource efficiency are therefore essential.

Setting the scene

The sustainable use of the region's natural resources is critical to the maintenance of its quality of life. Natural resources are the basis for wealth generation, as raw materials, supporting industries for extracting and managing them, and providing opportunities for recreational pursuits. Our use of resources has far reaching impacts on the environment, from local pollution through to global climate change. Many natural resources are finite, and our use of them now means less availability for future generations. We are also storing up problems for the future through our production of waste, much of which will take years to dispose of.

The South West has a wealth of natural resources - its land, air, soils, water, wildlife, energy, and minerals all contribute to the quality of life in the region. However, many of these resources have been seriously degraded and are now under threat. Pressures on the land include losses to development and the historic legacy of contamination. Agriculture can place a number of pressures on the environment, including loss of habitats, pollution from manures, slurries, pesticides and fertilisers, and soil erosion from inappropriate land management (see theme 13 Food & Farming).

Overall, water quality in the region is good, for example the quality of our bathing waters consistently exceeds the national average and has improved since 1991. Further improvements are still needed to meet stricter standards for public health, wildlife and fisheries.

Air quality is also good in the South West and the region is fortunate in having low levels of most man-made air pollutants relative to the rest of the UK. Ground-level ozone is a particular problem in the region, which can irritate the eyes, nose and lungs. Road transport is the major source of emissions of air pollutants in the region. We cannot afford to be complacent about the good quality of the region's natural resources. The South West's population is growing fast, which places greater demands on water, land and other resources, and produces increasing quantities of waste. Increases in the levels of pollutants can contribute to global warming and climate change, which indirectly affect other key elements of the environment. Pollution can directly affect wildlife and habitats and

We can contribute to sustainable development by cutting down on the use of non-renewable resources like oil and gas, increasing our use of renewable resources and minimising waste and pollution to reduce the region's global footprint.

What are the opportunities for improving sustainability?

In the South West there are several opportunities to improve sustainability:

Encourage sustainable waste management

The growing quantity of waste produced in the South West and the relatively high proportion disposed of to landfill sites are key issues which need to be addressed. The UK Waste Strategy sets out the hierarchy of approaches to waste management, seeking to reduce waste production first, then reuse or recycle waste, and finally disposing of waste responsibly. It sets national targets for waste minimisation and recycling. The priority must be to slow and then to reverse the growth in waste, breaking the link between waste production and economic growth. In particular, the business sector has significant potential to reduce waste and increase its competitiveness as a result. Some businesses are already leading the way on this. Awareness raising and education amongst communities, businesses and industry are important to help move up the waste hierarchy.

Groups such as Horizon South West, the regional co-ordinator for environmental networks and green business clubs in the region, are helping to promote environmental best practice across the region and ultimately to reduce waste produced within the business sector.

Another challenge is to encourage the development of recycling, composting and energy recovery facilities within the region. Regional targets for reducing industrial and commercial waste landfilled, and for recycling and composting household wastes are needed to help deliver the national targets. The high transport costs associated with taking recyclable waste to facilities well beyond the South West is a major obstacle to achieving higher rates of waste recovery and recycling. The development of local recovery and recycling capacity needs to be accompanied by the development of local markets

for the recovered energy and materials. The change of emphasis from disposal to waste reduction and extracting value from waste offers the prospect of increased employment in the environmental services sector and the establishment of the South West as a leader in waste management innovation.

Encourage the sustainable use of our water resources

Our freshwater resources are renewable, yet our demands on these resources are increasing. To meet the different needs of people and of the environment, water resources must be managed to safeguard each within an acceptable balance. In some areas, water abstraction is adversely affecting the environment, particularly from rivers where flows are already low. Climate change may mean that in future, we will experience hotter, drier summers, which could reduce supplies at the same time as demand is likely to increase.

Priority must be given to minimising water use by supporting the introduction of water efficient appliances in the home and in industry, backed up by measures to educate and inform business and individuals about the efficient use of water resources. In extreme circumstances priority may need to be given to essential needs, such as drinking water supplies and the protection of priority wildlife sites. In the longer term we need to avoid such circumstances through demand management and leakage control. We may also need to consider improvements to water supply infrastructure and water storage facilities to help moderate the stresses that arise due to low rainfall.

The Region's first Water Market was held in 2000 in Blandford Forum to raise awareness of water use and conservation. The day provided opportunities for people to buy water saving devices like rain-harvesting systems or low-flush loos, learn about the wildlife along the river Stour, or take canoeing and swimming lessons.

