

PART 3:
THE FUTURE

16. FORCES FOR CHANGE WITHIN THE NORTH WESSEX DOWNS AONB

- 16.1. The North Wessex Downs is a dynamic landscape that has evolved and changed over time in response to prevailing economic and social conditions. It is the cumulative effect of past change that has created the special and distinctive character of the North Wessex Downs that is valued today. The landscape will continue to change in the future. However, as this chapter will illustrate, the pace and nature of change is accelerating and may impact on those very qualities that make this landscape special. Recent changes include the dramatic downturn in the agricultural economy and externally, the growth of the surrounding urban centres, including Basingstoke, Whitchurch, Andover, Newbury and Swindon. The challenge will be to understand, manage and direct future change in a way that ensures the outstanding landscape quality and its valued features and attributes are conserved and enhanced.
- 16.2. This chapter considers the main forces for change as they affect the character of the North Wessex Downs and highlights those facets of the landscape that are most vulnerable. In doing so it provides a framework for an AONB Management Plan, which is now a statutory requirement, under the Countryside and Rights of Way (CROW) Act 2000.
- 16.3. The forces for change are considered under seven main headings which include both global changes such as climate change and more detailed local issues.
- Climate Change
 - Agriculture
 - Development
 - Traffic and Transport
 - Military
 - Social Character
 - Recreation and Tourism.
- 16.4. For each of these the impact on landscape character and its main attributes, including biodiversity, cultural heritage and social and economic character is considered.

Climate Change

- 16.5. It is generally accepted that climate change is occurring and that CO₂ emissions from the combustion of fossil fuels are a major contributing factor. It is difficult to be precise about the actual implications of climate change and to an extent these will be dependent on responses, mitigation and adaptation. However, the climate of the South of England may already be changing. Since 1900 the average temperature has risen by 0.5°C and summer rainfall has decreased. Greater climatic changes are predicted over the next 100 years, and may include warmer weather all year, wetter winters, drier summers and weather extremes including storms and flooding. The

range of possible impacts of climate change on the landscape of the North Wessex Downs will need to be kept under review as knowledge increases. They may include:

- low flows (and drying out) in chalk streams and rivers in summer, plus a requirement for increased abstraction from the chalk aquifer to meet water demands from surrounding urban areas, exacerbating low flows;
- localised winter flooding, as for example witnessed by many communities in the valleys and vales of the North Wessex Downs in recent years;
- potential requirements for local flood defence measures that maybe unsympathetic to the small scale, intimate character of the valleys;
- higher wind speeds and more frequent storms causing damage to woodlands, parklands and crops;
- changes to the characteristic habitats, for example composition of chalk grassland, drying out of wetland, continued viability of some of the beech hangers, and increased fire risk to heathland;
- potential for damage to important archaeological sites e.g. waterlogging, erosion and loss of stability to earthwork structures such as Silbury Hill;

16.6. It should be noted that the Environment Agency, with other partners, is working on many of the above impacts. Their work includes low flows in chalk streams and response to winter floods amongst others.

16.7. It is anticipated that, farmers will need to adapt to a different climate with higher temperatures, longer growing seasons and summer drought, resulting in changes to the characteristic farmed landscapes of the North Wessex Downs. This will not necessarily be unfavourable and may include extensification of grazing and arable systems or a shift to more drought tolerant crops. However, there may also be a demand for increased irrigation of arable land with consequent impacts on water supplies and potential increase in soil erosion.

16.8. It is unclear what the human response to climate change will be in the long term. Indeed, it has also been noted that the impact of climate change may include much colder weather, comparable to other countries of our latitude, if the Gulf Stream is changed from its present course. The potential impacts should be kept under review and updated as knowledge increases.

Renewable Energy

16.9. The UK Climate Change Programme provides a national framework for moving towards a more sustainable, lower carbon intensive economy. It sets out a portfolio of related policy commitments and measures which the Government has put forward in an effort to combat climate change, including an overall target to reduce the UK's CO₂ emissions by 20% (below 1990 levels) by 2010. In an effort to meet this challenging target the Government has reinforced its support for the pursuit of sustainable energy solutions, including renewables. Significantly, the Government's White Paper on Renewable Energy '*New and Renewable Energy; Prospects for the 21st Century*' sets a target for securing 5% of electricity requirements from renewables by

2003, rising to 10% by 2010. The Renewables Obligation, due to be introduced in April 2002, also obliges electricity suppliers to supply a specified proportion of their electricity from renewable resources.

