

6. RESPONDING TO CLIMATE CHANGE AND MANAGING RESOURCES

Objective 1: *To conserve and enhance Exmoor's landscapes as living working landscapes that remain predominately free from intrusive developments, maintain a sense of tranquillity and protect Exmoor's dark skies.*

Objective 2: *To ensure that Exmoor's moorlands remain open, remote and relatively wild in character; that views are preserved, and strategically important areas of former moor and heath are managed in a way that restores their wilder landscape character.*

Objective 6: *To conserve and enhance Exmoor's natural resources and to improve air and water quality, conserve water resources, ensure soils are in good condition, maximise carbon storage, and minimise pollution.*

Objective 5: *To ensure that the built tradition, character, distinctiveness and historic character of Exmoor's settlements, buildings, farmsteads, landscapes, archaeological sites and monuments is conserved and enhanced and that the cultural heritage of Exmoor is protected through the careful management of development.*

Objective 14: *To achieve a strong, diverse, resilient and self-sufficient economy and encourage economic and employment opportunities which do not conflict with National Park purposes.*

Objective 18: *To minimise the net emissions of carbon dioxide and other greenhouse gases into the atmosphere, and support measures which contribute to carbon neutrality in ways that both conserve and enhance the National Park.*

Objective 19: *To adapt to the anticipated effects of climate change on Exmoor's communities, businesses, landscape, wildlife and coast including flood risk, sea level rise, and unexpected weather events and so on.*

Objective 20: *To minimise waste and emissions and support opportunities for reuse and, recycling in ways compatible with Exmoor's National Park designation.*

CLIMATE CHANGE MITIGATION AND ADAPTATION

PURPOSE OF POLICY

6.1. This policy explains the response to climate change, both in terms of mitigating the impacts of climate change through reducing greenhouse gas emissions, and building resilience by adapting to changes in climate that are already happening.

CONTEXT

6.2. Climate change is likely to be one of the most significant challenges facing Exmoor in the future. It is expected to impact on all aspects of the National Park – its natural beauty, wildlife and cultural heritage, the special qualities that people visit to enjoy and understand, and on local communities and economic activity. The UK Climate Projections 09¹⁶⁶, predict significant changes to Exmoor's climate across a range of different greenhouse gas emissions scenarios. In all cases, a rise in temperature is seen to be a highly probable outcome, with the main doubt being around by how much temperatures will rise. The main consequences of this change in climate are likely to be hotter, drier summers, and warmer, wetter winters that are characterised by periods of long duration rainfall. In contrast, frequent and short duration, high-intensity rainfall linked with longer drier summers is predicted. There is also likely to be a rise in sea level and increased storminess at the coast¹⁶⁷. These scenarios could potentially cause increased flooding from fluvial, surface water, coastal and tidal flooding. Although the exact nature of these changes on Exmoor is not known, the impacts on way of life are likely to be significant. Exmoor's communities therefore need to plan to mitigate and adapt to climate change, facing up to the threats it poses and taking advantage of any opportunities presented.

6.3. The Government has set statutory targets to reduce carbon dioxide emissions by 80% by 2050, with at least a 34% reduction by 2020¹⁶⁸. The main sources of emissions of greenhouse gases

¹⁶⁶ Adapting to Climate Change. UK Climate Projections 09, Defra

¹⁶⁷ Strategic Flood Risk Assessment Level 1 Report 2009 Prepared by Scott Wilson Ltd for West Somerset Council and Exmoor National Park Authority

¹⁶⁸ Climate Change Act 2008

from Exmoor are land management (including agricultural activity, land use change and forestry), energy and transport. Energy use accounts for 18% of Exmoor’s carbon footprint, principally comprising carbon dioxide emissions from the burning of fossil fuels from the domestic and commercial sectors. Transport makes up about 17% of Exmoor’s carbon footprint, arising from carbon dioxide emissions from vehicle movements within the National Park¹⁶⁹.

NATIONAL POLICY

- 6.4. National policy recognises the key role that planning plays in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure. National policy advocates the adoption of proactive strategies to mitigate and adapt to climate change¹⁷⁰, taking full account of flood risk, coastal change and water supply and demand considerations.
- 6.5. The National Parks Circular¹⁷¹ highlights that National Park Authorities should promote energy efficiency and lead the way in adapting to and mitigating climate change, alongside a renewed focus on achieving National Park purposes. The National Park Authorities’ role as exemplars of sustainability is given particular emphasis in terms of promoting the generation of renewable energy appropriate to the national value of the landscape.
- 6.6. These aspirations are reflected in the Vision for Exmoor National Park, which includes a commitment to work towards becoming a carbon neutral National Park. The Exmoor Carbon Neutral Programme sets out a range of actions needed to reduce emissions including an ambitious energy efficiency programme, the deployment of renewable energy and heat technologies, sustainable transport measures, changes to land use and management, and increased carbon storage in peat and woodland.

CLIMATE CHANGE MITIGATION

- 6.7. The Local Plan can only influence the spatial planning aspects of climate change mitigation and adaptation. These are set out below. As climate change is such a cross-cutting issue, many of the policies in this Plan will be important to meeting the challenges of both reducing greenhouse gases, and adapting to changes in climate. In particular, policies on increasing the efficiency of existing and new build development through retrofitting, design and sustainable construction will be important (policy CE-S7); encouraging more sustainable modes of travel and reducing the need to travel (policy AC-S1); supporting small scale renewable energy schemes that are appropriate in the National Park context (policies CC-S3, CC-D4, CC-D5); reducing flood risk and managing coastal change (policies CC-D1, CC-S2); enabling wildlife and heritage assets to adapt to a changing climate (policies CE-S2, CE-S4, CE-D3); and managing waste including proposals for anaerobic digestion (policy CC-S4 Waste).
- 6.8. Since energy use accounts for 18% of Exmoor’s carbon footprint, minimising energy use and increasing energy efficiency are effective ways to reduce carbon emissions. Energy consumption can be significantly reduced through the location of development, site layout and building design, the type of materials used, and the prudent use of existing and new resources, as set out in policy CC-S7 Design and Sustainable Construction Principles. Once the demand for energy has been minimized, the incorporation of low carbon or renewable energy technologies within existing properties or new build development will also help to reduce the National Park’s carbon footprint. Small-scale renewable energy schemes that are carefully sited and designed can also have a part to play. Policy CC-S3 provides more detail on renewable energy.
- 6.9. All development, including replacement and enhancement schemes, will need to demonstrate how it has had regard to the energy hierarchy by:
 - a) reducing the need for energy;
 - b) using energy more efficiently; and
 - c) using low carbon and renewable energy.

¹⁶⁹ Exmoor National Park Carbon Neutral Programme Consultation 2010

¹⁷⁰ In line with the objectives and provisions of the Climate Change Act 2008

¹⁷¹ English National Parks and the Broads: UK Government Vision and Circular 2010, Defra

- 6.10. As climate change could lead to increased pressures on water resources, the conservation and prudent use of water resources will also be important in future. Reducing the demand for water, and improving the efficiency with which it is used through, for example, rainwater and greywater harvesting and water conservation technologies can also be encouraged during refurbishment of existing properties and through high standards of sustainable design and construction with new build development as set out in policy CC-D3.
- 6.11. As transport accounts for just under a fifth (17%) of Exmoor's carbon footprint, primarily arising from carbon dioxide emissions from vehicle movements within the National Park, reducing the need to travel and encouraging more sustainable modes of transport will be important. This can be done by supporting the continued vitality of communities and settlements with jobs, services, shopping, and leisure facilities, and encouraging residents and visitors alike to use more sustainable modes of transport, as set out in policy GP4 Spatial Strategy and transport policies (Section 10 – policy AC-S1).
- 6.12. Other components of the National Park's carbon footprint arise from agricultural activity, land use change and forestry. Changes to land use and land management and increased carbon storage in peat and woodland provide important opportunities for reducing greenhouse gas emissions and are highlighted in the Exmoor National Park Partnership Plan. Whilst these measures do not directly fall within the planning system, associated development (or change of use) may be required.

CLIMATE CHANGE ADAPTATION

- 6.13. The Exmoor Climate Change Adaptation Study¹⁷² sets out a range of responses to climate change, including managing flood risk and coastal change, ensuring existing and new buildings are well adapted, helping wildlife and habitats to be more resilient, and managing changes to the landscape and historic environment resulting from a changing climate or necessary mitigation measures.
- 6.14. The UK Climate Projections indicate that changes in the duration and intensity of rainfall, sea level rise and increased storminess at the coast could increase the risk of flooding on Exmoor. Policy CC-S2 directs development away from areas at risk of flooding and encourages land management that reduces flood risk by increasing infiltration and flood storage, slowing down the passage of water into rivers, avoiding soil compaction and erosion. High intensity rainfall could also exacerbate erosion of footpaths and bridleways. It also recognizes the need to adapt to coastal changes which could have important implications for some of Exmoor's communities. Further detail is set out in Policies CC-D1 (flood risk), CC-S2 (responding to coastal change), and RT-D12 (Access Land and Rights of Way).
- 6.15. Climate change will impact on Exmoor's landscapes, wildlife and habitats, although the exact impacts are difficult to predict. Some landscape features, characteristics, species and habitat types may benefit from the changes, whilst others could decline or be lost as a result. This policy therefore supports measures that will enable Exmoor's landscapes, wildlife and habitats to adapt to the changes that do occur and to build future resilience of ecosystems through for example expanding and connecting habitats and supporting networks of Green Infrastructure. Further detail is set out in Policies CE-S1 (Landscape Character), CE-S2 (Biodiversity) and CE-S3 (Green Infrastructure).
- 6.16. Many of Exmoor's heritage assets are also vulnerable to climate change, including direct losses from sea level rise or coastal change, or impacts resulting from necessary alterations to adapt to flood risk, improve energy efficiency and so on. Whilst these changes may be required to ensure the continued preservation of the building or site, it is important to ensure that they do not cause inappropriate or damaging alterations. Where a heritage asset is likely to be lost, the National Park Authority will seek to ensure that it is preserved through record. Further details are set out in policy CE-D3.

¹⁷² Preparing for Climate Change. ENPA, Sept 2011

CC-S1 CLIMATE CHANGE MITIGATION AND ADAPTATION

- 1. Climate change mitigation measures will be supported by:**
 - a) Promoting the energy hierarchy through first reducing the need for energy then using energy efficiently, and using low carbon and renewable energy including through sustainable design and construction (GP1 and CC-S7).**
 - b) Small scale renewable energy technologies where these are of a scale and design appropriate to the locality, do not adversely affect wildlife and contribute towards meeting domestic, community or business energy needs within the National Park (CC-S3).**
 - c) Reducing the demand for water including through water conservation measures, reducing leakage, and supplying water efficiently (GP1, CE-S7, CC-D3).**
 - d) Reducing the need to travel and encouraging sustainable transport modes (GP4, SE-S1, AC-S1).**
 - e) Measures that support carbon sequestration and storage.**
- 2. Proposals to adapt to the consequences of climate change will be supported by:**
 - a) Avoiding development in areas at risk of flooding, and improving the resilience of essential services and infrastructure to cope with changes in climate (CC-D1).**
 - b) Promoting land management which reduces the risk of flooding (CC-D1).**
 - c) Adapting to coastal change (CC-S2).**
 - d) Enabling wildlife and habitats to adapt to climate change including through enhancement of green infrastructure networks (CE-S3) and seeking opportunities to strengthen landscape character (CE-S1, CE-S2).**
 - e) Adaptations to heritage assets that safeguard the asset but do not cause damaging alterations (CE-D3).**
- 3. Measures to mitigate the causes of climate change and adapt to the consequences of climate change must be compatible with conserving the natural beauty, wildlife and cultural heritage of the National Park, and promoting enjoyment and understanding of its special qualities.**

FLOOD RISK

PURPOSE OF POLICY

6.17. Policy CC-D1 sets out the National Park's approach to managing flood risk from all sources, and applies a sequential, risk-based approach to the location of development to avoid where possible, flood risk, taking account of the impacts of climate change.

CONTEXT

6.18. A large part of central Exmoor forms the upper part of the Exe catchment, is drained by the River Exe itself and its main tributary, the Barle. The west side of the National Park is drained by the rivers Yeo, Mole and Bray into the river Taw. The northern side of the National Park is drained by shorter rivers and streams running north into the Bristol Channel including the UMBER, Heddon and West and East Lyn in the west and the Hawkcombe Stream, Horner, Aller, Aville and Washford River in the east. Many of the watercourses on Exmoor flow through steep confined valleys which respond rapidly to rainfall.

6.19. The management of water flow is one of the key aspects of catchment management as concentrated periods of high rainfall can lead to flash flood events. Rapid run-off is thought to have been exacerbated by land drainage schemes on the moors and high ground and by compacted soils which are unable to absorb high intensity rainfall. Different approaches to reduce flood risk through good rural land management are also being tested which could benefit properties in Bossington, Allerford, West Luccombe and Horner through changes in rural land management in the catchment slowing down the passage of water and reducing rapid run off.¹⁷³ Some of these land management techniques include controlling headwater drainage, creating new woodlands and retaining water on lowland flood meadows.

¹⁷³ <http://archive.defra.gov.uk/environment/flooding/documents/manage/multi-objective-fm-scheme-factsheet1.pdf>

- 6.20. Flood risk on Exmoor has been assessed through the Strategic Flood Risk Assessment (SFRA), taking into account tidal and fluvial flood risk and the implications of climate change. Flood Zones 3a (high risk) and 3b (functional floodplain) have been defined within the principal local service centres of Dulverton, Porlock and Lynton and Lynmouth. Porlock is also highlighted as the settlement most affected by tidal/coastal flooding. For areas outside these settlements the precautionary approach has been adopted whereby the whole of Flood Zone 3 is considered to constitute the functional floodplain. Areas not lying within Flood Zone 2 or 3a/b are classified as Flood Zone 1 (lowest risk).
- 6.21. The NPPF advocates that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk or, where development is necessary, making it safe without increasing flood risk elsewhere. Impacts from coastal change should also be avoided (policies CC-D2 and CC-S2).

FLOOD ZONES AND THE SEQUENTIAL TEST

- 6.22. Flood zones have been developed by the Environment Agency as set out in Table 6.1 below with the risk of flooding increasing as you move down the table.