Tackle pollution from diffuse sources

Pollution events can cause acute and dramatic changes to the environment. Poor water quality affects the availability of water supplies, the cost of water treatment, and ecological diversity of water systems. In 1998 the region had the second largest number of pollution incidents in the country. Over two-thirds of these were caused by organic wastes, fuels and oils, and sewage. Already considerable success has been achieved in tackling pollution from specific 'point' sources. We now need to match this with reductions in the release of pollutants such as

pesticides and fertilisers from diffuse sources, which are a significant issue in the South West because of the dominance of farming.

Encourage the efficient use of minerals

There is significant exploitation of mineral resources in the South West. This includes china clay workings at St Austell in Cornwall and Lee Moor in Devon, the quarrying of limestone from the Mendip Hills, ball clay extraction in Devon and sand and gravel workings in Dorset. The exploitation of mineral resources brings employment and wealth generation particularly to rural areas, and other regions are dependent on the minerals we produce. The use of local materials in buildings contributes to the region's distinctiveness but depends on new supplies of traditional materials continuing to be available. However, minerals are a finite resource, and their extraction pressurises the environment through the direct loss of land, the disposal of spoil, impacts on hydrology and sometimes through subsidence. Dust, noise and traffic are also problematic locally. We need to reduce our demand for minerals, conserve high quality minerals for specialist uses, and encourage greater use of secondary and recycled materials. This can be achieved by demand management, encouraging sustainable construction, economic instruments to encourage recycling, and high operational standards during extraction.

Increase woodland cover and sustainable management

Forestry and woodland cover nearly 10% of the region and include a range of types from small farm woodlands to large traditional estates. Woodlands and their links with hedgerow patterns provide a distinctive landscape and identity for the region. Forestry offers a whole range of goods, services and public benefits. These embrace wood production, employment, protection of soils and groundwater, the active pursuit of biodiversity, and public access and recreation. Increasing woodland cover can also help to lock the carbon dioxide emissions that contribute to global warming, and helps to reduce flooding. A thriving forestry industry is needed, which attracts investment and employment into rural communities, regeneration of native woodlands to support biodiversity, and increased access and enjoyment for recreational uses. To achieve this, we need incentives to encourage private sector sustainable forestry initiatives, and a regional forestry strategy. The Rural White Paper provides the policy and additional funding.



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What are the objectives for improving sustainability in the South West?

There are many challenges for the region to use its resources more sustainably. However, much work is already going on to help achieve this. We need to build on this activity, and set ourselves ambitious but realistic targets to improve our future performance.

Objective	Examples of how it might be achieved	Links to potential partners and processes
Reduce pollution and improve water, land and air quality	1 promote remediation of polluted sites	EPA, devt plans, Environment Agency, local authorities, developers
	2 reduce pollution from agriculture and industry	Farmers, NFU, FWAG, Environment Agency, water companies,
	3 minimise risk of potential pollution to water bodies	Pesticides tax?
	4 invest in cleanest technology available in industry/commercial development	Environment Agency, LEAPs, industry, farmers IPPC, Environment Agency, industry
Ensure water, land, minerals, soils, forestry and other natural resources are used efficiently and with least environmental damage	1 education and awareness of appropriate use	Local authorities, NGOs, Local Agenda 21 strategies, community strategies, Local Environment Agency Plans
	2 promote resource efficient design and construction	Local authorities, developers, Through design guides/briefs, local authority development plans
	3 demand management	Water companies, Environment Agency, Water metering. Local authorities, developers, minerals companies, Forestry Commission, NFU
	4 take action to address damage caused by resource use	Water companies, Environment Agency, local authorities, minerals companies, LEAPs, CAMs, restoration of minerals sites
	5 support increased area of broadleaved woodland and sustainable management of all forests/woodlands	Forestry Commission, Community forests
	6 reduce loss of land valued for access, farming and biodiversity to other land uses such as physical development and mineral extraction	Local authorities, Countryside Agency, English Nature, conservation groups, Development plans, minerals plans, National Park plans.
Promote wise use of waste resources whilst reducing waste production and disposal	1 set regional targets for waste management and encourage local ownership	Regional Assembly, local authorities, Environment Agency, Regional Waste Strategy, local waste plans
	2 develop local markets and infrastructure for recycling	Through RDA and Horizon South West Community strategies
	3 develop systems to encourage greater community and business involvement in sustainable waste management solutions	Community strategies / LA21, Learning & Skills Councils?
	4 support education and promotion to encourage a move up the waste management hierarchy	



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