- 16.10. This commitment to renewable energy, in the North Wessex Downs this may manifest, for example, in the introduction of new types of energy crops such as *Miscanthus* (elephant grass) or short rotation coppice, as supported by grants in the England Rural Development Plan or demand for small scale wind energy development.
- 16.11. The likely number and scale of such future developments in the North Wessex Downs remains uncertain. However, in order to help translate the national targets for renewable energy into suitable developments on the ground, the Government has instructed all Regional Governments to set targets for renewable energy, based on an assessment of each region's capacity to generate electricity from renewable resources. Preliminary indications from the South West and South East Regional studies indicate that there could be a significant increase in the number of biomass and small scale wind energy developments throughout both Regions provided the commercial viability of electricity and heat generation from renewable sources can be established in the area. The AONB management plan will have an important role in influencing these regional studies to ensure that the pursuit of renewable energy targets maintains and enhances the character of the North Wessex Downs.

Agriculture and land management

- 16.12. The historic analysis undertaken as part of this assessment has indicated that the character of agriculture within the North Wessex Downs has fluctuated over time in accordance with prevailing economic circumstances and technological developments. For example, arable cultivation on the downs, was established as early as the prehistoric period and during the seventeenth and eighteenth centuries, corn was the major cash crop on the chalklands. In the mid nineteenth century, arable farming entered a decline until post-1945 national policy, and subsequently the CAP, established a new framework for agriculture and the intensive arable agriculture that now characterises the AONB is the result of these policies. Future reform of the CAP and adjustments to world markets will lead to further changes.

Impact of Past Agricultural Change

- 16.13. Post-war agricultural policy resulting in the intensification and indeed 'industrialisation' of farming in the North Wessex Downs has been a major force for change since designation of the AONB in 1972. A recent study by the RSPB¹³ using MAFF June Census data revealed that between 1968 and 1998 the total area under grassland in the AONB was reduced by 32%. The consequent effects on the character of the North Wessex Downs are well rehearsed and include:
- fragmentation of important habitats, notably chalk grassland into a few isolated remnant sites;
 - extensive areas of land being farmed as a single unit in very large scale fields, with loss of peripheral boundary features;

¹ Moorcroft, D, Hubbard, S. and Lucas. F. 'Agricultural Change in the North Wessex Downs AONB'. 2001

- mechanisation and reduction of farm labour means that there is no longer the skills to maintain woodland coppice, hedgerows and other landscape features which would formerly have been an integral part of the agricultural scene;
- loss of important archaeological, with many features such as roundbarrows only visible as cropmarks on air photos and no longer forming recognisable landscape features;
- impact of run off (fertiliser, herbicides plus soil erosion) from intensively farmed arable areas on the delicate habitats and high water quality of the chalk rivers that are a special feature of the AONB;
- reduction in livestock, as farms have converted to arable and more recently as a result of BSE and foot and mouth (but with intensification of stocking density on remaining areas of grassland) make it difficult to maintain extensive areas of grassland (but with loss of quality in other areas);
- impacts of capital intensive agricultural economy on the social character of the AONB. This has included declining employment in agriculture, fewer larger farms and a shift towards part time employment, resulting in pockets of rural deprivation (poverty and poor access to services) masked by wider affluence of the estates and larger farm units.

16.14. More recently the character of arable farming, has itself changed. These include development of hardier cereal varieties allowing a shift from spring to autumn drilling with consequent impacts on biodiversity, particularly farmland birds. Maize, now a widespread crop in parts of the AONB, is a significant contributor to soil erosion and diffuse pollution to watercourses due to the extent of bare ground within the crop. There have also been changes in the types of crops grown.

Current Changes in Agriculture

16.15. The effects of past agricultural intensification on landscape character, biodiversity and archaeology are widely recognised and understood. Of greater concern, in the context of the current downturn in farming, and not least the impact of foot and mouth, is to understand the future direction for agriculture. At the time of this study, UK farming is in serious recession and the local impacts of this are well documented in several recent studies such as the Hampshire Farming Study² and the Oxfordshire Farming Study³. In the AONB, where continued productivity of the thin calcareous soils, is dependent on high capital inputs (e.g. nutrients, mechanisation and water), the recession is likely to have a significant effect. The resultant changes and restructuring of agriculture may have an even greater impact on the character of the North Wessex Downs than the changes witnessed over the last 50 years. The following section outlines the projected trends and key issues emerging.

16.16. In the future it is anticipated that restructuring of the agricultural economy will see an increasing polarity in farming. This will include at one extreme an increase in large farm units seeking to increase production through achieving economies in scale, and at the other extreme marginal land coming out of agricultural management and

² Hampshire County Council 'Hampshire Farming Study' 1999 Review

³ Oxfordshire County Council 'Oxfordshire Farming Study' 1999.

put into new uses. However, there are also significant opportunities presented by the Agenda 2000 package and specifically those offered by the Rural Development Regulation - the second pillar of the CAP, as realised through the England Rural Development Programme (ERDP). The ERDP provides a mechanism to assist the agricultural industry within the AONB and may result in many positive environmental changes of benefit to local character.