Table 6.1

Flood Zone	Definition
Flood Zone 1	Low probability - Defined as zone where there is a less than 1 in 1000 annual probability of river or sea flooding in any year.
Flood Zone 2	Medium probability - Defined as having between a 1 in 100 year and 1 in 1000 year annual probability of river flooding or between a 1 in 200 year and a 1 in 1000 year annual probability of sea flooding in any year.
Flood Zone 3a	High probability - Defined as having a 1 in 100 or greater annual probability of river flooding (>1%) or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.
Flood Zone 3b	Functional floodplain - Defined as land where water has to flow or be stored in times of flood.

- 6.23. National policy sets out a sequential test for assessing the flood risk of proposed development¹⁷⁴. The Sequential Test is a simple decision-making tool designed to ensure that sites at little or no risk of flooding are developed in preference to areas at higher risk. Development should avoid areas of flood risk, and the presumption is that all development should be located within Flood Zone 1 (areas with the least risk of flooding). Where this is not possible, then sites within Flood Zone 2 can be considered (areas of low to medium risk). Only where there are no reasonably available sites in Flood Zones 1 or 2 should the suitability of sites in Flood Zone 3 (highest risk) be considered, taking into account the flood risk vulnerability of the type of development proposed¹⁷⁵. If, following application of the Sequential Test, it is not possible for the development to be located in zones of lower probability of flooding, the Exception Test can be applied to allow necessary development to occur whilst managing flood risk. For the Exception Test to be passed it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk. In addition, a site-specific Flood Risk Assessment (FRA) must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall¹⁷⁶.
- 6.24. A site-specific FRA will be required for proposed development (except minor development) within Flood Zones 2 or 3, and for any applications within Flood Zone 1 over 1 hectare or in an area which has critical drainage problems¹⁷⁷. The Environment Agency¹⁷⁸ also advises that FRAs should be undertaken if the development site is located in an area known to have critical flooding problems from any flood source; the development is located within 20m of any watercourse regardless of Flood Zone classification; or liaison with the National Park Authority identifies the requirement for a FRA. Flood risk on Exmoor has been assessed through the

¹⁷⁴ Para 100 NPPF 2012 DCLG

¹⁷⁵ Technical Guidance to the NPPF, 2012, DCLG Table 2 provides guidance on the vulnerability of different types of development

¹⁷⁶ Para 102 NPPF 2012 DCLG

¹⁷⁷ Para 103 NPPF 2012

¹⁷⁸ <http://www.environment-agency.gov.uk/research/planning/82584.aspx>

SFRA¹⁷⁹, including flood risk zones which are shown on the Proposals Map, and other potential flood sources, as well as records of historic flood events. Further advice on undertaking site-specific FRAs is available from the Environment Agency website.

- 6.25. The Environment Agency publishes maps of flood risk on its website, and these should be referred to along with the SFRA as the most up to date source of information on flood risk. These maps are kept up to date, and will be used in the consideration of this policy.
- 6.26. Development should not increase flood risk elsewhere, and surface water run-off from new development should be minimized through careful location, layout and design including the use of sustainable drainage systems (SuDs) such as permeable materials, rainwater harvesting, filter strips and swales, soakaways, or ponds. The surface water drainage arrangements for any development site should be such that the volumes and peak flow rates of surface water leaving a developed site are no greater than rates prior to the proposed development, unless specific off-site arrangements are made and result in the same net effect. Applicants should consult the Environment Agency, the relevant Sustainable Drainage Systems Approving Body¹⁸⁰ and the National Park Authority when considering the design of sustainable drainage systems.
- 6.27. If, having applied the sequential approach and exception tests, development proceeds in an area of flood risk, residual risks should be managed including through flood resilience or resistance measures, (although these should not be used to justify development in inappropriate locations). Development design must be appropriate to the degree of flood risk identified, for example flood-resilient construction may be required to reduce the consequences of flooding and facilitate recovery from the effects of flooding sooner than conventional buildings. This may be achieved through designing buildings so that water can flow through lower levels, the use of water-resistant materials for floors, walls and fixtures and the siting of electrical controls, cables and appliances at a higher than normal level. In some circumstances, flood-resistant construction may be required, which can prevent entry of water or minimise the amount of water that may enter a building where there is flooding outside. Safe access and escape routes accounting for climate change must also be provided and agreed with the Environment Agency for developments within Flood Zones 2 and 3.
- 6.28. Where permission is granted, developer contributions towards providing the necessary flood defences will be sought.

MANAGING FLOOD RISK ON EXMOOR

- 6.29. A large part of central Exmoor forms the upper part of the Exe catchment, is drained by the River Exe itself and its main tributary, the Barle. The west side of the National Park is drained by the rivers Yeo, Mole and Bray into the river Taw. The northern side of the National Park is drained by shorter rivers and streams running north into the Bristol Channel including the UMBER, Heddon and West and East Lyn in the west and the Hawkcombe Stream, Horner, Aller, Aville and Washford River in the east. Many of the watercourses on Exmoor flow through steep confined valleys which respond rapidly to rainfall.
- 6.30. The management of water flow is one of the key aspects of catchment management as concentrated periods of high rainfall can lead to flash flood events. Rapid run-off is thought to have been exacerbated by land drainage schemes on the moors and high ground and by compacted soils which are unable to absorb high intensity rainfall. Different approaches to reduce flood risk through good rural land management are also being tested which could benefit properties in Bossington, Allerford, West Luccombe and Horner through changes in rural land management in the catchment slowing down the passage of water and reducing rapid run off.¹⁸¹ Some of these land management techniques include controlling headwater drainage, creating new woodlands and retaining water on lowland flood meadows.
- 6.31. Flood risk on Exmoor has been assessed through the SFRA, taking into account tidal and fluvial flood risk and the implications of climate change. Flood Zones 3a (high risk) and 3b (functional floodplain) have been defined within the larger settlements of Dulverton, Porlock and Lynton

¹⁷⁹ Strategic Flood Risk Assessment Level 1 Report, Scott Wilson Associates for West Somerset Council & Exmoor National Park Authority, March 2009

¹⁸⁰ Devon and Somerset County Councils are designated as the relevant Sustainable Drainage Systems Approving Bodies under the Floods and Water Management Act 2010 and must approve drainage systems in new developments and re-developments before construction begins

and Lynmouth. Porlock is also highlighted as the settlement most affected by tidal/coastal flooding. For areas outside these settlements the precautionary approach has been adopted whereby the whole of Flood Zone 3 is considered to constitute the functional floodplain. Areas not lying within Flood Zone 2 or 3a/b are classified as Flood Zone 1 (lowest risk).

- 6.32. Some existing infrastructure is at risk of flooding. Transport links within West Somerset, such as the A39 in the vicinity of Williton, Ellicombe and Dunster Marsh, and transport routes within Exmoor National Park around Dulverton are affected by fluvial flooding (see AC-S2 Transport Infrastructure and Section 10). The Police Station and Fire Station are also at risk from fluvial flooding in Dulverton. Surface water flooding is typically generated by short duration, intense rainfall events where precipitation is unable to infiltrate the ground or enter drainage systems. Subsequently, water may become transferred overland causing localised flooding. Other risks of flooding arise from reservoirs as a result of dam or bank failure and the predominant flood risk direction is shown on the Proposals Map.
- 6.33. Land used for holiday or short-let caravans and camping, and permanently occupied caravan and mobile home sites give rise to special problems in relation to flooding. Caravan or mobile home sites intended for permanent occupation are regarded to be at higher risk (classified as 'highly vulnerable')¹⁸². The instability of such structures places their occupants at special risk and they are likely to be occupied throughout the year including the winter months when flood risk is likely to be higher. Sites intended for temporary occupation are considered to be at lower risk (classified as 'more vulnerable') because they are usually occupied during the summer when flood events are less likely to occur, although they may be located for amenity and recreational reasons on coastal or riverside sites with a high residual risk of flooding. Consequently, permanently occupied sites ('highly vulnerable' development) will not be permitted in Zones 3a and 3b, and temporarily occupied sites ('more vulnerable' development) will not be permitted in Zone 3b (functional floodplain).
- 6.34. Flood watch areas¹⁸³ have been established in several parts of the National Park, where the Environment Agency provides a flood warning system. Emergency responses to extreme flood events are co-ordinated via the Somerset and Devon Flood Warning Response Plans bringing together the emergency services, local authorities and other partners.
- 6.35. The presence of formal raised manmade flood defences within the National Park is limited. Long term planning for flood risk within the National Park is set out in Catchment Flood Management Plans (CFMP) to cover fluvial and tidal flood risk, and Shoreline Management Plans (SMP) dealing with coastal flood risk. The National Park is covered by three CFMPs: North Devon, Exe and West Somerset. These provide a catchment overview of the main sources of flood risk and how these can be managed in a sustainable way for the next 50 to 100 years. The policy options range from no active intervention, to taking further action to reduce flood risk. The policy options for the catchment units within the National Park are summarized in the SFRA and will be taken into account in decision-making relating to Policy CC-D1.
- 6.36. The draft Shoreline Management Plan (SMP2) provides information regarding the risks of coastal change and the preferred strategy when considering future development and land use change on the coast. The Exmoor coastline is largely undeveloped and dominated by steep cliffs interspersed by steep sided valleys and Porlock Vale. The SMP2 approach to coastal change is to continue to allow it to evolve naturally to conserve important landscape characteristics; however it is proposed that the sea defences at Lynmouth will be maintained. At Porlock Weir it is proposed that there is no active intervention, and the policy approach is set out in CC-S2. Natural coastal evolution will be allowed to continue along the Porlock shingle ridge area as the flood risk in this area is fluvial rather than tidal.

¹⁸² Technical Guidance to the NPPF, 2012, dCLG Table 2 Flood Risk Vulnerability classification

¹⁸³ SFRA Figures 7 A & B

CC-D1 FLOOD RISK

1. Development proposals will be permitted where they:
 - a) Are consistent with the sequential test and applicants demonstrate that sites at little or no risk of flooding are developed in preference to areas at higher risk.
 - b) Do not increase the risk of flooding elsewhere.
 - c) Allow for relocation of communities, infrastructure or facilities at risk of flooding in accordance with policies CC-D2 and CC-S2.
 - d) Help to reduce the overall level of flood risk in and around the area through land management and working with natural processes, conserving the natural environment and cultural heritage.
 - e) Do not reduce the potential of land used for current or future flood management.
 - f) Are compatible with the appropriate Catchment Flood Management Plan or Shoreline Management Plan.
 - g) Use development to reduce the risk of flooding through location, layout and design and incorporate sustainable drainage systems to minimise surface water run-off and avoid pollution.
2. Where appropriate, a site-specific Flood Risk Assessment should support proposals.
3. Where, as a result of applying the sequential test, a development is approved on an exceptions basis, planning agreements or developer contributions will be sought to ensure that the development is protected from flooding to the appropriate standard throughout its lifetime. Any required additional or enhanced flood defences should not conflict with National Park purposes.

COASTAL DEVELOPMENT

PURPOSE OF THE POLICY

6.37. Exmoor has a wild, undeveloped coast, characterised by high cliffs, headlands and uninterrupted views giving a sense of tranquillity and remoteness. It can also have a level of coastal vulnerability associated with it due to the impact of coastal change. Policy CC-D2 seeks to protect the undeveloped nature of the coastline and ensure the vulnerability of any new development is minimised.

CONTEXT

6.38. The coast is important for its natural beauty, historic assets and supports a range of habitats and species. A significant proportion of the coast has a number of designations including Sites of Special Scientific Interest, Special Areas of Conservation, Heritage Coast and areas identified on the Section 3 Conservation Map. Furthermore the coast is a tourism asset; the South West Coast Path is a national trail which follows the Exmoor coast for part of its length and it makes an important contribution to the local economy.

6.39. Planning at the coast requires a strategic approach due to natural processes acting across regional and local authority boundaries. The NPA will therefore work closely with neighbouring partners to ensure a co-ordinated approach¹⁸⁴. This will include the Marine Management Organisation, as there is an overlap of jurisdiction with local planning powers extending from the land down to low water mark and marine plans from the sea to the high water mark.

COASTAL CHANGE AND THE PRECAUTIONARY APPROACH

6.40. A Shoreline Management Plan (SMP) is a long-term plan for the management of the risks associated with coastal processes. It takes into account the impacts of climate change, risks to people and the developed, historic and natural environment¹⁸⁵. They are therefore an important

¹⁸⁴ NPPF 2012 DCLG

¹⁸⁵ It sets out coastal policies over a 100 year timescale to manage tidal flooding and coastal erosion risks.

part of the evidence base for planning in coastal areas¹⁸⁶. The revised SMP for North Devon and Somerset¹⁸⁷ covers the stretch of coast from Hartland Point in Devon to Anchor Point in Somerset and includes the whole of the Exmoor coastline¹⁸⁸.

- 6.41. Coastal change refers to a physical change to the shoreline including permanent inundation, erosion and coastal accretion¹⁸⁹. The risk of coastal change including by flooding means that a precautionary approach should be taken to minimise risk to life and property. Development at the coast should therefore avoid areas known to be at risk of climate change or those areas which are likely to become an area at risk within the lifetime of the development as indicated by the SMP and other evidence. Where development is proposed in a location considered to be at risk of coastal change the applicant must be able to demonstrate that the development will be safe during its lifetime and have accounted for the impacts of flooding, climate change and sea level rise (CC-S1 Climate Change Mitigation & Adaptation).
- 6.42. Where it is identified from evidence such as the SMP that an area is likely to be affected by coastal change a Coastal Change Management Area (CCMA) will be identified. Further details on CCMA's and responding to coastal change are provided in Policy CC-S2.

