



Living & Working
Managing Natural Resources and Waste

5. Policy Framework - Managing Natural Resources and Waste

5.13 Managing Natural Resources and Waste

Background

5.13.1 This chapter focuses on how we manage resources within the AONB. It includes renewable energy sources, minerals, water, soil and waste. All have significant implications for the quality of the AONB environment and landscape, but also for future generations. The emphasis is on sustainable and integrated management that takes account of the special qualities of the AONB.

Renewable Energy



The Dorset AONB Partnership considers wind farms inappropriate in the AONB.

5.13.2 The Government launched its white paper on energy in February 2003, the central plank of which is to cut carbon emissions by 60% by the middle of this century. Renewable energy is therefore a key development area and one that could have profound impacts on the AONB.

5.13.3 The key task is to identify the most appropriate means of energy production for the Dorset AONB. The evaluation of wind turbines is likely to conclude that the impact of wind farms on the AONB landscape would be too damaging. Conversely, the development of bio-mass crops may provide an income which would help sustain wider land management and provide a boost to many aspects of the AONB environment and economy. However this would require very large land uptake per MW electricity produced and could impact upon the landscape and environment.

5.13.4 The Government Office for the South West has contracted Land Use Consultants to undertake a broad scale landscape character appraisal to assess the sensitivity of different landscape areas to accommodate wind turbines and bio-mass crops. It is important that energy needs are considered in conjunction with landscape, heritage and environmental strategy applicable to the AONB and assessed accordingly.

5.13.5 In addition to energy production we will need to consider the potential for heat production from wood fuel as this would reduce the demand for fossil fuel generated heat in both domestic and commercial applications.

5.13.6 The goals of reducing carbon emissions and combating global warming are imperative, as is the need for local sustainability. These issues are already arising in the AONB, with applications for wind turbines in and near the AONB already being made. Many landowners are keen to explore the potential for bio-mass crops and coppice. Assessing the most appropriate methods of energy and heat production to the landscape and environmental resources is key, together with facilities for a diverse and sustainable approach to energy production.

5.13.7 The Dorset AONB Partnership Board has agreed a policy position statement as follows: "That wind turbine farms, of current design and technology standards, would be inappropriate within the Dorset AONB. The landscape impact of individual wind turbines or clusters of turbines would require careful assessment and the Partnership Board would wish to reserve the right to comment on such proposals."

Minerals

5.13.8 Dorset's mineral resources include ball clay, oil, gas and building stone. The county is a net importer of other resources such as aggregates. There is an interdependence between counties within which Dorset is called upon to accept a share of the overall demand for minerals.



Quarrying is still a significant industry in parts of the AONB.

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5.13.9 Ball clay, sand and gravel and building stone are extracted from within the Dorset AONB. In addition, the Wytch Farm oil field in the Poole Basin within the AONB produced 2,915 thousand tonnes of crude oil in 2000, from a peak of 4,728 thousand tonnes in 1996. Some areas of the AONB could supply further considerable quantities of particular minerals, such as ball clay and block stone.

Waste and Recycling

5.13.10 Over 200,000 tonnes of household waste are now produced in Dorset each year. The amount of waste we produce is increasing by over 3% every year. Dealing with this is becoming a pressing issue, as reducing waste is fundamental to wider strategies for sustainable development. Failure to address this problem will affect the environment, economy and potentially our well being.



Over 200,000 tonnes of household waste are produced in Dorset each year.

5.13.11 European and national policy recognises that there must be fundamental changes in the way we manage waste. The emphasis is on reducing the volumes of waste produced and providing sustainable waste management.

5.13.12 Government policy recognises that waste should initially be reduced to the minimum. Once this has been achieved, ways to re-use any waste material should be sought. Having done this, consideration should be given to whether anything useful can be recovered from the waste. This includes recycling and composting followed by the recovery of energy. Only after this should disposal be considered. These principles are known as waste hierarchy.

5.13.13 The Government has taken steps to bring about these changes. A range of national targets has been introduced for local government, industry and residents to meet. The targets for household waste are that by 2005, 40% of municipal waste must be recovered, with 25% of this achieved through recycling and composting. By 2020, 66% of household waste must be recovered and half of this should be through recycling and composting.