- 16.17. The key issues and potential impact of these scenarios is explored further below.
- 16.18. **Increase in Large Farm Units:** The larger and well-structured arable farms of the North Wessex Downs are likely to be able to respond to the competitive global market, driven at the international level by world trade negotiations (GATT). This may result in increased specialisation with a concentration on the best and most productive land and the amalgamation of holdings with very large farms managed as a single unit under a block farming regime, mainly through contract labour. Anticipated adverse impacts may include further homogenisation of the landscape, reduction in the already very depleted biodiversity, potential demand for more centralised and large scale buildings such as grain storage facilities and further reduction in the level of agricultural employment. Increased specialisation and dominance of arable systems may also mean that in some areas there may no longer be livestock to maintain areas of grassland. However, it is also true that larger units may also have the resources, labour and capital to respond to environmental initiatives and pursue landscape and biodiversity enhancement in association with productive agriculture. It is acknowledged that many of the large farms currently operating in the North Wessex Downs are very conservation-minded, particularly with regard to game shooting interests.
- 16.19. **Surplus/Marginal Agricultural Land:** The concentration of resources on the 'best' land may result in marginal areas coming out of production resulting in pockets of unmanaged land throughout the AONB. The reduction in livestock, for example, may lead to some grasslands regenerating to new areas of scrub and woodland. Recent years have also witnessed an increase in marginal land being put into set-aside. While, this does have ecological benefits (e.g. for ground nesting birds and invertebrates) it also has a significant impact upon the landscape. There is potential for marginal or surplus agricultural land to be brought into positive environmental management, supported through agri-environment initiatives, for example to provide a connected habitat of chalk grassland potentially combined with a new access network.
- 16.20. At the same time, there are many pressures for new uses of 'marginal' land including 'lifestyle' farms or smallholdings, leisure uses and horse paddocks – all of which can have local visual impacts. It is suggested that with appropriate guidance and management advice new landowners may be responsive to AONB objectives and able to deliver positive landscape benefits.
- 16.21. **Medium and Small Farms:** It is also expected that the North Wessex Downs may see the emergence of a sector of small farms seeking to build on the opportunities presented by the England Rural Development Programme (ERDP). Under this scenario small scale family owned and tenanted farms may increasingly seek to produce high quality premium goods for local markets potentially under environmentally sensitive regimes, supported through measures such as Agri-

environment Schemes (Countryside Stewardship/Organic Farming Scheme) and the new Rural Enterprise Scheme and Processing and Marketing Grant. Although the largely arable landscape of the North Wessex Downs, would at first seem to offer few opportunities for this type of production, the recent emergence of a thriving organic sector within the AONB suggests that this is a model with considerable potential. However, the effort and ingenuity required to achieve these goals should not be under-estimated. Many of the necessary skills and labour are now much depleted within the area, for example, those in shepherding and animal husbandry. More fundamentally, perhaps, has been the change in consumer demand since the last time sheep extensively grazed open downland. At this time the demand was for wool and mutton; now the demand is for lamb. This potentially requires the development of new farming systems utilising the traditional sheep breeds of the downlands. It may also mean the linking of downland pastures with off-down pastures for finishing. And, in turn, if such production is to achieve a premium market, will require consideration of:

- the achievement of specific environmental standards (as an assurance to consumers);
- brand labelling, potentially linking to similar initiatives being taken in the Chilterns and South Downs AONBs and more general work the Countryside Agency is pursuing under their 'Eat the View' campaign.

16.22. Such ideas are beginning to be explored within the North Wessex Downs through the Ridgeway Project with funding from the Heritage Lottery Fund but have the potential to be extended across much larger areas of the AONB.

16.23. The wider social and economic benefits arising from this potential re-direction of agriculture include re-establishing a local agricultural economy responding to local circumstance, greater employment opportunities within land-based industries and a strengthening of links between producers and consumers.

Diversification: New Land Uses

16.24. It is evident from a number of current studies of farm diversification that farmers given the opportunity would prefer to focus their diversification actively, within farming, i.e. into alternative crops and adding value, as opposed to pursuing other, non agricultural, activities. Thus the arable farming of the North Wessex Downs in the future may include some different crops and land uses.

16.25. **Energy Crops:** The ERDP recognises that energy crops have the potential to make a significant contribution to Government targets to reduce greenhouse emission and for renewable energy generation. The new Energy Crops Scheme (ECS) provides establishment for two energy crops, short rotation coppice and *Miscanthus* (Elephant grass). Proximity to energy consumers and the structure of farming in the AONB suggest that this might be an attractive option, although could have significant consequences on local character, not least the experience of openness, remoteness and the fundamental exposure of the chalk topography, which are key attributes of the AONB. The landscape assessment provides a baseline for a future more detailed study to assess areas most able to accommodate energy crops.