CONSIDERATIONS FOR PROPOSALS

- 6.43. Coastal interests can be wide ranging and include the rich variety of environmental, historic and recreational importance of the coast. Proposals at the coast will need to be consistent with other policies in this plan which reflect coastal interests including: GP4 Spatial Strategy, CE-S1 Landscape Character, CE-S2 Biodiversity, CE-S7 Design & Sustainable Construction Principles, CE-S4 Cultural Heritage and Historic Environment, RT-S1 Recreation & Tourism, RT-D12 Access Land and Rights of Way. To protect the undeveloped nature of the Exmoor coastline, new development should be located in named settlements¹⁹⁰ unless it can be demonstrated that the proposal is essential in an undeveloped coastal location and is consistent with policies CC-D2 and CC-S2.
- 6.44. Development at the coast has the potential to be visually intrusive, for example by affecting the skyline and views along the coast including undeveloped stretches (CE-S1 Landscape Character). Proposals must demonstrate that there will be no adverse impact on the coastline and any coastal issues that may arise will need to be carefully considered including direct, indirect, cumulative, long-term and short-term impacts. Proposals must also demonstrate they are appropriate to the coastal location and that they will not affect natural coastal processes or result in coastal water pollution (CC-S5 Pollution)¹⁹¹ to the detriment of surrounding areas including those outside the National Park.
- 6.45. Furthermore the traffic impacts of new development should be carefully considered as there is a need to minimise the impact of seasonal traffic on narrow roads that lead to the coast particularly around popular destinations such as Porlock and Lynton & Lynmouth.
- 6.46. Improvements to existing sea defence works are not usually subject to planning control although Exmoor National Park would be expected to be consulted on any proposed changes. Planning permission is however required for new sea defence works. As sea defences can have a considerable effect on the coastal environment and natural beauty of the area, good design will be essential to ensure proposals conserve or enhance their surroundings visually.

¹⁸⁶ Paras 41 and 56 NPPF 2012 DCLG

¹⁸⁷ Prepared by the EA in partnership with the North Devon and Somerset Coastal Advisory Group (NDASCAG) was drafted in 2010

¹⁸⁸ <http://www.ndascag.org/> [Accessed 06.03.2012] At the time this was looked at it was noted that the document remained a draft, therefore subject to change until it has been signed off by the EA SW Regional Director on behalf of DEFRA

¹⁸⁹ NPPF 2012 DCLG

¹⁹⁰ Supported by YFE community consultation 2009-2010, Stakeholder YFE Consultation, Member/staff YFE consultation, Youth Consultation (Ilfracombe, Petroc [Barnstaple])

¹⁹¹ Para 25 NPPF 2012 DCLG refers to 'Local planning authorities should reduce risk from coastal change by avoiding inappropriate development in vulnerable areas or adding to the impacts of physical changes to the coast'

CC-D2 COASTAL DEVELOPMENT

1. **Proposals should avoid areas at risk from coastal change and be compatible with the latest Shoreline Management Plan and available coastal vulnerability data. Development will be permitted at the coast only where it has been demonstrated that it:**
 - a) **is located in a local service centre or village or requires a coastal location;**
 - b) **is not within an area identified at risk of coastal change including coastal change management areas unless it is essential infrastructure or sea defences which clearly require such a location and there are no alternative solutions;**
 - c) **is appropriate to the setting and character of the coastline (CE-S1) and does not adversely affect coastal interests including coastal biodiversity and heritage assets; and**
 - d) **does not increase risk to life or property, or affect the natural coastal processes at any part of the coastline both within and outside of the National Park.**

RESPONDING TO COASTAL CHANGE

PURPOSE OF POLICY

6.47. Policy CC-S2 Responding to Coastal Change ensures the precautionary principle is followed regarding development at the coast to minimise risk to life or property. Coastal change is of particular concern where it is likely to adversely affect existing communities and development. Policy CC-S2 provides a mechanism for areas identified at risk and sets out the principles that need to be considered to enable a strategic approach to the adaptation and replacement (through relocation) of development likely to be affected by the physical changes of the coast¹⁹². Proposals regarding CC-S2 should also refer to CC-D2 for further details on coastal development.

NATIONAL CONTEXT

6.48. National government promotes the adoption of proactive strategies when responding to coastal change¹⁹³. Any area likely to be affected over the next 100 years by physical changes to the coast (defined primarily from evidence provided by Shoreline Management Plans (SMPs)) will be identified as a Coastal Change Management Area (CCMA). When defining the geographical extent of a CCMA, relevant bodies including the Environment Agency will be consulted. For these areas the principles of CC-S2 will be followed to:

- a) be clear as to what development will be appropriate in such areas and in what circumstances; and
- b) make provision for development and infrastructure that needs to be relocated away from CCMA¹⁹⁴s

6.49. Where appropriate, a strategic plan will be developed incorporating an identified CCMA and the principles of CC-S2 to ensure an integrated approach is undertaken to manage the overall sustainability of the community likely to be affected by physical changes at the coast.

CONTEXT

COASTAL CHANGE

6.50. With the impact of climate change leading to sea-level rise and increased storminess, significant challenges lie ahead in the management of the coast. The exacerbation of coastal change by the impact of climate change has increased the coastline's vulnerability. Evidence of coastal

¹⁹² Supported by YFE Community, member/staff YFE consultation and YFE youth consultations (Ilfracombe, Petroc [Barnstaple]) for locating, adapting and designing new development to cope with effects of more extreme weather. YFE Stakeholder event supported planning for areas at risk of change and locating, adapting and designing new development to cope with the effects of more extreme weather. UK Marine Policy Statement, 2011 (HM Government) (The Stationary Office)

¹⁹³ NPPF 2012 DCLG

¹⁹⁴ NPPF 2012 DCLG

change within Exmoor National Park includes the 1996 breach of the shingle ridge at Porlock Bay which flooded the low lying marsh behind. Rapid evolution of the beach and the development of salt marsh followed¹⁹⁵.

- 6.51. Although the impacts of climate change cannot be fully predicted, planning based on the best available evidence can help identify those areas most at risk and assist in decision making on any appropriate action (CC-S1 Climate Change Mitigation & Adaptation). Effective policies are required to prepare for and adjust to the impacts of climate change on the coast. Risk will be appraised using SMPs and other up-to-date material information on coastal change as it becomes available.

SHORELINE MANAGEMENT PLAN

- 6.52. A Shoreline Management Plan (SMP) is a long-term plan for the management of the risks associated with coastal processes. It takes into account the impacts of climate change, risks to people and the developed, historic and natural environment¹⁹⁶. They are therefore an important part of the evidence base for planning in coastal areas¹⁹⁷.
- 6.53. The SMP for North Devon and Somerset¹⁹⁸ includes changes to the coastal policy unit at Porlock Weir from a 'Hold the Line' policy to 'No Active Intervention' commencing from the adoption of the SMP. This implies that assets at Porlock Weir including residential properties, listed buildings and local infrastructure would become at risk of flooding and erosion. To 'hold the line' at Porlock Weir would, in the short term, require existing defences to be replaced with much larger structures to withstand the increased exposure to wave action. This would make it technically and economically difficult to sustain coastal defences here. It is noted in the SMP that it is unlikely that future sea defence provision at Porlock Weir would attract public funds, although there is flexibility for the existing localised defences to be maintained or replaced if alternative funding is made available. However it also questions the sustainability of defences at Porlock Weir because their retention could potentially impact on the wider coastline of Porlock Bay in the long term. Continued defence would only be acceptable if there was limited impact on sediment transport along the coastline. The impact of coastal change at Porlock Weir was further studied by the Somerset Coastal Change Pathfinder project¹⁹⁹, this demonstrated through a visual mapping exercise the possible significant consequences of coastal change at Porlock Weir²⁰⁰.
- 6.54. CC-S2 provides the mechanism for areas at risk, such as potential properties at Porlock Weir, to have the opportunity to respond to climate change. It is envisaged that Porlock Weir will be identified as a CCMA and a strategy for Porlock Weir and surrounding area will be produced. Any proposals for adaptation and relocation at Porlock Weir should accord with this strategy.
- 6.55. The SMP continues a 'hold the line' policy at Lynmouth, implying that the defences will be maintained and eventually replaced with larger structures to continue to provide protection to Lynmouth. Impacts could include the loss of beach width due to the combination of sea level rise and retention of coastal defence, the potential loss of terrestrial habitat from the Exmoor Coastal Heaths SSSI and Exmoor Heath and Coast SAC. Further impacts could include the loss of or damage to a number of non-designated archaeological features, scheduled monuments and parts of the South West Coast Path.

CONSIDERATIONS FOR PROPOSALS

- 6.56. Policy CC-S2 will be applied only to those communities where there is accepted evidence that they are at risk of coastal change. Any proposals for replacement of development through relocation will need to demonstrate that the overall proposal for both new development created and measures for the management of that which is to be lost are consistent with the principles in Policy CC-S2.

¹⁹⁵ <http://www.english-nature.org.uk> [Accessed 06.03.2012] An evaluation of the breach processes at Porlock shingle ridge was undertaken between 1998 and 2004 by the Environment Agency <http://www.environment-agency.gov.uk/> [Accessed 06.03.2012]

¹⁹⁶ It sets out coastal policies over a 100 year timescale to manage tidal flooding and coastal erosion risks

¹⁹⁷ Paras 41 and 56 NPPF 2012 DCLG

¹⁹⁸ SMP 2010

¹⁹⁹ DEFRA funded from 2009-2011. The project had the aim of assisting those coastal communities most at risk from sea level rise to help them adapt to projected changes at the coast. Project outputs included the development of a scenario for Porlock Weir following a major storm event

²⁰⁰ http://www.somersetcoastalchange.org.uk/about_the_project/porlock_weir [Accessed 06.03.2012]

- 6.57. The relocation of development at risk to ‘safer’ areas could be achieved in a number of different ways, including the relocation further inland or to neighbouring settlements (GP4 Spatial Strategy). Time limited conditions may also be used to enable flexibility in replacement through relocation. The NPA will work with partners to consider the full range of options based on sound evidence for a community ‘at risk’ to find the most appropriate solution for it, which will include the impact on the natural, cultural and built environment.
- 6.58. Proposals to relocate development being displaced as a result of coastal change should be able to demonstrate the reasons for the choice of location for any relocated development including local socio-economic links between the relocated development and the community from which the development was displaced.
- 6.59. Future arrangements should be made for the buildings to be replaced to ensure they are rendered safe, either through clearance or ‘managed’ which may include a temporary and alternative use of the site. Where permission is granted, a planning obligation will be secured to ensure the satisfactory management of the development which is to be lost. The coordination of the development which is to be lost and the new replacement development may be managed through a legal agreement. Proposals for the relocation of an existing dwelling should apply the same principles as those in HC-D15 Replacement Dwellings in respect of floorspace and reflect the scale of the original building it is replacing. Development should also be of a character and quality commensurate with its location in a National Park and should be well integrated within its locality, ensuring the place will function well²⁰¹. Proposals for relocation may provide an opportunity for the enhancement of the National Park; this should be consistent with policy GP6: Enhancing the National Park.

CC-S2 RESPONDING TO COASTAL CHANGE

- 1. Where the adaptation of development or its replacement through relocation is proposed in response to coastal change, it must be demonstrated that the existing development is in an area likely to be significantly affected by physical changes at the coast, such development includes infrastructure at the coast (CC-S1 Climate Change Mitigation & Adaptation, AC-S1 Sustainable Transport). Proposals for adaptation of existing development should be consistent with other policies in this Plan. The replacement of development through relocation must be consistent with the following principles:**
 - a) it is important to the well-being of the coastal community affected;**
 - b) it is not within an area likely to be affected by physical changes to the coast;**
 - c) it is well related to current buildings and infrastructure including in its siting, scale, height and design (CE-S7);**
 - d) replacement development is of the same size and use as the original asset at risk unless an opportunity for significant visual enhancement can be demonstrated in accordance with GP6. In the case of dwellings, they accord with the maximum floorspace provision in HC-D15;**
 - e) the site of the original development at risk it replaces is either cleared or managed to be rendered safe for the local community, environment and consistent with National Park purposes; and**
 - f) the overall proposal considering both new development and management of that which is to be lost will result in no unacceptable impact on the landscape, biodiversity, built environment, townscape or local communities.**
- 2. Porlock Weir**
A strategy for Porlock Weir and surrounding area will be produced in line with the principles of CC-S2 Responding to Coastal Change and any proposals for adaptation and relocation at Porlock Weir will be required to be achieved in accordance with this strategy.

²⁰¹ NPPF 2012 DCLG, apply integrated coastal zone management p.25, the character of the coast including its designations are not compromised p.25 maintain character of the coast p.26

WATER CONSERVATION

CONTEXT

- 6.60. The National Park is an important source of water for communities both within and outside the National Park. The catchments on Exmoor supply drinking water to over half a million people including in Tiverton, Exeter and Taunton. The implications of growth in settlements outside the National Park for water conservation on Exmoor will need to be assessed as part of adjacent Authorities' Local Plan appraisals. Its popularity as a tourist destination, along with many other parts of the South West, also increases demand for water supplies, particularly during the summer months. Water resources are important for the local economy and businesses, particularly agriculture. Careful management and protection of these water catchments is important to ensure that their ability to provide ecosystem services including capturing and storing rainfall, managing flood risk, water re-cycling, the supply of clean, fresh water, and support for wildlife habitats and species are not compromised. Monitoring programmes are required by the Water Framework Directive to establish an overview of the water status in each river basin district. Water Framework Directive assessments by the Environment Agency have generally found rivers and streams on Exmoor to be in 'good' ecological status.
- 6.61. Water is supplied primarily from Roadford and Wimbleball reservoirs, other smaller reservoirs, a number of rivers and their tributaries and numerous groundwater resources and are administered by South West Water and Wessex Water. In some cases, in more remote areas there may be private water supplied from sources such as springs, wells and boreholes where access to public water supply is too expensive to connect due to distance. Wessex Water covers parts of the eastern side of the National Park. Groundwater is an important component of water resource availability for Wessex Water, although supplies are also drawn from Wimbleball reservoir and a number of rivers and tributaries. Assessment²⁰² of water requirements and likely supplies in this part of the Park over the period of the Plan (including climate change implications) has identified that there is sufficient water to meet demands, provided action is taken to improve water conservation (along with other actions for the water company including reducing leakage). This area is considered to be in low risk of water stress²⁰³.
- 6.62. South West Water covers parts of the western side of the National Park. The key resources that are available include Roadford and Wimbleball reservoirs, the River Exe and its tributary the Barle, which are used to recharge Wimbleball reservoir, and a number of groundwater resources. Assessment²⁰⁴ of water requirements and likely supplies in this part of the Park over the period of the Plan has identified that sufficient water can be provided to meet demands, provided measures to improve demand management and leakage control are undertaken and there is further investment in water supply infrastructure (outside the National Park), although rising population numbers in large settlements outside the National Park are likely to put increasing pressure on water resources. This area is considered to be in moderate risk of water stress²⁰⁵. There are no plans to invest in additional water supply infrastructure within the National Park during the Plan period.
- 6.63. As well as providing water for public drinking supplies, water is essential to Exmoor's landscapes and wildlife, and it is vital to the livelihoods of those who live and work here particularly for agriculture and other non-domestic uses. Water is highly relevant to conservation of biodiversity²⁰⁶ both in terms of the quality and quantity of water that is available to support the survival of water dependent species and wetland habitats. A number of rivers and wetland sites are designated on Exmoor and are dependent upon there being appropriate water quality to support the habitats and species for which they were designated (see policy CE-S2 Biodiversity). Water supplies are also required to provide a sufficient base flow for rivers to maintain fish stocks and other aquatic species, and to dilute any pollution and sewage (CC-S5 Pollution).
- 6.64. The Government is committed to protecting water ecosystems to achieve good ecological status through a river basin planning approach, under the EU Water Framework Directive (WFD). This Directive requires the protection, improvement and sustainable use of freshwater systems and

²⁰⁶ England Biodiversity Strategy, Defra 2011

coastal waters and sets a timetable to reach good chemical and ecological status for inland and coastal waters. To meet WFD objectives the Environment Agency has produced a series of River Basin Management Plans (RBMPs) that set out a programme of measures for protecting and improving the water environment. This includes a River Basin Management Plan (RBMP) for the South West River Basin District – which includes the river catchment areas on Exmoor. The South West RBMP encourages sustainable water management such as water efficiency measures, by builders and developers, and promotes the use of sustainable drainage systems in new developments as well as retrofitting where appropriate.