Water Resources



Water Resource planning is led by the Environment Agency through its Regional Strategy.

5.13.14 Water is essential to life, both in the natural environment and for people. Our water supply is taken from rivers and streams and from water-bearing rocks known as aquifers. The chalk that underlies much of Dorset is an important aquifer.

5.13.15 Water consumption has increased tremendously and in some areas water resources are already under pressure. Abstraction from rivers and aquifers can lead to low river flows and consequent damage to landscape and wildlife. In Dorset, low flows have been an issue on a number of rivers and wetlands, notably the Upper Piddle. The Environment Agency, together with Wessex Water, is addressing this through its Restoring Sustainable Abstraction Programme, which includes a number of schemes and investigations in the AONB. Climate change may exacerbate low river flows if the predicted drier summers reduce natural flows and increase demands from agriculture and horticulture. However, the predicted wetter winters may result in greater aquifer recharge, which may help counteract lower summer flows.

5.13.16 Water resource planning is led by the Environment Agency through its regional strategy. At a more local level, water resource issues will be addressed through Catchment Abstraction Management Strategies and in the Agency's Local Contribution Plans which have replaced Local Environment Agency Plans (LEAPs).

5.13.17 Development to meet an expanding population will increase demand for water supply and sewage treatment. It is essential that Planning Authorities assess and consider the availability of water resources to meet the potential demand.

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Soil

5.13.18 Soils fulfil a wide range of environmental, economic and social functions. They are the basis for 90% of all human food, livestock feed, fibre, support human settlements, provide raw materials and filter groundwater. Their protection at a national level has been outlined in the Draft Soil Strategy for England (2001) with three key objectives of managing the extent, quality and diversity of soil.



Conservation of soils is essential.

5.13.19 Dorset AONB has a diverse range of soils, (due largely to its diverse geology) supporting a wide variety of ecological, landscape, agricultural and cultural functions. With these functions core to AONB management, the conservation and enhancement of soils is an essential activity, particularly as land use becomes more intensive.

Current Trends

5.13.20 Increasing emphasis and applications for renewable energy production to meet Government targets, even before a full assessment of opportunities has been conducted.

5.13.21 Increasing pressure for mineral extraction in the AONB.

5.13.22 Local authorities are working hard to increase recycling efforts and other sustainable waste management schemes in order to meet new Government targets.

5.13.23 Water use is increasing and whilst strategic resource management methods are being developed. There is a great need to increase water efficiency.

5.13.24 Soil loss from erosion is an increasing issue in some parts of the AONB leading to a reduction in water quality as well as loss of soil resource.

Key Issues

5.13.25 The key issues concerning the management of natural resources in the AONB include:



The diverse materials required by the agricultural industry are often non-recyclable.

- All natural resource management has implications for the landscape and environmental quality of the AONB.
- There is a general lack of understanding regarding the process of energy production from renewable sources, leading to lack of confidence and uncertainty.
- There is a fear that regional and national demand for minerals and renewable energy will mean that local opinion is overlooked.
- People are unsure as to the overall sustainability of mineral extraction.
- Lack of reduction in packaging of products.
- Products without elaborate packaging are often considered inferior and can be commercially disadvantaged.
- Composting often takes longer and can be less successful than the experts say.
- Not all waste can be recycled at any recycling point - e.g. some may not take paper or cans or plastic bottles.
- There is no separation of household waste, nor kerb side collection of waste in parts of Dorset.
- The more affluent an area the more foodstuffs and materials are imported and the larger the waste stream created.
- The import of nutrients and materials is not matched by an export of the waste thereby creating an increase in local waste disposal.

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- Land management and agriculture has not been a consumer of domestic produced compost / nutrients.
- Agriculture creates its own waste stream. Livestock rearing can create large volumes of nutrients and manures, requiring localized disposal, which can impact upon the environment and in particular the water resource. The diverse materials required by the agricultural industry such as plastic wrapping used in silage making are not always easily recycled.
- The increasing cost of disposing of old cars and the lack of recycling facilities for electronic goods is leading to an increase in dumping.
- Increasing demands on the public water supply through changing lifestyles and increases in housing development.
- Abstraction can result in low river flows and consequent degradation of aquatic habitats.
- Industrial and agricultural pollution of the aquifer, resulting in the need for costly treatment processes.
- Impact of new development on water resources and infrastructure is not always adequately considered in the planning process.
- Potential impacts of climate change.
- Lack of connection between our use of water and the natural environment.
- Loss of soil through erosion.