- 16.26. **Carbon Sequestration:** In the light of the Kyoto Protocol, there is considerable interest in how farmers, particularly on arable land, can benefit from schemes that alleviate carbon emissions and reward carbon sequestration and carbon trading. This is already acting as a major force for rural land use change in the US, Canada and parts of mainland Europe, including the introduction of new methods of farming (minimal tillage), different crops and an increase in woodland cover.
- 16.27. **Woodland Management and Planting:** The absence of appropriate forms of woodland management, has been highlighted as a critical issue in many of the landscape types and is considered to be key to retaining local character and ecological diversity. In particular, the absence of management of native coppice woodland has been noted, although there has recently been an increase in the amount of hazel coppice restoration due to the availability of grant funding. The ERDP including the Woodland Grant Scheme offers opportunities for woodland management and planting. However the North Wessex Downs is currently not well placed to meet the criteria and priorities established for new planting and therefore, at least in the short term, there may be no great incentive for significant woodland expansion. The preparation of the AONB management plan will provide an important tool for considering the future role of long-term woodland in the North Wessex Downs (within the context of this landscape character assessment) and potential discussions with the Forestry Commission to negotiate planting and management targets for the area.
- 16.28. **Conversion of Farm Buildings:** In addition, to requirements for new buildings, the changes in the structure of agriculture, may also result in existing buildings becoming redundant, through centralisation of operations. Many of these will come forward for conversion. The potential impacts are considered further under the heading of 'Development' below

Conclusions

- 16.29. What emerges from the above review is that agriculture within the North Wessex Downs is at a critical juncture and will be a fundamental force for change on landscape, social and economic character. This is not new and such forces have shaped the character of the AONB through history; but never before have the tensions been so clear between increasing intensification on the one hand and a shift towards systems more attuned to the achievement of integrated rural development on the other. This is within a context where agriculture is in crisis nationally and the very viability of farming on the downs is brought into question.
- 16.30. The **challenge for the AONB management plan** is to form the bridge between the contrasting forms of agriculture that are likely to emerge to ensure conservation and enhancement of the fundamental characteristics of the North Wessex Downs is economically rewarding for landholders;

Development

- 16.31. Development is a powerful force for change. National and local planning policies provide strong protection for the AONB, and these policies have a high priority in development control. Nevertheless, there are a number of key pressures within the North Wessex Downs. In many cases these cannot be considered in isolation, being

driven by wider economic changes beyond the AONB boundary. These are considered further below.

Peripheral Urban Development

16.32. The North Wessex Downs is located between the 'golden valley' of the M4/Thames Valley and the M3 corridor. It is ringed by rapidly expanding economies, including Swindon, Newbury, Reading and Basingstoke, based on the Information Communication Technology (ICT) industries, plus the growing urban centres of Whitchurch, Andover and Didcot. As the economy continues to grow the demand for housing will continue to increase and the need to balance economic growth whilst meeting environmental objectives will be one of the prime considerations for the management plan. At present household growth is not keeping pace with economic growth thus representing a key force for change as pressure to find development sites becomes apparent. In some cases existing development impinges on the AONB boundaries - which obviously has a visual impact in views from the high central core of the downs, but there are also significant underlying impacts including:

- demands on the water resources of the chalk aquifer, resulting in low flows within the region's prime chalk rivers;
- increasing recreation pressures and loss of tranquillity - a rare commodity in southern England;
- social and economic consequences for the North Wessex Downs including the influx of more affluent incomers and inflated house prices;
- a trend towards reverse commuting, with young workers in low paid jobs in service industries and agricultural contracting moving to areas such as Didcot or Swindon and those working in peripheral industries moving into attractive villages within the AONB;
- increased traffic levels on the rural lane network, resulting in both loss of tranquillity, higher accident levels, and damage to the character of the lanes.

Demand for Settlement

16.33. The North Wessex Downs is characterised by a great diversity in building styles and a very distinct pattern of settlement. There is a high demand for housing within the AONB particularly in the east, where there are many small attractive villages in close proximity to employment centres. The key issues are:

- severe planning restrictions on villages perceived, by some, to be leading to village cramming and need to achieve an appropriate balance between 'protection' and allowing settlements to expand gradually;
- inflated property prices, as commuters move to attractive villages in close proximity to urban centres and consequent need for provision of affordable housing to maintain balanced rural communities;

- need to ensure new development is sympathetic and of good design and helps maintains the local village character;
- inappropriate location of development which can have a significant impact on character, for example by expansion of villages along valleys, or up onto the open downlands;
- poor design in terms of style and materials - some parts of the AONB (notably some villages to the east) are considered to be taking on a more suburban character.