- 6.65. Demand for water resources in the future is expected to increase with a growing population, particularly in communities outside the National Park who are serviced by water arising on Exmoor. Climate change and the associated warmer, drier, summers are likely to affect the availability of resources including reduced flows in rivers, reductions in the recharge of aquifers and a consequent lowering of groundwater levels²⁰⁷ and Water Resource Management Plans have tried to take into account the implications in the assessment of long term water availability. Increased frequency of extreme weather events may also affect both water supplies and the risk of flooding (CC-D1 Flood Risk). There may also be other effects on the water environment, such as increased water temperatures, which will also impact on aquatic species and habitats. These potential effects would be exacerbated by likely increases in the demand for water from households and industry. Additional measures for storing and conserving water resources, for example, through rainwater harvesting or small scale farm water storage including reservoirs, bunds and ponds may be required in future²⁰⁸.
- 6.66. The emphasis is therefore on conserving water resources on Exmoor including maintaining river flows at periods of low rainfall, and managing water on a catchment basis. Development should not have a detrimental impact on the water environment and should incorporate measures to support water efficiency and re-use (see policy CE-S7 Design and Sustainable Construction Principles). This could include minimising demand, recycling and storing water, and retrofit where appropriate. Retrofitting on listed buildings would require listed building consent, and on traditional buildings would need to not cause harm to the historic fabric of the building.

CC-D3 WATER CONSERVATION

- 1. Development proposals should demonstrate how water conservation measures will be incorporated in their proposals and how demand for water will be minimised, and including measures for the recycling, storage and reuse of rainwater and greywater. Retrofitting of existing properties will also be encouraged where appropriate.**
- 2. On-farm water storage through small scale reservoirs, bunds and ponds will be supported where they enhance water supplies and are compatible with National Park purposes.**
- 3. Development proposals which lead to an increase in the demand for water in locations where the existing water supply is inadequate or cannot be satisfactorily improved, or where additional abstraction will have an adverse effect on existing supplies, fisheries, recreational or nature conservation interests will not be supported.**

²⁰⁷ Water resources in England and Wales - current state and future pressures Environment Agency 2008

²⁰⁸ Water for Life, Defra 2011

LOW CARBON AND RENEWABLE ENERGY DEVELOPMENT

PURPOSE OF THE POLICY

6.67. Policy CC-S3 sets out the National Park Authority's overall approach to climate change mitigation and adaptation, which includes support for appropriate small scale renewable energy technologies. This policy sets out in more detail the specific approach to renewable energy within the National Park.

NATIONAL POLICY

6.68. The Government has set a UK target to deliver 15% of the UK's energy consumption from renewable sources by 2020, and also has an ambition that by 2020, 12% of heating should come from renewable sources.

6.69. The National Planning Policy Framework places the responsibility on all communities to contribute to energy generation from renewable or low carbon sources. Renewable and low carbon energy development should be encouraged, while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts. Community-led initiatives are also encouraged for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning.

6.70. The Government's Vision²⁰⁹ for National Parks particularly highlights the National Park Authorities' role as exemplars of sustainability in responding to climate change, including promoting energy efficiency and the generation of renewable energy, whilst not compromising their overriding duty under the 1949 Act. It recognises that the National Parks offer important opportunities for a range of renewable energy technologies, including biomass (woodfuels), micro-hydro, anaerobic digestion (which will also reduce waste), wind and solar power installations, appropriate to the national value of the landscape.

CONTEXT

6.71. The use of energy accounts for about 18% of Exmoor's carbon footprint. The greatest demand for energy is from domestic heating, which is currently provided through a combination of oil, cylinder gas, coal, electricity, woodfuel and a small amount of mains gas. As a consequence, domestic heating also accounts for around two-thirds of emissions arising from energy use. The remaining emissions related to energy are from electricity for homes, heating for businesses, and electricity for businesses²¹⁰.

6.72. The National Park Authority has encouraged the use of renewable technologies through the Carbon Neutral Exmoor programme. In appropriate circumstances small scale renewable energy schemes utilising technologies such as solar panels, biomass (woodfuel) heating, small scale wind turbines, photovoltaic cells and combined heat and power schemes can be incorporated both into new developments and some existing buildings – this is supported in appropriate circumstances through policy CE-S7 Design and Sustainable Construction Principles.

6.73. The Renewable Energy Resource Assessment²¹¹ for Exmoor National Park identifies the potential for a range of technologies across Exmoor. This highlights in particular the opportunities from biomass due to the availability of woodfuel and other crops within the National Park. Hydropower is another potential source within the National Park, although not all water courses may be suitable and other interests will need to be taken into account. Solar heat and electricity (PV) have become more widespread (particularly following Government incentives and reductions in cost), and probably to a lesser degree, ground and air source heat pumps. The wind resource is good, however potential in Exmoor is likely to be limited by the need to site turbines in locations sympathetic to the natural beauty, wildlife and cultural heritage of the National Park. Energy from waste technologies could provide a sustainable way of managing residual municipal waste and agricultural wastes providing travel distances are minimised. Tidal stream and wave energy are developing technologies that are not currently commercially viable, but could become so over the Plan period. Proposals for renewable energy

²⁰⁹ English National Parks and the Broads: UK Government Vision and Circular DEFRA 2010

²¹⁰ Exmoor Carbon Neutral Programme Consultation, Exmoor National Park Authority, 2010

²¹¹ Renewable Energy Resource Assessment for Exmoor, 2008

technologies would need to consider the implications of flood risk and coastal change in accordance with policies CC-D1 Flood Risk and CC-S2 Responding to Coastal Change.

RENEWABLE ENERGY

- 6.74. Not all renewable energy technologies will require planning permission. However the National Park Authority encourages applicants to consider the full range of technologies available and to discuss proposals with the Local Planning Authority at an early stage. Applicants will be expected to demonstrate that they have undertaken measures to reduce the need for energy and improve energy efficiency before considering renewable energy and the type of renewable energy technology to be used, to ensure that they are consistent with the National Parks Vision and Circular that in National Parks renewable energy generation is appropriate to the national value of the landscape²¹².
- 6.75. The National Park Authority is supportive in principle of small-scale renewable energy developments which contribute towards meeting domestic, community or business energy needs within the National Park provided that there is no significant environmental harm to the area concerned or the National Park as a whole. For the purposes of this policy, ‘small-scale’ is defined as schemes of a scale that can be carried out within the capacity of the local environment and consistent with its landscape character, without causing damage to its natural beauty, cultural heritage, wildlife, or eroding enjoyment of the special qualities of an area, in accordance with statutory purposes and national policy²¹³. This will include cumulative impacts when considered in combination with any existing schemes within the National Park or affecting its setting. Where the impacts are acceptable small scale renewable energy schemes that provide community benefits or environmental enhancement will be particularly supported. Large and medium scale renewable energy projects will not be acceptable within Exmoor. Nationally significant energy infrastructure projects²¹⁴ will be determined by the Secretary of State.
- 6.76. Planning permission for renewable energy developments likely to have an adverse effect on a site with internationally or nationally recognised designations (Special Areas of Conservation, Sites of Special Scientific Interest, National Nature Reserves, Scheduled Monuments, Conservation Areas, Listed Buildings, and Registered Parks and Gardens identified on the Proposals Map) will not be granted, unless an assessment has shown that the objectives of designation of the area will not be compromised by the development, and any significant adverse effects on the qualities for which the area has been designated have been mitigated and are clearly outweighed by the environmental, social and economic benefits. Impacts on Local Wildlife Sites and other areas of nature conservation or heritage interest will also be subject to a similar assessment.
- 6.77. Proposals will need to be consistent with policies CE-S1 Landscape Character, CE-S2 Biodiversity, and CE-S4 Cultural Heritage and, where necessary, landscape sensitivity and capacity analysis, ecological or historic environment/ archaeological surveys or other investigations deemed necessary by the National Park Authority should be carried out to inform the application. Environmental Impact Assessment (EIA) will be required for certain renewable energy projects where the development falls into a category within Schedule 2(3) of the Regulations²¹⁵ and the National Park Authority adopts a ‘screening opinion’ that EIA is required.

ISSUES TO BE CONSIDERED IN PROPOSALS FOR RENEWABLE ENERGY DEVELOPMENT

- 6.78. There are many different types of renewable energy technologies, and some are more compatible to National Park purposes than others. Applicants are therefore encouraged to consider the range of technologies available at an early stage, and to discuss proposals with officers so that appropriate schemes can be supported. Proposals should clearly set out the benefits arising from the development including for example reductions in emissions, environmental enhancements, community or social benefits, and economic benefits such as job

²¹² Para 47 English National Parks and the Broads UK Government Vision and Circular 2010, “The Parks offer important opportunities for renewable energy generation which must not be overlooked, including woodfuels, and micro-hydro, anaerobic digestion (which will also reduce waste), wind and solar power installations appropriate to the national value of the landscape. The Authorities should promote energy efficiency within the Parks

²¹³ Para 14, footnote 9 NPPF 2012 DCLG

²¹⁴ Defined in the Overarching National Policy Statement for Energy Infrastructure as Onshore wind or biomass schemes generating more than 50 megawatts and offshore wind schemes over 100 megawatts

²¹⁵ The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011

creation and retention. However, care must also be taken in the detailed design of any proposal to minimise potential adverse impacts, both during construction and operation. Applications should assess the impacts of the proposed scheme along with any required infrastructure such as buildings, tracks, overhead cables or pipelines. The impacts will vary according to the type of scheme proposed, and the level of assessments and information required should be proportionate to the scale of the proposal and its likely impact. Further details are given below.

- 6.79. Planning conditions may be used to ensure that any residual impacts of approved schemes are acceptable, to require removal of approved structures if they become redundant, and restoration of the site.

LANDSCAPE AND VISUAL IMPACT

- 6.80. The landscape and visual effects of particular renewable energy developments should be assessed in accordance with policy CE-S1 Landscape Character. Potential impacts will vary on a case by case basis according to the type of development, its location and the landscape setting and sensitivity of the proposed development. Landscape sensitivity is the degree to which a particular landscape character type or area can accommodate change without unacceptable detrimental effects on character.
- 6.81. The effects of renewable energy schemes on landscape can include:
- a) direct impacts on landscape fabric (for example loss of a hedge or other feature);
 - b) impacts on landscape character, including effects on the distinct pattern of elements of the landscape such as scale, landform, vegetation patterns, historic and cultural features; and / or
 - c) impacts on the perceptual characteristics of landscape – including feelings of openness, remoteness, tranquillity, and beauty.
- 6.82. The visual impacts of renewable energy schemes will depend on where they can be seen from and who will see them. Landform is a fundamental issue for Exmoor particularly moorland landscapes which have a horizontal emphasis of ridges, plateaux, and smooth horizons. As with landscape character, the significance of visual impacts will vary according to the sensitivity of the receptor environment, and the magnitude of change, for example a scheme in a remote moorland area with open views and few visible human artefacts would be more sensitive to visually intrusive vertical elements such as wind turbines than areas with more existing activity and structures.
- 6.83. Some of these effects may be minimised through appropriate siting, design and landscaping schemes, depending on the size and type of development proposed. For example, visibility of wind turbines from valleys can be decreased if the siting of turbines avoids blades breaking the skyline from important viewpoints. The most quiet, scenic and tranquil areas should be avoided, as should any visual competition with historic features such as church towers, historic settlements, or other landmarks. Grouping any necessary structures with existing buildings, trees or landform can help visual integration, and for smaller schemes screening may be possible. The design of structures is also important, and traditional materials and form should be used where possible. The colour of wind turbines can also help to reduce visual impacts.
- 6.84. The cumulative impacts of a number of structures associated with the scheme and with other existing renewable energy schemes within the locality or visible from it should also be considered. Cumulative landscape effects and visual effects should be considered separately. The former refers to the effects of a proposal development on the landscape fabric, character and quality and so concerns the degree to which renewable energy development becomes a significant or defining characteristic of the landscape. Cumulative visual effects concern the degree to which renewable energy development becomes a feature in particular views (or sequences of views), and the effect this has upon the people experiencing those views.
- 6.85. Applicants should consider issues of landscape and visual impact and demonstrate that any impacts can be avoided, minimised or mitigated such that the proposals will not detract from the natural beauty of the National Park.