Dumping and storing of scrap materials has a visual impact on the landscape.

- Mineralisation of soils resulting from loss of top soil due to erosion and lack of replenishment of organic matter.
- Reducing biodiversity of micro-biological flora

and fauna of soils considerably alters the ability of soil to support ecosystem.

- Contamination of soils from heavy metals and chemical pollutants can affect the soils' biology and overall value.

Key Opportunities

5.13.26 The key opportunities relating to natural resources in the AONB are:

- The development of an integrated resource management approach linking environmental capacity and conservation with social and economic development needs.
- Bio-mass production could provide a boost to the farming and forestry sector whilst reducing dependency on fossil fuels.
- Water resource management could attain its full strategic importance.
- Soils could be managed as a finite key strategic resource.
- Waste management could be an integral part of integrated resource planning and management.
- Community planning provides a forum for discussion of resource issues at a local level.

Current Activity

5.13.27 Related areas of activity include:

- **Minerals.** The Draft Dorset Minerals and Waste Plan is currently out for consultation and is a key policy area for sustainable management of natural resources.
- **Waste.** Kerbside recycling schemes are being improved across the AONB to meet Government targets. LA21 are investigating the potential for development of community composting schemes. It is also proposed that the Somerset NFU and FWAG scheme to collect black plastic from farms could be developed in AONB.
- **Water.** Catchment Abstraction Management Strategies are being developed across the AONB by the Environment Agency. Water Companies are, through their 'AMP4 plans', applying to OFWAT for funds to improve the management of water resources.
- **Soil.** Agri-environment schemes are being promoted by a number of organisations in the AONB and include some soil conservation measures, such as *wider* field margins as buffer strips.

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Related Policies and Strategies

5.13.28 The key documents and strategies relating to natural resources include:

- *'Our Energy Future - creating a low carbon economy'*, Energy White Paper (DTI, 2003)
- *'Renewable Energy Strategy for the South West 2003 - 2010'* (South West Renewable Energy Group, 2002)
- *'Waste Strategy 2000 for England and Wales'* (DEFRA, 2000)
- *'Guidance on Municipal Waste Management Strategies'* (DETR, 2001)
- *Dorset Minerals and Waste Local Plan* (Dorset County Council 1999)
- *'Draft Soil Strategy for England'* (DEFRA, 2001)
- *'EC Directive on Water Frameworks'* (2000-60-EC), 2000
- *'Water Resources for the Future - A Strategy for the South West Region'* (Environment Agency 2001)
- Local Environment Agency Plans and Contribution Plans
- *'Dorset Local Agenda 21 Strategy'* (Dorset LA21 Group, 2001)

5.13.29 Dorset AONB Policy Framework - Managing Natural Resources

Policy Aims

- Ensure that natural beauty is a key consideration within strategic land management.
- Ensure the sustainable use and management of natural resources.
- Develop an integrated approach to natural resource and waste management.
- Increase public understanding and involvement in natural resource and waste management.
- Secure sustainable energy production, appropriate to the AONB.

Policy Objectives

- NR1. Ensure that the National importance of the AONB landscape and its beauty and character, is recognised as a resource in its own right, by assessment of resource and conservation policy.
- NR2. Ensure that the quality of the AONB environment is not compromised by demand for natural resources by determining landscape tolerance and influencing policy accordingly.
- NR3. Resist wind farm developments of current design and technology standards that would adversely affect the natural beauty of the AONB and ensure careful assessment of the impacts of individual turbines.
- NR4. Ensure a continued policy and practice shift away from 'use and discard' to a reuse and recycle approach.
- NR5. Develop a better understanding and awareness of 'integrated resource management' within Planning and wider policy and strategy frameworks.
- NR6. Ensure a detailed assessment of environmental and community assets within natural resource and waste schemes.
- NR7. Support and promote measures for the conservation and restoration of key natural resources, such as soil and water.
- NR8. Identify 'best fit' options and opportunities for renewable energy production within the Dorset AONB.