16.34. Community-led initiatives such as countryside design summaries, village design statements and parish maps can help promote good design, particularly if they are adopted as Supplementary Planning Guidance. However, these initiatives are not yet established within many parts of the AONB and represent an important opportunity for the future.

Diversification - Conversion of Farm Buildings

16.35. The future of agriculture in the AONB and its potency as a major force for change has been discussed in detail above. Diversification of farm businesses and realisation of assets, including re-use of farm buildings is being promoted through the Government Action Plan for Farming and the Rural White Paper as one way of sustaining farm incomes³ and Planning Policy Guidance is provided in PPG7⁴. It can also help promote local economic vibrancy within rural areas. In the North Wessex Downs planning permission is being sought for both modern large portal frame constructions and traditional farm buildings for both residential and economic uses. Conversion of farm buildings and tensions with the need for strong landscape protection, are considered to be a major issue within the AONB. Farmers, on the other hand, have concerns that restrictive planning controls are hindering their ability to diversify and ultimately continue to operate. The key issues within the North Wessex Downs are:

- new uses include warehousing, industrial or business units, as well as a strong demand for equestrian uses, all of which may contribute to greater traffic levels in the AONB.
- need for associated infrastructure such as parking and lighting – impact on local character;
- impacts on the internal and external fabric of historic buildings;
- effect on a variety of declining wildlife species which co-exist with the agricultural use of buildings but can be disturbed or killed during conversion. These include barn owls, swallows, swifts and house martins and several species of bats.

³ The DETR has undertaken research to assess the implications of planning in relation to farm diversification including building reuse.

⁴ Planning Policy Guidance Note 7: The Countryside – Environmental Quality and Economic and Social Development

- 16.36. There are also concerns that diversification should be in support of the local economy and linked to sustainable management of the whole farm unit, rather than simply bringing in new industrial uses, which promote reverse commuting from the surrounding urban centres.

Tall Structures: Wind Turbines, Masts and Overhead Power Lines

- 16.37. Perhaps the most obvious new developments in the North Wessex Downs are the tall structures on the ridges, crests and scarps which interrupt the smooth rolling skylines and are visible from a wide area. The AONB contains a number of communication masts, transmitters, and overhead power lines. There is only one small scale wind turbine at present, although preliminary indications from the South West and South East Regional studies indicate that there will be a significant increase in the number of wind energy developments in the future. A particular concern is the fact that each application is currently dealt with by the individual local authority with no consistent approach for the AONB as a whole. While a single tall structure can create a landmark, intervisibility between several can be very detrimental, diminishing the special perceptual qualities of remoteness and tranquillity. Other potential impacts include increased noise and air pollution caused by service traffic. The development of an AONB wide policy for tall structures is a key requirement. This landscape assessment should provide the basis for the basis for a more detailed study to assess the ability of different landscape types to accommodate such structures and provide guidance on appropriate siting and design.

Mineral Extraction

- 16.38. There are only limited areas of mineral extraction within the AONB, notably gravel extraction in the eastern part of the Kennet Valley. Possible future demand for aggregates from the lowlying sands and gravels in the eastern part of the AONB or chalk from the uplands could have a very significant impact on local character.

Redundant Military Infrastructure

- 16.39. The area includes several redundant Ministry of Defence sites, including a number of disused airfields concentrated along the flatter plain along the northern edge of the AONB. In Swindon these include Wroughton Airfield and Princess Alexandra's Hospital, both representing major development opportunities. To the east, the International Business Centre at Harwell, also on a former airfield, has plans for further expansion. Future development of these sites, while perhaps providing an opportunity for small scale peripheral landscape enhancement, such as tree screening, could also have potentially detrimental consequences in terms of bringing traffic, light pollution and further development pressures into the heart of the AONB. It is clear that economic benefits will need to be carefully balanced against environmental consequences and the national importance of the North Wessex Downs landscape; an AONB-wide strategic policy is recommended. It should be noted that interest in the historic fabric of military sites is growing and a small but increasing number of 20th century structures and sites are being statutorily protected.

Traffic and Transport

- 16.40. There are a number of linked issues relating to traffic and transport that have a fundamental influence on the quality of life for communities within the AONB. These are considered below:

Communication Infrastructure

- 16.41. The development of communication infrastructure has had a significant impact on the tranquillity. The M4 and latterly the route of the A34, providing a link between Southampton and the Midlands, have sliced across the North Wessex Downs. The road infrastructure has a major visual and noise impact on the AONB as well as a severance effect. It has also acted as a catalyst for development in the form of petrol stations, service areas and hotels. While further major road infrastructure within the AONB is not envisaged, the incremental upgrading of the rural roads and lanes is also having a detrimental impact on landscape character.