WILDLIFE

- 6.86. The impact of renewable energy schemes on the local ecology should be carefully assessed in accordance with policy CC-S2 Biodiversity and where possible, result in an overall benefit for wildlife. Care must be taken to prevent proposals from adversely affecting existing nature conservation areas or species of conservation interest. Applications in areas designated for their ecological importance (SACs, SSSIs, NNRs) must demonstrate that they will not affect the integrity or special interest of the habitats or species for which the area was designated. Any potential impacts on Local Wildlife Sites should also be considered.
- 6.87. The potential impacts from renewable energy schemes on wildlife depend on the type of technology and its location. Wind turbines may have direct impacts on habitats in relation to their siting and any access tracks required, and also potential impacts on species particularly birds and bats which can be struck by the moving blades. Care is needed to ensure that turbines are not located on migratory routes or on commuting routes between roosts and foraging areas for example. Hydro schemes also have potential ecological impacts through disturbance to the river bed and bank; impact on the watercourse as a habitat for fish and other aquatic creatures including through water abstraction; and impact on ecological value of other land affected by the development. The demand for woodfuel for biomass could also lead to the loss of deadwood habitats if wood is cleared from the forest floor. Domestic renewable energy schemes such as PV panels also need to ensure that there is no disturbance during installation or maintenance to species such as bats or barn owls which may be using the roof space. There is also emerging evidence that the reflection of polarised light from solar panels can be damaging to aquatic insects²¹⁶. Such impacts will need to be judged on a case by case basis and will need to be kept under review.
- 6.88. Whilst negative impacts need to be avoided or minimised, there are also potential wildlife benefits that can be gained from renewable energy schemes. For example careful management of woodlands for woodfuel could enhance biodiversity; energy crops such as miscanthus can provide cover and potentially over-wintering sites for birds and other species; water management for hydro could benefit aquatic species, for example some turbine types oxygenate the water which can benefit fish.

CULTURAL HERITAGE

- 6.89. The impacts on the historic environment should be assessed in accordance with policies CE-S4 Cultural Heritage and CE-D3 Conserving Heritage Assets, including impacts on heritage assets such as historic landscapes, listed buildings and Conservation Areas or their settings. Renewable heat systems such as solar panels or biomass boilers could also affect historic buildings and although these might not require planning permission, they may require listed building consent. Visualisations may be required to demonstrate the effects of a proposed wind turbine on historic landscapes or the setting of heritage assets. Hydro schemes may utilise existing buildings and the impact on any historic interest will need to be carefully assessed. The risk of potential damage to archaeology particularly during construction should also be assessed.
- 6.90. Potential schemes should include an assessment of the implications for archaeological remains, historic buildings and designed landscapes, as well as the historic character and associations of the wider landscape. Such assessments should embrace both the direct physical effects of projects and any indirect impacts, such as hydrological impacts in surrounding areas.

TRANQUILLITY, NOISE AND SHADOW FLICKER

- 6.91. Tranquillity is one of the special qualities of the National Park that is valued by people and any potential impacts on tranquillity from renewable energy schemes including noise or shadow flicker from wind turbines would need to be minimised to a level which would not adversely affect people's enjoyment of the National Park. There may also be impacts on residential properties, particularly where schemes are located close to existing dwellings or buildings in order to minimise visual impact. Air source heat pumps can potentially cause noise disturbance to neighbouring properties. Noise from traffic and plant operations will need to be carefully

²¹⁶ A Review of the Impact of Artificial Light on Invertebrates, Buglife 2011

considered, particularly in relation to biomass and anaerobic digestion plants according to likely levels of traffic to and from the site in order to transport biomass fuel and subsequent by-products.

- 6.92. A specific issue in relation to wind turbines is shadow flicker, where the shadow of the rotating blades falls across a dwelling and can cause light within the dwelling to brighten and darken. Government guidance²¹⁷ states that impacts are only likely to occur when the property is located within 130 degrees either side of north of a turbine, and that shadow flicker decreases with distance from the turbine, with a general guide of more than 10 rotor diameters from the turbine being seen as acceptable. However this may conflict with locating turbines close to existing buildings in order to reduce visual impact and so will need to be considered in combination with other objectives. Noise from wind or hydro turbines must also be assessed according to the latest standards. Applicants should provide information on the assessment of noise, vibration and shadow flicker impacts including noise associated with the construction, operation and (if relevant) decommissioning of the scheme. Noise limits may need to be set using planning conditions to protect general amenity and any nearby residential properties.

AIR AND WATER QUALITY, DUST, ODOUR

- 6.93. Air and water quality in the National Park are generally good, and any potential impacts from renewable energy schemes will need to be carefully considered.
- 6.94. Potential impacts on air quality can arise from the dust generated by biomass plants, particularly when large quantities of materials are required. The efficient burning of modern biomass boilers could however help to improve air quality, particularly in comparison to conventional oil or coal fuelled boilers.
- 6.95. Anaerobic digestion plants are by their nature odorous. Proposals should examine predicted odour effects and, if necessary, include mitigating measures such as odour control systems. However, anaerobic digestion plants also provide opportunities to deal with farm wastes such as slurry, which otherwise may form a potential pollution hazard.
- 6.96. The growing of biomass crops such as miscanthus could impact on water quality from the use of chemical fertilizers and pesticides, although generally such crops are low input, and once established, reductions in soil disturbance and erosion can also be achieved compared with conventional arable crops, thereby potentially improving water quality by reducing runoff and sedimentation²¹⁸.
- 6.97. The impact of hydro schemes on water quality and resources will need careful assessment, particularly during any required engineering or construction works and once the scheme is operational.

RECREATION AND ACCESS

- 6.98. Tourism and recreation are important to the National Park, and one of the primary purposes of the National Park is to promote understanding and enjoyment of its special qualities. Any potential impacts on recreation and access should be considered. These could include disruption to public rights of way or access, or impacts on important views due to siting of a wind turbine for example, or disruption to riverbank access from a hydro scheme.
- 6.99. Applicants will also be expected to provide information on access requirements for the scheme and any potential impacts arising. This includes access for construction and maintenance. The landscape and visual impacts of any access tracks will need to be considered in particular, as well as any associated impacts on wildlife or cultural heritage.

TRANSPORT AND TRAFFIC

- 6.100. Transport of equipment to the site will need to be considered, for example the construction of wind turbines will require sufficient access for long and wide load items. The weight of individual components could also be an issue, and it is important that all sections of roads and bridges on the proposed delivery route can accommodate the size and weight of the loads.

²¹⁷ Update of UK Shadow Flicker Evidence Base, Parsons Brinckerhoff for DECC, 2011

²¹⁸ Planting & Growing Miscanthus Best practice guidance. Natural England 2007

- 6.101. Some renewable energy technologies may require regular transport movements, for example deliveries of biomass, or additional feedstock for anaerobic digesters. The impacts on rural roads, settlements and the tranquillity of the National Park will need to be considered.

GRID CONNECTION

- 6.102. The impacts of grid connection either by overhead cables or underground pipelines are important considerations, as they can have significant impacts on landscape, ecology and the historic environment. Policy AC-D5 (Fixed Line Transmission Infrastructure) requires that new connections are underground.
- 6.103. Most micro-generation technologies can either operate connected to a national or local grid or as stand-alone systems that power buildings directly or feed into an energy store, such as a battery. Micro-generation is particularly suited to rural locations where mains connectivity may not be available.

ENVIRONMENTAL ENHANCEMENT OR COMMUNITY BENEFITS

- 6.104. Whilst the potential impacts of renewable energy schemes need to be carefully considered, there may also be opportunities to provide environmental enhancement or community benefits, and applicants should include details of any such benefits in their proposals. This will include any carbon savings that will be achieved and reductions in greenhouse gas emissions.
- 6.105. Other environmental enhancement could include wildlife benefits from increased management of woodland and hedgerows for biomass. Low tech anaerobic digesters can be beneficial in reducing potential pollution hazards, and also assist in meeting the requirements of Nitrate Pollution Prevention Regulations²¹⁹ and extension of Nitrogen Vulnerable Zones.
- 6.106. There could also be some benefits from a shift to renewable heating systems, particularly in some settlements such as Dulverton and Porlock which are not on mains gas, and where there are high levels of solid fuel boilers (oil and coal in particular). The high price of oil and concerns over future security of supply, mean that a local, renewable source of fuel could greatly benefit communities. Through the Exmoor Carbon Neutral programme, the National Park Authority is encouraging communities to help tackle climate change, including through the installation of renewable energy technologies. The potential for communities to benefit from deploying and owning renewable energy generation capacity is of great interest; it offers an opportunity to engage communities in responding to climate change and for them to realise an income stream which could be used to fund local projects of their choice, helping to empower and build more cohesive communities in Exmoor.
- 6.107. Local communities may also benefit from the expansion of renewable energy technologies across Exmoor, including jobs for suppliers and contractors in installing and maintaining systems.

²¹⁹ Nitrate Pollution Prevention Regulations (NPPR) (2008)

CC-S3 LOW CARBON AND RENEWABLE ENERGY DEVELOPMENT

- 1. Development proposals for small scale renewable energy schemes that assist in contributing towards reducing greenhouse gas emissions and moving towards a carbon neutral National Park will be supported where they:**
 - a) contribute towards meeting domestic, community or business energy needs within the National Park;**
 - b) are compatible with the landscape character of the locality and avoid the most sensitive landscapes;**
 - c) do not compromise the natural beauty, wildlife or cultural heritage of the National Park, or lessen the enjoyment of its special qualities, either on their own, or in combination with other schemes;**
 - d) do not adversely affect habitat quality or the maintenance of wildlife populations;**
 - e) provide environmental enhancement or community benefits wherever possible;**
 - f) conserve the amenity of the area including in relation to landscape and visual impact, tranquillity, access and recreation, air and water quality, noise, dust, odour and traffic generation; and**
 - g) make provision for the removal of the facilities and reinstatement of the site, should it cease to be operational.**
- 2. Proposals for large scale, commercial renewable energy development will not be permitted.**

SMALL SCALE WIND TURBINES

CONTEXT

6.108. Whilst the National Park Authority is supportive of renewable energy, wind turbines are, by their very nature, often intrusive in the landscape. The Exmoor National Park Landscape Character Assessment (LCA) identified intrusive development as one of the main threats to landscape character. The LCA recognizes that Exmoor National Park “is small in extent and as such is fragile in relation to change – not least small cumulative issues that, collectively, can have a significant impact on the landscape”. The Exmoor National Park Partnership Plan 2012-17²²⁰ recognises that wind turbines can, individually and cumulatively, erode the unspoilt, uncluttered nature of the landscape and they can have a detrimental impact on tranquillity²²¹. The potential for exploiting the wind resource in Exmoor is therefore likely to be limited by the need to ensure that turbines do not detract from the statutory purposes to conserve the natural beauty, wildlife and cultural heritage of the National Park. Some landscapes such as moor and heath, including in coastal locations, are so sensitive to intrusive development from vertical structures due to their open vistas and wild character that it may not be acceptable to have any turbines. However, in other landscape types in the National Park, it may be possible for individual small scale wind turbines that are similar in scale to existing buildings and trees, against a backdrop or suitably screened and in an appropriate colour, to be assimilated into the landscape.

DEVELOPMENT AND SMALL SCALE WIND TURBINES

6.109. Consistent with the need to conserve and enhance the National Park’s natural beauty, turbines should generally be in the range of 10m to 15m in height to rotor tip. Occasionally, wind turbines up to a maximum of 20m height (to rotor tip) may be capable of being accommodated within the National Park given careful consideration of any potential impacts on National Park purposes. This maximum height reflects experience in assessing the impacts of wind turbine proposals some of which have approached 20m to the rotor tip. Turbines of this height have only been judged to be acceptable where the landscape is considered to be sufficiently robust, for example, where existing vertical features in the landscape such as a backdrop of trees

²²⁰ Exmoor National Park Partnership Plan 2012-2017

²²¹ The Exmoor National Park Partnership Plan recognises a special quality of Exmoor National Park as “A timeless landscape mostly free from intrusive development with striking views inside and out of the National Park and where the natural beauty of Exmoor and its dark night skies can be appreciated

have enabled a turbine structure to be accommodated, and where it would not break the skyline. Turbines approaching the range of 15-20m should be well related to existing vertical features such as trees which can be critical in providing a backdrop or screen and where the turbine cannot be viewed against the skyline from surrounding public viewpoints (including roads, rights of way and access land). Where trees are essential in providing screening or a backdrop, a management plan of ongoing maintenance will be a condition of any planning consent.

- 6.110. Large and medium scale wind turbines over 20m height (to rotor tip) and wind farms are not considered to be appropriate within the National Park given their intrusive nature and impacts on the landscape character and tranquillity.
- 6.111. In order to judge whether the potential impacts of a proposal are likely to be acceptable, applicants should consider the impacts of the wind turbine along with any required infrastructure such as road access, on site-tracks, turbine foundations, hard standings, anemometer masts, a construction compound, electrical cabling and an electrical sub-station and control building. Some of these features are permanent and others are required only in the construction phase and as such are temporary. Applications should include any necessary supporting information regarding the assessment of impacts on landscape, wildlife, cultural heritage, historic environment and other resources as set out under the issues to be considered in proposals for renewable energy development, policy CC-S3 paragraphs 6.78-6.107.

CC-D4 SMALL-SCALE WIND TURBINES

- 1. Proposals for individual wind turbines serving individual properties or groups of properties will only be permitted where they are small scale and:**
- a) appropriate in scale to the property being served, with a maximum height of 20m to rotor tip;**
 - b) there is no unacceptable landscape or visual impact including cumulative impacts; and any residual impacts are minimised by locating the turbine close to any associated development or features and by screening and colour of the turbine;**
 - c) there is no adverse impact on wildlife or cultural heritage;**
 - d) there is no adverse impact on tranquillity or amenity including the effects of shadow flicker and noise on nearby properties or access routes;**
 - e) the location does not conflict with the use of the area for recreation and access, and public safety is not compromised; and**
 - f) access to the site for construction and maintenance can be provided without damage to rural roads or historic bridges and fords.**

FREESTANDING SOLAR ARRAYS

CONTEXT

6.112. A solar array is a linked collection of solar panels. Given the sensitivity of traditional buildings in the National Park to roof mounted panels, a number of schemes have come forward that mount solar panels on the ground or on stand-alone frames.

DEVELOPMENT AND FREESTANDING SOLAR ARRAYS

- 6.113. Small-scale freestanding solar arrays that are well screened in enclosed gardens or closely linked to existing buildings with no or minimal visual impact may be preferable to visually intrusive roof mounted panels. There may also be some circumstances where ground mounted solar arrays to serve groups of properties, community buildings such as village halls, agricultural properties or other businesses are acceptable, where these are well screened within existing building complexes or by other landscape features such as hedgerows, walls or trees, and do not detract from any architectural or historic interest. However, freestanding arrays should be sensitively sited to avoid impacts on wildlife and land of high ecological interest. Applicants should highlight the benefits of a ground-mounted array in comparison to a roof-mounted array in these cases. Proposals should consider the potential impacts on the issues listed for renewable energy development, policy CC-S3, paragraphs 6.78-6.107, and provide relevant information to support the application. Policy CC-D1, Flood Risk should also be considered.
- 6.114. Ground mounted solar arrays may be preferable to a roof mounted solar panels. Where permission is granted in these circumstances, the National Park Authority will attach a condition removing permitted development rights for roof-mounted solar panels to ensure that the cumulative impacts of any future proposals can be properly assessed.
- 6.115. Visual impacts are likely to be more significant where large numbers of panels are proposed in isolation or unconnected to the buildings or properties that they are intended to serve. Siting a solar array system in a field may constitute a change of use of the agricultural land, which would require planning permission. Proposals for ground-mounted solar arrays that are sited in isolation away from existing built forms are likely to have significant impacts on landscape character and visual amenity and are not considered to be appropriate within the National Park.

CC-D5 FREESTANDING SOLAR ARRAYS

- 1. Small scale freestanding solar arrays to serve the needs of individual properties, groups of properties, community buildings such as village halls, agricultural properties or other businesses will be permitted where:**
 - a) they are appropriate in scale and in proportion to the size of the property they are intended to serve;**
 - b) they are suitably sited and screened to avoid any intrusive visual or landscape impact, and where they are clearly associated with the buildings or properties that they are intended to serve;**
 - c) they are sensitively sited to avoid impacts on wildlife and land of high ecological interest ;**
 - d) the design, colour and choice of materials minimises any visual impact; and**
 - e) they do not detract from the setting of listed buildings or other heritage assets, or cause damage to archaeological interests.**
- 2. Proposals for ground mounted solar arrays that are sited in isolation away from existing built forms will not be permitted.**

CC-S4 WASTE AND RESOURCE MANAGEMENT

Objective 21. *To minimise waste and related emissions and support opportunities for reuse and, resource recovery & recycling in ways compatible with Exmoor's National Park designation.*

PURPOSE OF THE POLICY

6.116. The National Park Authority is the Waste Planning Authority and this policy therefore sets out the planning policy for waste and resource management including anaerobic digestion.

POLICY CONTEXT

6.117. The Waste Framework Directive²²² defines waste as “any substance or object the holder discards, intends to discard or is required to discard”.

6.118. The overall objective of Government policy on waste, as set out in the strategy for sustainable development, is to protect human health and the environment by producing less waste and by using it as a resource wherever possible. The European Waste Framework Directive provides the overall direction for pursuing sustainable waste management. A review of this Framework put particular emphasis on the planning system in ensuring that waste management activities occur in sustainable ways at sustainable locations and that it is vital to apply the waste hierarchy. The waste hierarchy provides for more sustainable waste management through moving the management of waste up the ‘waste hierarchy’ of:

- i. Prevention: the most effective environmental solution is often to reduce the generation of waste, including the re-use of products;*
- ii. Preparing for reuse: products that have become waste can be checked, cleaned or repaired so that they can be re-used;*
- iii. Recycling: waste materials can be reprocessed into products, materials, or substances;*
- iv. Other recovery, waste can serve a useful purpose by replacing other materials that would otherwise have been used; and*
- v. Disposing only as a last resort: the least desirable solution where none of the above options is appropriate.*

6.119. Consideration must be given to application of the waste hierarchy, to distinguish between those waste management options which deliver energy as part of the process, and those which do not. The Department of Environment, Food and Rural Affairs provide guidance on this in ‘Guidance on applying the Waste Hierarchy’²²³. Further guidelines are set out in “Taking sustainable use of resources forward: A Thematic Strategy on the Prevention and Recycling of Waste”²²⁴ which aims to reduce the negative impact on the environment that is caused by waste, from production to disposal, via recycling. This approach means that every item of waste is seen not only as a source of pollution to be reduced, but also as a potential resource to be exploited.

6.120. It should be noted that the National Planning Policy Framework does not contain specific waste policies, but sets the national guiding principles of planning. National waste policy has also been reviewed and central government has issued a new National Waste Management Plan for England and a revised Planning Policy Statement (PPS) 10 for consultation. It is envisaged that this Local Plan, when published, will incorporate the revised government policy on waste.

CONTEXT

6.121. Responsibility for planning for waste management in Exmoor National Park rests with the National Park Authority (as Waste Planning Authority) and West Somerset and North Devon

²²² Waste Framework Directive (European Directive (WFD) 2006/12/EC), as amended by the new WFD (Directive 2008/98/EC, came into force in December 2010)

Once a substance or object has become waste, it will remain waste until it has been fully recovered and no longer poses a potential threat to the environment or to human health

From this point onwards, the waste ceases to be waste and there is no longer any reason for it to be subject to the controls and other measures required by the Directive

²²³ <http://www.defra.gov.uk/publications/files/pb13530-waste-hierarchy-guidance.pdf>

²²⁴ European Union: “Taking sustainable use of resources forward: A Thematic Strategy on the prevention and recycling of waste” needs date

District Council (as Waste Collection Authorities). Domestic waste collection in Exmoor National Park is undertaken by contractors on behalf of the Somerset Waste Partnership and North Devon District Council. This waste is taken to waste recycling and treatment facilities outside the National Park based on contracts between the collection/disposal authorities and the waste industry and waste is also taken to small reuse and recycling points within Exmoor National Park.

- 6.122. Given the overlap of administrative boundaries, the relevant waste planning authorities of Exmoor National Park Authority and the County Councils of Somerset and Devon, have agreed to work together closely in order to continue to achieve sustainable waste management.

DEVELOPMENT AND WASTE

- 6.123. Both Devon and Somerset County Councils agree with the National Park Authority that the provision of large scale waste facilities for disposal, processing, recovery and recycling is inappropriate on Exmoor due to the area's designation as a National Park. Facilities for the disposal of domestic, industrial and commercial waste are incompatible with National Park purposes because of potential adverse impacts and because they may require the importation of waste which is deemed inappropriate in a National Park. Exmoor National Park policy will therefore presume against new waste facilities within the National Park, and no sites will be allocated. Specialised processing sites such as commercial composting and recycling plants will also be inappropriate, because of the potential adverse impacts including on the landscape and the potential for air, land and water contamination (CC-S5 Pollution).
- 6.124. Through the Somerset Waste Core Strategy and Devon Waste Plan, and municipal waste management strategies, Somerset and Devon County Councils and the Somerset Waste Partnership will therefore plan for management of domestic waste arising from within the National Park. Data for domestic waste arising from West Somerset and North Devon Districts have informed both County Councils' technical evidence base on capacity requirements. This means that domestic waste from within Exmoor National Park will continue to be treated or disposed of outside the National Park.
- 6.125. Waste collection from commercial and industrial premises within Exmoor National Park is carried out by commercial licensed waste carriers. Devon and Somerset County Councils have agreed to plan for the management of commercial and industrial waste from within Exmoor National Park, using the same source of baseline data provided by Defra²²⁵ in 2010. Somerset County Council also carried its own industrial and commercial waste survey to inform planning work; the results of which can be found on the Somerset County Council website²²⁶. The Waste Planning Authorities have agreed to liaise closely in monitoring overall waste arising in the National Park area during the lifetime of their respective Local Plans.
- 6.126. Construction and demolition waste arising in the Exmoor National Park area is not expected to be significant given the level of current development in the National Park. However, (small-scale) major planning applications, i.e. for 10 or more dwellings or buildings greater than 1000sqm, are likely to generate a considerable volume of waste compared to the majority of minor developments in the National Park and CC-S4 therefore requires that they should demonstrate how waste will be minimised and sustainably managed, both through the construction phase of the development, and its subsequent operation. This should include the potential for appropriate local reuse of topsoil and other relevant materials in order to reduce transport miles. A waste audit action plan will be required and included as part of the planning application and should provide the following information²²⁷:
- a) The likely nature and volume of waste generated through construction
 - b) How the design and layout of the development will minimise the amount of waste generated during the construction phase and the steps taken to separate and re-use appropriate wastes on site – where there will be no harmful impact on the environment or local amenity. Consultation with the Environment Agency, as regulator is advised as part of this process as well as Exmoor National Park.

²²⁵ <http://archive.defra.gov.uk/evidence/statistics/environment/waste/wrindustry.htm>

²²⁶ Document SD8e - <http://www.somerset.gov.uk/irj/public/services/directory/service?rid=/guid/1007f859-76a1-2e10-94a4-dbe534b91758>

²²⁷ Planning for Sustainable Waste Management: Companion Guide to Planning Policy Statement 10 (DCLG 2006)

- c) How and where waste that cannot be re-used on site will be managed in accordance with the waste hierarchy including the potential for local reuse, and in accordance with environmental permitting and duty of care.
 - d) In accordance with Approved Document H of the Building Regulations; details how waste will be managed sustainably once the site is operational e.g. incorporating storage space for recycling materials. The Somerset Waste Partnership, as waste collection authority has produced guidance on this²²⁸, and applicants are urged to contact them for proactive discussion.
- 6.127. It is also important to integrate waste management considerations into non waste developments, particularly by seeking to minimise the generation of waste in new developments, alterations and extensions, encouraging sustainable construction methods including the use of recycled materials and ensuring that construction and demolition waste is managed and re-used.
- 6.128. The National Park Authority recognises the role that Exmoor's communities can play in making more sustainable use of resources. Applying the waste hierarchy in a National Park context and measures which encourage the recycling and responsible reuse of waste will therefore be encouraged where local, very small scale, community-based waste projects which deal exclusively with the waste arising from that individual community for reuse, recycling, or community composting. Community facilities should be well related to settlements, as in accordance with GP4, to reduce the need to travel, providing there is no unacceptable adverse impact on local communities and amenity, and the landscape, wildlife and cultural heritage of the National Park.
- 6.129. Landscape and environmental impacts are likely to be greater in the open countryside outside settlements where this type of development is unlikely to be acceptable. Additionally, management of waste through small scale anaerobic digesters dealing with a mixed waste stream (which may include agricultural waste or manure and slurry) may be encouraged. Farm facilities should be suitably located on the farm to avoid impacts on the natural and cultural environment and traffic generation. In all cases, however, such proposals will only be permitted with appropriate safeguards to ensure that no waste is imported from outside the community and also to ensure that there will be no significant impact on the environment, the local community, and National Park purposes as set out in GP1. Environmental permitting and waste transfer carriers advice should be sought from the Environment Agency as regulator.
- 6.130. The National Park Authority will require appropriate restoration of waste sites to achieve National Park purposes. Such schemes should seek to achieve the conservation and enhancement of the National Park including for geodiversity, biodiversity, green infrastructure, historic environment and quiet enjoyment of the National Park.
- 6.131. Waste from sewage can harm the environment where capacity is exceeded and as a result of its transportation. To ensure environmental quality and the health and amenity of the National Park's residents is safeguarded, sewerage capacity and sewage disposal (including the process of disposal) must be appropriately managed. Exmoor National Park will seek to continue discussions around arisings and capacity with South West Water and Wessex Water as service providers. Policy CC-S4 Waste and Resource Management together with Policy CC-D6 Sewerage Capacity and Sewage Disposal seek to ensure that these impacts are avoided and to provide appropriately for new or extended sewage infrastructure.

DEVELOPMENT AND ANAEROBIC DIGESTION OF AGRICULTURAL MANURE AND SLURRY

- 6.132. Despite the rural nature of the National Park, agricultural waste (including manure, slurry and spoiled straw) is not generally a significant issue for disposal as most is distributed naturally on pasture, collected from barns and agricultural sheds and managed in slurry pits or composted on the farm, then spread on the land as a natural fertiliser. It does require consideration however, particularly in those areas of the National Park designated as a Nitrate Vulnerable Zone (NVZ)²²⁹, which is a strip running along the south west boundary with Devon. Guidance on NVZs is given by Defra and the Environment Agency on the storage of organic manure based on the requirements of the Nitrate Pollution Prevention Regulations²³⁰. Restrictions on

²²⁸ Developer Guidance: <http://www.somersetwaste.gov.uk/about/developers/>

²²⁹ Defra (2009) Guidance for farmers in Nitrate Vulnerable Zones, Storage of Organic Manure

²³⁰ OPSI (2008) The Nitrate Pollution Prevention Regulations (SI 2349)

spreading may increase the need for either more storage facilities or for treatment by methods such as anaerobic digestion and the spreading of digestate on the land holding.

- 6.133. Development of new farm or agricultural waste facilities such as pits or tanks is normally permitted development but can require planning permission in some circumstances, usually because of proximity to housing, protected buildings or highways. Where permission is required for development to address animal waste (excluding carcasses), policies seek to help farmers to manage agricultural waste and protect the environment. Small-scale waste management facilities on farms may be permitted provided in part that waste arises from the farm or farms concerned, and any development in line with Environment Agency waste permitting requirements can be accommodated without harm to the area including to the National Park's special qualities and to avoid any adverse impact on local amenity, landscape, wildlife and cultural heritage and traffic generation. Proposals will be dealt with through Policy SE-S4: Agricultural and Forestry Development in Section 8 of this Plan. Where proposals have the potential to cause pollution, they should be consistent with Policy CC-S5: Pollution.
- 6.134. Anaerobic digestion can help to protect the environment by processing manure, slurry, animal faeces, urine, and spoiled straw into digestate and biogas. The digestate can be spread on the land, providing it meets strict protocol and quality requirements laid out by Defra and the State Vet. The Environment Agency considers that manure and slurry used as feedstock materials for anaerobic digestion and any biogas produced from manure and slurry is waste²³¹. Waste regulatory controls therefore apply. Regulations²³² specify the type and volume which can be classed as an exempt waste operation at premises used for agriculture, and the procedures to register an exemption; these legislative and procedural issues do not form part of the planning application process. The Environment Agency also advises that spreading of digestate should be in accordance with existing codes of good agricultural practice and nitrate vulnerable zone (NVZ) requirements to prevent nutrient overload and pollution. Digestate must conform with standards set out in the Quality Protocol and PAS 110²³³ to be spread as fertilizer, if it doesn't comply, it is considered a waste and appropriate waste management controls will apply to its transfer, handling and disposal. Proposals should comply with CC-S5: Pollution.
- 6.135. Single on-farm units are more likely to be acceptable in terms of scale given the area's National Park designation. Applications for single on-farm units, and any associated development for management of waste or renewable energy generation should only use agricultural manure and slurry arising on and crops grown for the purpose on the farm holding, and the National Park Authority will attach conditions to any granting of planning permission to ensure that this is the case. As with all cases, environmental permitting advice should be sought from the Environment Agency as regulator. Proposals will also need to accord with Policy CC-S3: Low Carbon and Renewable Energy Development.
- 6.136. There may be circumstances where farms in close proximity wish to group together to achieve economies of scale & economic viability and so that there is sufficient feedstock for the digestion process. In such cases, the National Park Authority will require that the proposal deals only with agricultural manure and slurry from, and crops grown for the purpose on those farms. A waste management plan will be required to enable the National Park Authority to assess whether a shared facility is practicable, and whether the scale of both the development and operation of the proposal including traffic movements are acceptable within the locality and the National Park as a whole. Where permission is granted, the National Park Authority will attach a condition to the permission to ensure that the feedstock materials for the anaerobic digester come from specified farm holdings. Environmental permitting and waste transfer carriers advice should be sought from the Environment Agency as regulator
- 6.137. Proposals for anaerobic digesters will be considered under policies CC-S1 and CC-S3 together with the supporting text above. However, anaerobic digester proposals dealing with a mixed waste stream (which may include agricultural waste, bio crops or manure and slurry) will be considered as waste and considered under CC-S4: Waste Management and the supporting text above.