Access to Transport

- 16.42. Access to public transport is an important issue. Although there are good main line rail routes through the area these tend to operate as commuter services, while many rural rail lines (for example to Marlborough and Lambourn) have closed. Despite several local initiatives, such as the Post Bus, Call a Bus, or the Wiggley Bus, public transport remains virtually nonexistent for many of the smaller rural communities. The impacts include:

- compounding rural deprivation and isolation for those sectors of the population that do not have access to a private car;
- increasing traffic levels on the rural lane network through use of the car to access services elsewhere.

Traffic

- 16.43. High traffic levels are a major concern for communities throughout the North Wessex Downs and are impacting on quality of life as well as the rural character of the area. The increase in traffic volume, size and speed is caused by a number of factors, notably:

- larger scale of farming with large vehicles, bulk deliveries and heavy vehicles travelling through the rural lanes to comparatively remote farms;
- increased dependence on the private car through lack of local services and facilities (requirement for two car households);
- loss of rural jobs and growing trend towards out-commuting, with equally some conversion of farm buildings to employment resulting in localised increases in traffic and parking requirements;
- congestion on major routes with the rural lanes of the AONB being used as rat runs and becoming unsafe for walking and riding;

- increase in car-bourne tourism and recreation - adding to rural traffic levels and congestion.

16.44. The impacts of high traffic levels on the character of the AONB include

- higher accident levels and perceptions of danger making lanes unsafe for pedestrians and cyclists;
- erosion of road edges and verges, particularly on the narrow sunken lanes, with road improvements by kerbing, highway lighting, wide visibility splays and signing creating a more urban character;
- increased requirement for provision of parking both in villages and rural locations, for example at recreation sites;
- loss of rural tranquillity.

16.45. These impacts common throughout the AONB, but are a particular concern in areas in close proximity to urban centres, notably the Vales, Lowland Mosaic and Downland with Woodland landscape types.

Military

16.46. The Strategic Defence Review (1998) includes proposals for consolidation and expansion of activities at Tidworth and Ludgershall, on the boundary of the AONB. The MoD is in the process of consolidating training activities at Salisbury Plain (which joins with the south west part of the AONB). While unlikely to have a direct impact on the North Wessex Downs it has raised concerns, among local people. These include:

- possible future pressures for land acquisition for military training;
- visual impacts of development e.g. new buildings;
- associated impacts e.g. traffic and increased demand for housing and recreation.

Recreation and Tourism

16.47. The expanding peripheral population and increase in leisure time is anticipated to be a major force for change within the North Wessex Downs. This raises a number of issues:

- impact of motorised vehicles on green lanes including the Ridgeway;
- locally requirements for parking in the countryside plus an increase in traffic on the rural lane network;
- impacts on key 'honeypot' sites including damage to archaeology and erosion of fragile habitats;
- increase in noise from more intrusive countryside sports such as clay pigeon shooting;

- implications of provisions for open access under the CROW Act (actual open access areas are likely to be minimal, given that cultivated land is excluded. Nevertheless, the legislation is still perceived as a threat by many landowners as, for example, there may be cases of isolated downland in the middle of arable land with no statutory footpaths allowing access. In this instance there would be conflicts of interest arising between the public trying access the farm and landowners/farmers);
- implications of changes to Public Rights of Way under the CROW Act (Restricted Byways are afforded legal protection from damage by recreational off-road vehicles. However, Unclassified Country Roads and Byways open to all traffic remain vulnerable to damage).
- loss of sense of remoteness.

16.48. To a large extent these issues can be overcome through good management and anticipated growth in recreation and tourism could act a catalyst for positive change. Access opportunities, an outstanding landscape plus significant historic and cultural assets and attractive villages and market towns are together considered to provide an excellent package for the development of Green Tourism, particularly given the accessibility of the North Wessex Downs to consumers. This could tie into wider social objectives, for example supporting village services, and diversification of farm businesses. Currently there are a large number of initiatives promoting tourism within the area or at specific sites, although the area as a whole does not have a strong identity as a visitor/tourist destination. The promotion and marketing of the North Wessex Downs as a cohesive area is considered to be a major opportunity for the AONB.