²³¹ <http://www.environment-agency.gov.uk/business/sectors/37338.aspx>;

http://www.environment-agency.gov.uk/static/documents/Business/Anaerobic_Digestion_and_Environmental_Permitting.pdf & http://www.opsi.gov.uk/si/si2010/draft/ukdsi_9780111491423_en_1

²³² HMSO (2009) Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations

²³³ PAS 110: <http://www.wrap.org.uk/system/files/private/BSI%20PAS%20110.pdf>

CC-S4 WASTE MANAGEMENT

- 1. The National Park Authority will work with the Waste Collection and Disposal Authorities, and devolved authorities such as the Somerset Waste Partnership and local communities to promote sustainable management of waste through the waste hierarchy.**
- 2. Large scale waste facilities, including landfill sites, will not be permitted in the National Park.**
- 3. Waste facilities for small scale reuse, recycling, composting and anaerobic digesters dealing with a mixed waste stream will only be permitted to meet the identified needs of and serve individual local communities, and where do not include importation of waste from outside that community. Community waste facilities should be well related to settlements, as in accordance with GP4, to avoid the need to travel and avoid any unacceptable adverse impact on local communities and amenity, and the landscape, wildlife and cultural heritage of the National Park. Proposals for anaerobic digesters should also accord with policy CC-S3: Low Carbon and Renewable Energy Development. Farm facilities should be suitably located on the farm to avoid impacts on the natural and cultural environment and traffic generation.**
- 4. Construction and demolition waste should be minimised and must be managed and re-used on site where there will be no harmful impacts. Where re-use on site may result in an environmental risk to biodiversity, the historic environment (such as archaeology) or setting of a heritage asset, local communities or the water environment, appropriate off-site waste management or disposal will be required. Environmental permitting and waste transfer carriers advice should be sought from the Environment Agency as regulator.**
- 5. Applications for all major developments (for 10 or more dwellings or buildings greater than 1000sqm) must demonstrate how the construction and operational phases of the development will be consistent with the principles of sustainable waste management through a waste audit statement.**
- 6. The National Park Authority will require the appropriate restoration and after-use of waste sites, through the application of appropriate conditions where necessary, based upon conservation and enhancement of geodiversity and biodiversity, the historic environment and quiet enjoyment of the National Park.**
- 7. The design of new development should incorporate adequate storage for recycling waste (CE-S7). Development comprising of domestic properties must seek guidance from the Somerset Waste Partnership and their access requirement.**
- 8. Proposals relating to waste water and sewage facilities for storage and disposal should be consistent with Policies GP1 and CC-D6 to ensure that such infrastructure is appropriate in terms of its location, scale and design to avoid adverse impacts on the National Park and surrounding area. Ongoing dialogue with water utility companies will help to achieve this.**

SEWERAGE CAPACITY & SEWAGE DISPOSAL

PURPOSE OF POLICY

- 6.138. National policy advocates healthy communities and the protection of the environment²³⁴.
- 6.139. Sewage disposal (including the process of disposal) is important for the protection of public health. However it can have negative impacts on the environmental quality of land, air and water where capacity is exceeded. Policy CC-D6 seeks to ensure that public health, amenity and environmental quality are safeguarded from the impacts of sewage disposal. New or extended sewerage infrastructure should be provided for appropriately and any negative impacts should be avoided or managed suitably. For the purposes of this policy, sewerage infrastructure refers to new or extended sewage treatment works, the transfer, processing, disposal or storage of sewage.

CONTEXT

- 6.140. On Exmoor, Wessex Water and South West Water are the operators for mains waste water treatment. Additionally, a number of private operators dispose of non-mains sewage in the area. Sewerage infrastructure within the National Park is relatively small scale but forms an important component of the area's utility provision. Additional sewerage infrastructure or the expansion of existing infrastructure may be required during the lifetime of this plan²³⁵ but are likely to be small scale due to the size of the population. Sewage from non-residential development such as from boats, recreational development, and businesses can also impact on the capacity of sewerage works.
- 6.141. Public mains sewerage infrastructure and non-mains sewerage, including septic tanks, are essential for public health, the maintenance of water quality and the prevention of pollution but can themselves have amenity, public health and environmental implications if they are not managed appropriately. The scale, siting and appearance of sewerage works are important considerations to ensure that what may otherwise be intrusive development is acceptable in the National Park.
- 6.142. Environmental impacts such as emissions and discharges are controlled under other legislation outside of planning management and are monitored by the Environment Agency²³⁶. Sewage treatment plants are classified as 'less vulnerable' development in areas of flood risk. Therefore provided adequate pollution control measures are in place, sewage transmission infrastructure and pumping stations are seen as water-compatible development (CC-D1 Flood Risk).

TYPES OF SEWAGE DISPOSAL

- 6.143. Sewage is carried from its source to the works by two types of sewerage system. In more modern systems, foul sewers are separated from systems that collect stormwater run-off, which is discharged directly into natural watercourses. It is however common, particularly in older areas, for foul and stormwater systems to be combined. In combined works, the flow and concentration of sewage entering treatment plant vary with rainfall, and when higher flows occur part of the sewage may be diverted and held in stormwater tanks. If the flow is very high, the sewage may be discharged, untreated into the surface watercourse. Ensuring the capacity of sewerage infrastructure is not exceeded is therefore essential to protect the environmental quality, public health and amenity of the National Park. The recycling and reuse of rainwater and greywater helps to minimise risks of overloading sewerage infrastructure and are encouraged in the National Park (CC-D3 Water Conservation).
- 6.144. Sludge is treated outside the National Park by sludge treatment centres. Some sewage may be treated by private operators which are small and localised. Sewage treatment can result in a range of wastes which are deposited in different ways. Currently sludge recycling to agricultural land is accepted by DEFRA and the EA as the most sustainable option²³⁷. With

²³⁴ Para X CC-S4 Waste Management

²³⁵ Consultation results demonstrated people wanted to ensure adequate sewage infrastructure, including the extension of sewage treatment plants is provided in the National Park

²³⁶ For more information please see the Environment Agency website

²³⁷ Sewage works and sewage farms: industry profile. Department of the Environment Industry Profile (1995)

advances in technology the operation area required for sewerage infrastructure has reduced in recent years.

PUBLIC HEALTH, ENVIRONMENT AND AMENITY

- 6.145. Sewerage works are essential to protect public health. The sewage treatment process may however result in point source localised contaminated land on site from organic pollutants and pathogens. Due to the nature and function of sewage treatment works it may be inappropriate to locate the development it serves in close proximity to sewage works to protect the amenity and health of the public²³⁸. The degree of any nuisance will vary according to the design and age of works, associated landscaping, local topography and prevailing wind. The enclosure of works and effective odour control measures can be used to mitigate against some of these impacts²³⁹. The advice of the appropriate water company/sewerage undertaker will be sought on individual cases.
- 6.146. The impact on water quality is a key consideration for applications regarding sewerage works with the possibility of pollution from the discharges of sewage infrastructure. Good water quality is important for Exmoor's biodiversity. As a result of the 1998 European Directive²⁴⁰ which prevented the discharge of sewage into the sea, improvements were made to the plant at Lynmouth and a new plant was built at Porlock. Problems regarding water quality can however still occur due to overflows from combined sewer outflows or high rainfall which can lead to organic material diffusing into rivers and out to sea. Non-mains drainage proposals, including the use of septic tanks, may have an adverse effect on the environment when there is a high water table or if the site is susceptible to flooding. This is likely to be exacerbated by the impacts of a changing climate which may mean that flood resilience measures to avoid overflows are required.

CAPACITY ISSUES

- 6.147. Housing development, in particular, can potentially increase the risk of water quality being affected due to extra loads being placed on sewerage works. The capacity of the sewerage infrastructure will be a key consideration in the drainage design process of any application. Where it is physically possible, development should connect to a public mains sewer and satisfactory arrangements should be made in consultation with the appropriate sewerage undertaker for the area to ensure the sewerage infrastructure can cope appropriately with additional demands before the development is occupied or activated.
- 6.148. If connection to a public sewer is not feasible, or available, other measures such as a sewage treatment plant incorporating a combination of treatment processes should be considered which will meet the standard and conditions set by the Environment Agency (EA) and are appropriate in the National Park context. Developers are encouraged to make a full assessment of the suitability of any proposals for non-mains sewerage systems at the project design stage. Only where mains sewage or a combined sewage treatment system are not feasible, taking into account practicability, and the scale and size of a development, should a system incorporating septic tank(s) be considered. Where an affordable housing proposal has public mains sewerage constraints but is otherwise acceptable, the provision of septic tanks could be considered as part of the proposal (HC-S1 Housing). A proliferation of small private sewage treatment plants should however be avoided where possible, for reasons including landscape impact and a greater risk of environmental pollution.

CONSIDERATIONS FOR SEWERAGE INFRASTRUCTURE PROPOSALS

- 6.149. The design of sewerage infrastructure whether for additional capacity, the replacement or new facility, public or private, should result in the efficient use of infrastructure and should be compatible with the surrounding amenity, environment, public health and landscape. Both proposals for sewerage infrastructure and development that produces sewage must ensure any associated problems are avoided. Planning applications should, therefore, be supported by a full assessment of the proposed use of sewerage infrastructure.

²³⁸ Consultation highlighted concern over the loss of amenity through odour and noise from some local sewage works

²³⁹ Types of nuisances are listed in clause 1.b) of Policy CC-D6

²⁴⁰ <http://www.environment-agency.gov.uk/business/regulation/31907.aspx> [reference needs updating but you can find information about the directive here]

- 6.150. Assessment should include a thorough examination of the impact of disposal of final effluent²⁴¹. The National Park Authority encourages pre-application discussions on any impact proposals will have including on the environment, amenity and public health. Proposals must demonstrate that opportunities to mitigate impacts are taken. Pollution should also be taken account of and be consistent with CC-S5 Pollution. The Environment Agency (EA), and the relevant undertaker for the area will be important stakeholders and consultees in considering any appropriate sewage improvements which may be required for a proposal. Views from other key bodies such as neighbouring LPAs, Health Authorities, Natural England and Drainage Boards may also be material in assessing the suitability of sewerage infrastructure and development requiring sewerage infrastructure improvements. An Environmental Permit or exemption will be required from the EA if it proposed to discharge treated sewage effluent to controlled waters or ground.
- 6.151. Under section 106 of the Water Industry Act 1991, and supported by planning case law, when connecting to a public mains sewer it is the undertaker's statutory duty to deal with the burden of additional discharge and not that of the developer. Conditions may be used where appropriate to ensure sewerage infrastructure is in place before the development is occupied or activated to avoid potential overloading whilst allowing appropriate development to be permitted.
- 6.152. Proposals which require non-mains sewerage must demonstrate that the proposal cannot be connected to a public mains sewer and must ensure arrangements are made to ensure sewerage capacity is not exceeded before development proceeds.
- 6.153. If proposals require non-mains sewerage infrastructure and are assessed as being unsatisfactory, including where they are likely to lead to a significant environmental, amenity or public health problem(s) which cannot be overcome by means of a condition, planning permission will be refused. This will be the case even if the proposal is a temporary measure and will also apply to issues around maintenance and capacity.

CC-D6 SEWERAGE CAPACITY & SEWAGE DISPOSAL

- 1. Development proposals for or which require new or extended sewage infrastructure will be permitted where it can be demonstrated that the facility will pose no unacceptable harm to public health, amenity or environmental quality. The following criteria must also be satisfied:**
 - a) appropriate location, scale and design of the infrastructure (CE-S6);**
 - b) use of necessary mitigation measures (including climate change resilience measures), to avoid impacts on surrounding areas including noise, air, soil and water pollution, odour (CC-S5), litter, visual intrusion, and other disturbances; and**
 - c) connection to a public mains sewer, where available and physically possible. Where existing capacity is insufficient, proposals should—contribute to an integrated and adequate network of sewage treatment installations, sufficient to meet the needs of existing and proposed development; Proposals which require non-mains sewerage must demonstrate that the proposal cannot be connected to a public mains sewer.**
- 2. Satisfactory arrangements should be made to ensure the public sewerage infrastructure can appropriately manage the additional required capacity of the proposal before the development is occupied or activated.**
- 3. Development proposals which exceed the capacity of private sewerage infrastructure or which do not otherwise include satisfactory arrangements consistent with the requirements of this policy will not be permitted. For development proposals that require new or extended private sewerage infrastructure, this must be provided before commencement of development to ensure current sewerage capacity is not exceeded.**
- 4. Regularly occupied development such as residential buildings will not be permitted in locations likely to be unacceptably affected by the proximity of sewerage infrastructure.**

²⁴¹ DETR Circular 03/99 (1999) Planning Requirement in respect of the Use of Non-Mains Sewerage incorporating Septic Tanks in New Development

POLLUTION

PURPOSE OF POLICY

6.154. Pollution can lead to environmental damage, loss of amenity, detrimental impacts to quality of life, cause health issues and deplete our natural resources. Pollution can also damage Exmoor National Park's special qualities including its tranquillity, dark night skies and habitats which support a great diversity of wildlife²⁴². Pollution can result from point or diffuse sources from various activities which can have direct or indirect impacts. Policy CC-S5 seeks to ensure that new and existing development; does not contribute to, is put at unacceptable risk from, or is adversely affected by unacceptable levels of pollution²⁴³.