Social Character of the AONB

16.49. A study of the changing social character of the AONB has been undertaken as part of this report. Significant forces for change and a number of key issues emerged. In summary, these include:

- population growth, with a high proportion of immigrants seeking to locate to rural areas and work in the nearby urban centres (education and training could be provided for Parish Councils to assist in the incorporation of new people entering the community and the countryside);
- a consequent increase in house prices and lack of affordable housing;
- perceived loss of younger people from villages;
- trend to outbound commuting with high traffic level in the AONB;
- loss of rural services, notably village shops, banking facilities and schools and poor public transport.

The Future

16.50. The North Wessex Downs AONB is a landscape that has evolved and developed over time. This chapter has aimed to summarise the current forces for change

although future impacts cannot always be predicted. The only certainty is that the North Wessex Downs will continue to change. Appendix 6 provides a list of environmental indicators by landscape type to enable the monitoring of trends in change within the North Wessex Downs.

- 16.51. A number of significant recent developments provide a strong framework to help manage the future direction of change within the AONB. Not least is the enhanced status of AONBs, through the Countryside and Rights of Way (CROW) Act 2000 and the increase in public funding available for AONB management. The framework developed by Agenda 2000 and taken forward through the ERDP, plus policy established by the Rural White Paper also provide an important opportunity to guide and shape the future character of the AONB.
- 16.52. A new management structure has recently been established for the North Wessex Downs AONB, with support from the local authorities, statutory agencies, voluntary bodies, landowners and the local community. This structure and partnership approach should mean that the AONB is well placed to secure a positive future. The AONB management plan (a statutory requirement under the CROW Act) has a vital role to play in establishing an overall vision for the North Wessex Downs, reconciling the diverse interests, and developing an integrated and positive way forward at the local level, drawing on the opportunities presented nationally. The forces for change and issues identified in this report should provide the framework for the management plan.
- 16.53. Areas for further research, which are considered necessary to increase understanding of the issues and to underpin the management plan are outlined in the following section.

17. AREAS FOR FURTHER WORK

- 17.1. The landscape character assessment has aimed to bring existing information together to provide an overarching framework assessment of the AONB. In so doing, a number of areas that would benefit from further or more detailed investigation have been identified. These areas for further research are in addition to the work identified for the future AONB management structure in developing the management plan, strategic policies and priorities, drawing in funding and delivering actions.
- 17.2. It is anticipated that the studies listed below will be important for taking forward a management plan for the AONB. The principal areas requiring further more in-depth study are:

The built character of the AONB.

- 17.3. Buildings could only be considered in brief detail by this landscape character assessment, with emphasis placed on the relationship of settlements to the landscape context. The AONB includes a great variety of building styles and materials, varying from clunch, chalk and sarsen in the west to red brick and clay tile in the east. It does not have a unifying vernacular built form, as for example in the Chilterns or Cotswolds. A further detailed study of built character and the form of individual villages (including origin, evolution, pattern, layout) and buildings (origins, materials and style) using the initial findings of this landscape character assessment, is required to guide the future design and location of development. This AONB-wide study should provide the framework for more detailed local initiatives such as village design planning.

Detailed historic landscape characterisation of the AONB.

- 17.4. The time available for the historic component of this project was necessarily limited. The aim therefore has been to provide the historic dimension to landscape character, as opposed to a full, separate historic landscape characterisation. The area would benefit from a more detailed archaeological assessment, including:
- use of a GIS-based package so that information concerning both standing earthwork monuments and below surface finds could be combined with aerial photographic and survey data. This could be correlated to physical landscape characteristics such as elevation, aspect and slope, vegetation cover (past and present) and proximity to watercourses, for example. More detailed, local evidence from environmental archaeology should also be included. Such a project may then be in a position to compare and contrast the different landscape types and character areas, and to begin to offer interpretations of their historic evolution.
 - an investigation of other, less quantifiable aspects of past human inhabitation. These could take into account the importance (or not) of monument intervisibility for example, although GIS-based viewshed analysis may be one method of assessing this.
 - an examination of past human movement and occupation of the landscape. It could therefore begin the process of understanding the everyday lives and

routine practices of people in the past, and to see how this varied between different areas, or changed over time. This would therefore seek to address the theoretical problems inherent with a purely empirical and descriptive approach to the landscape.

- 17.5. An AONB wide study would provide a valuable baseline upon which to base management objectives that aim to conserve the rich archaeological resource and allow the targeting of archaeological resources where they might be used to best effect. There are also benefits to be gained in terms of predictive modelling, for example the understanding of the development of the landscape. The study would also provide a wealth of information for interpretation and educational purposes. The value of such a study is enhanced by providing a product that is easily accessible to other professions and the general public.

A review of farm performance.

- 17.6. The assessment has indicated that agriculture is central to the character of the North Wessex Downs. A more detailed review of farm performance will be essential to the development of future management initiatives. As part of the management plan, we suggest that it will be valuable to develop a more detailed picture of agricultural performance based on review of the MAFF small area statistics and economic modelling of different farm types. This should allow a better understanding of the extent to which the scenarios, outlined in the previous chapter, will be realised and therefore enhance the ability to manage future change. The review will also help target opportunities for environmental enhancement.

Development of a woodland strategy.

- 17.7. As part of the management plan it would be useful to apply the findings of the landscape character assessment to develop an AONB-wide woodland strategy. This would look at capacity and sensitivities to woodland creation and consider opportunities for commercial forestry, recreation of woodland habitats and small-scale tree and woodland planting. The strategy should consider the difficulties and opportunities that are associated with creating or recreating woodlands characteristic of each landscape type. This should include planting guidance for those involved in new planting schemes, such as developers, parish councils and landowners, and should cover desirable and undesirable species. It would also provide an opportunity to consider the capacity for renewable energy crops such as short rotation coppice. Such a study could provide a basis for discussions with the Forestry Commission to negotiate planting and management targets for the area.

Hedgerow restoration.

- 17.8. The assessment has indicated that the decline in hedgerows is a problem throughout the AONB. Areas that are farmed intensively have suffered greatest losses, but in addition there are also regional patterns, for example within Landscape Type 8 (Lowland Mosaics), the effects of Dutch Elm disease has been attributed for the loss of hedgerow trees.
- 17.9. A detailed assessment of the historical patterns of hedgerow loss was not possible during this assessment. However, the reinstatement of some of these hedgerows could contribute significantly to landscape character and the conservation of

biodiversity. Hedgerow planting initiatives should be guided by historical information on hedgerow loss, together with detailed characterisation of regional hedge species and management styles.

Heathland restoration.

- 17.10. A number of heathland creation and restoration schemes have been implemented within the AONB. These projects have been in response to the serious decline in open heath vegetation, and associated biodiversity. All areas of remnant heathland should be mapped and a database created to enable informed decisions regarding site selection and management. An AONB-wide programme of restoration should be established by using a GIS system and the database.

Chalk grassland database.

- 17.11. Chalk grassland is one of the defining features of the AONB, although these are now highly fragmented. The location of all chalk grassland SSSI and locally designated chalk grassland sites in the AONB have been plotted as part of this study. Important work on chalk grassland restoration is being undertaken through the Ridgeway Project with funding from the Heritage Lottery Fund (focussed on the Ridgeway corridor). This initiative has the potential to be extended across much larger areas of the North Wessex Downs. The database and GIS system should be used to identify opportunities for restoration and management to produce an AONB-wide strategy.

Biodiversity (general).

- 17.12. An initial aim should be to draw together all biodiversity data within the AONB, including all Local Wildlife and Heritage Sites to inform management objectives. It should also be recognised that there are a number of conservation advisory projects already working in the area (e.g. RSPB Stone Curlew Project/FWAG/HMAP). All existing projects must be identified to avoid any duplication of effort. In addition, a further objective would be to review all local BAPs and ensure that the targets and actions are considered during the preparation of the management plan.

A local produce strategy.

- 17.13. This study could explore the market potential for the future development of local food production in the AONB. With the potential emergence of a sector of small farms producing high quality goods the scope for developing local markets should be examined. The study could explore issues such as opportunities for farming specialist breeds and local retail potential for organic produce. This would inform agricultural policy in the management plan and provide valuable information for farmers considering producing for the local market.

Study of the changing social characteristics of the AONB.

- 17.14. As part of the present study the social characteristics of the North Wessex Downs were investigated using service level provision as a key element. Social characteristics could only be considered in terms of data that exists already. No primary research was undertaken, with much of the data used from a survey undertaken by the Rural Development Council (now Countryside Agency) in 1997.

It is likely that significant changes may have occurred that could effect these results, including the proposed automation of the post office network, changes in education policy impacting on rural schools, a change in national administration and more recently the impact of farming change, including Foot and Mouth. There is scope for using the emerging results of the Rural Services Survey 2000 and additional primary research to feed into a more in-depth study of the social characteristics of the AONB to enable a better understanding of the pressures facing rural communities and allow subsequent targeting of resources.

Tourism and recreation.

- 17.15. A vast number of linear and open access sites as well as other visitor attractions exist across the AONB. At present the approach to recreation and tourism provision in the North Wessex Downs is fragmented. The majority of recreation providers cannot identify the AONB area, which does not encourage a strong sense of identity. A comprehensive review of recreation and tourism in should be carried out including calculation of visitor numbers and income generated, an examination of the tourism infrastructure, and an assessment of specific market sectors to develop and expand to deliver sustainable tourism. The review would inform tourism/recreation policies that will be developed as part of the management plan to guide this important element of the AONB.