NATIONAL CONTEXT

6.155. National policy advocates sustainable development, of which there is an environmental dimension, part of this role seeks to minimise pollution. Nationally it is noted that part of the core land-use planning principles which underpin both plan-making and decision-taking is the contribution to reducing pollution. The planning system should ensure that new and existing development does not contribute to and is not adversely affected by unacceptable levels of pollution (including cumulative impacts) and land should be remediated where appropriate. Planning focuses on whether development is an acceptable use of the land and impacts of use. The control of processes or emissions regarding pollution is subject to approval under other pollution control regimes which fall outside of planning powers²⁴⁴.

6.156. Planning and pollution control operate within different legislative frameworks but complement each other. Pollution control aims to prevent pollution by limiting the release of substances and ensuring air and water quality meet standards that guard against impacts to the environment and human health. The planning system has an important role in determining whether the development, use of land and any impacts arising are acceptable. This includes consideration of additional pollution generated by road traffic, the demand for natural resources and any discharges to the environment associated with the proposed development.

CONTEXT

6.157. There are various types of pollution which include air, soil, water, light and noise. Pollution may be generated outside the National Park boundary but may affect the area including local communities within it, or may be generated within Exmoor but affect areas and local communities outside. Partnership working with neighbouring authorities is therefore important to prevent and address pollution sources²⁴⁵. Pollution can also be reduced by the actions of individuals, for example, car sharing, using sustainable transport modes, minimising water usage, and minimising artificial lighting to protect Exmoor's dark night skies (CE-D1 Protecting Exmoor's Dark Night Sky).

AIR POLLUTION

6.158. Although Exmoor's air quality is generally good, it can be affected by pollution-laden winds from areas outside the National Park, including mainland Europe²⁴⁶. The 2007 Air Quality Strategy²⁴⁷ sets out plans to improve and protect the air quality in the UK. Good air quality is important for human health and sensitive habitats such as Exmoor's internationally important heathland and oak woodlands. Some of Exmoor's habitats are sensitive to acidification which can be caused by pollutants such as sulphur and nitrogen oxides which create acid rain. In 2006, the EA and English Nature undertook an assessment that showed that overall nitrogen

²⁴² Exmoor National Park Partnership Plan 2012-2017

²⁴³ Para 26 NPPF 2012 DCLG 'preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of land, air, water or noise pollution or land instability'

²⁴⁴ NPPF 2012 DCLG

²⁴⁵ YFE events community, YFE stakeholder, YFE member/staff events, Schools Ilfracombe, Petroc: Working with others to avoid and address pollution sources within and outside of the NP was supported in consultation.

²⁴⁶ Exmoor's Core Strategy and Development Management Policies Sustainability Appraisal Scoping Report

²⁴⁷ DEFRA (2007) Air Quality Strategy

deposition exceeded the maximum critical loads for blanket bog and old sessile oak woods on Exmoor indicating that they could be at risk from air pollution²⁴⁸.

- 6.159. District Councils have a statutory duty for local air quality management²⁴⁹. They are required to carry out regular reviews and assessment against national objectives. Where it is found that objectives are unlikely to be met, air quality management areas (AQMA) must be designated to tackle the issue of air quality. Although no AQMA have been designated within Exmoor National Park, national surveys show that ground level ozone levels on Exmoor can occasionally reach very high levels during certain atmospheric conditions and can exceed European guidelines²⁵⁰. This can be harmful to human health, but such impacts cannot be controlled through planning policy.
- 6.160. Future development on Exmoor has the potential to detrimentally impact local air quality and therefore should be managed appropriately. Some proposals could lead to increased air pollution and in these cases the application must include measures to demonstrate that impacts are minimised to an acceptable level. Consideration should be given to neighbouring properties including the impact of unpleasant odours. The emission of greenhouse gases from development is an issue not only locally but in a wider context²⁵¹.
- 6.161. Development within the National Park is generally small in scale and so is unlikely to cause significant impacts on air quality. However some proposals can have the potential to cumulatively cause air pollution including through their impact on the surrounding transport network; opportunities for sustainable transport measures will therefore be a key consideration (AC-S1 Sustainable Transport). Other measures to improve air quality can include energy-efficiency measures in building design and construction as well as the use of appropriate low carbon renewable energy sources (CC-S1 Climate Change Mitigation & Adaptation; CC-S3 Low Carbon & Renewable Energy Development, CE-S7 Design & Sustainable Construction Principles).

SOIL POLLUTION AND CONTAMINATED LAND

- 6.162. Soil pollution can arise from different sources including agricultural activities and fuel storage. For Nitrate Vulnerable Zones (NVZ) guidance is given by DEFRA and the EA on the storage of organic manure based on the requirements of the Nitrate Pollution Prevention Regulations. Good agricultural practice for farmers, growers and land managers is also provided.
- 6.163. Soil pollution can lead to contaminated land, which can in turn can lead to a number of issues including impacts on human health, buildings (chemical and physical), and the natural environment where pollution affects ecosystems and wildlife populations. Land contamination is not restricted to previously developed industrial land but can also occur on greenfield sites and from natural sources as well as human activities. North Devon and West Somerset District Councils are required to identify, inspect and remediate land in its district for contamination²⁵².
- 6.164. Planning also has a role to play in dealing with contaminated land as it provides the means to secure appropriate investigation and remediation. In following this approach, land contamination is a material consideration. Where development is proposed on land that could be contaminated, a site investigation will usually be required. If contamination is found, remedial works would be required to make the land suitable for its intended end use²⁵³ as a condition of any planning permission.
- 6.165. Contamination may create issues away from its source through transport as a result of wind or water for example. Proposals for development such as housing with gardens, schools, nurseries or allotments where contaminated land would be a particular issue, should consider its possible presence. Each area of potentially contaminated land is likely to be different in terms of its particular contamination and a site specific approach to remediation will therefore be necessary. The EA has a role in assisting Local Authorities on providing site-specific local guidance.

²⁴⁸ Exmoor National Park Authority Sustainability Appraisal Scoping Report (2011) - further information is also available from Exmoor's Habitat Regulations Assessment

²⁴⁹ The Environment Act 1995

²⁵⁰ Exmoor National Park Authority Sustainability Appraisal Scoping Report (2011)

²⁵¹ Exmoor Carbon Neutral Study

²⁵² Under Part IIA of the Environmental Protection Act 1990 (EPA), which came into force on the 1st of April 2000

²⁵³ North Devon Contaminated Land Strategy 2009-2014 and West Somerset Council Environmental Health and Licensing Contaminated Land Inspection Strategy 2011 to 2015

- 6.166. A wide range of industries may historically have contaminated, or have the potential to contaminate the land they are sited upon (as well as neighbouring land). The Environment Agency set out further details on the processes, materials and wastes associated with individual industries which have potentially contaminating land uses and situations where land may be affected by contamination. This includes:
- a) Agriculture
 - b) Timber treatment
 - c) Naturally occurring radioactivity including radon
 - d) Methane and carbon dioxide production²⁵⁴
- 6.167. When determining planning applications for land that may be contaminated, the National Park Authority will consider whether the proposal takes acceptable account of contamination and whether actions are taken to remediate land to protect the environment and health of future users of the land if contamination is found. As Exmoor has a long history of mineral extraction there may be a number of sites within the National Park which have some pollution risk if disturbed.

WATER POLLUTION

- 6.168. Exmoor's high quality clean water resource is vital to a wide range of interests including its nature conservation, fisheries, water supply and bathing water quality as well as its amenity value. Exmoor's river corridors provide important wildlife habitats and make an important contribution to the landscape of the National Park. Overall the quality of Exmoor's rivers are rated as very good or good by the Environment Agency. However, there have been some instances where some of Exmoor's rivers have been identified as poor in terms of ecological status²⁵⁵.
- 6.169. Poor water quality can be the consequence of a range of diffuse sources and point source pollution including agricultural activities, abstraction, disused mines, industrial discharges, accidental spillage, sewage discharge (CC-D6 Sewerage Capacity & Sewage Disposal) and the physical modification of water bodies. To ensure the high quality water environment in Exmoor is maintained, activities in catchments, and those directly affecting the water resource itself, must be managed. Although many of these activities lie outside planning control, planning has a significant role in avoiding and mitigating the impact of pollution from new development proposals, such as through their location and design. Pollutants arising from agricultural activities may include silage effluent, milk and slurry. In some cases the use of covers on slurry stores may be appropriate to reduce the risk of overflowing and discharge.
- 6.170. Exmoor's water resources may come under pressure from development outside the National Park in nearby towns such as Barnstaple, Tiverton, Exeter and Taunton. Increased abstraction of water can lead to low water flows and a lowering of water tables. Lower levels of water can result in a higher concentration of contaminants and can therefore lead to poor water quality. Furthermore climate change is likely to add to the issue of low water flows. Water conservation is therefore closely related to water quality. Catchment abstraction management strategies are produced by the Environment Agency for the management of local water resources and should be referred to by proposals which may have an impact on water resources (CC-D3 Water Conservation). Flooding can also precipitate pollution and proposals which may affect or be affected by flooding should be consistent with CC-D1 Flood Risk. Opportunities to minimise environmental damage and diffuse pollution through the incorporation of sustainable drainage systems is supported (CE-S7 Design & Sustainable Construction Principles).
- 6.171. New development which may affect groundwater in certain areas of the National Park must take into account groundwater Source Protection Zones (SPZs), shown on the Proposals Map, and aquifer designations²⁵⁶. The emphasis is on the prevention of pollution rather than a reactive approach in cleaning up pollution issues. This approach minimises future issues. Necessarily, the need to protect groundwater in these zones places constraints on certain types of development particularly those such as landfilling, slurry tanks, oil storage, chemicals and housing which is dependent on effluent disposal through soakaways. Indirect issues

²⁵⁴ The Environment Agency website which include Department of the Environment (DoE) Industry Profiles

²⁵⁵ AMR 2010-2011

²⁵⁶ The Environment Agency provides the latest groundwater SPZ's and aquifer designation data and maps. For further information refer to the Environment Agency website.

including disturbance of contaminated land and its impact on water resources must also be considered in development proposals (see section on ‘Soil Pollution and Contaminated Land’).

LIGHT AND NOISE POLLUTION

- 6.172. The proliferation of artificial lighting has led to the deterioration of the night sky in some areas. The reduction or elimination of unnecessary artificial lighting should be aimed for; this not only helps to protect the special quality and Exmoor’s Dark Sky Reserve status²⁵⁷ but can have other benefits of reducing carbon emissions, reducing adverse impacts on nocturnal wildlife and habitats, increasing public awareness of the cultural heritage associated with the views of the dark night sky and stimulating night time economic development and public access to the National Park. The promotion and restoration of the dark night sky is strived for in Exmoor²⁵⁸. Proposals should therefore demonstrate management of light pollution is consistent with CE-D1 Protecting Exmoor’s Dark Night Sky. Proposals that are likely to result in unacceptable light pollution will not be appropriate in the National Park including from illuminated advertisements (CE-D4 Advertisements, Shopfronts and Private Road Signs). Good design can limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation²⁵⁹; further guidance is available in the Lighting Management Plan²⁶⁰.
- 6.173. Tranquillity which results from the experience of a combination of low noise and dark night sky is a special quality of Exmoor. The quiet enjoyment of the National Park is supported by Policy RT-S1 Recreation & Tourism. The impact of noise is a material consideration in determining planning applications; unacceptable intrusive noise generating development is inappropriate in the National Park context and will not be permitted where it would have a significant adverse impact on Exmoor’s special qualities, health, environment, surrounding land uses, quality of life or amenity. Adverse impacts should be minimised and reduced. Planning obligations and conditions may be used to mitigate the effects of noise (GP1 National Park Purposes and Sustainable Development). It is however recognised that existing businesses should not have unreasonable restrictions put on them because of changes in nearby land uses since they were established²⁶¹.

MINERAL EXTRACTION AND WASTE DISPOSAL

- 6.174. Mineral extraction and waste disposal if not managed acceptably, have the potential to result in significant environmental impacts including the creation of pollution both directly and indirectly through the generation of traffic. Most mineral extraction applications will need to be accompanied by a formal environment statement to ensure that impacts arising from extraction including any pollution of the air, water or soil will be kept to an acceptable level compatible with its location within a National Park (CE-S8 Small Scale Working or Re-working for Building and Roofing Stone and CC-S4 Waste Management).

CONSIDERATIONS FOR PROPOSALS

- 6.175. When considering the impact of a development, the various forms of potential pollution including air, soil, water, noise and light, from both individual and cumulative sources will be considered. Applicants are encouraged to discuss proposals with the National Park Authority at an early pre-application stage where pollution issues are likely to arise so that relevant issues and information which may be required to accompany a proposal will be considered. The Environment Agency provides guidance on pollution prevention measures and is a key stakeholder in assessing the potential pollution implications of proposals. Further information on the impact of pollution on Natura 2000 sites is provided by the Exmoor National Park Habitat Regulations Assessment²⁶². The careful siting, layout, design and choice of materials can help to minimise energy loss and thus carbon emissions as well as other environmental pollutants and help to conserve natural resources such as water. Such design considerations

²⁵⁷ Exmoor National Park (2009) dark Sky Reserve Application to the International Dark Sky Association - In 2011 Exmoor became the second place in the world to receive ‘Dark Sky reserve’ status, in recognition of the lack of light pollution and importance of the area for views of the night sky. The reduction of light pollution was also supported by consultation

²⁵⁸ English National Parks and the Broads (2010) UK Government Vision and Circular; Exmoor National Park Partnership Plan 2012-2017

²⁵⁹ NPPF 2012 DCLG

²⁶⁰ Exmoor National Park Authority (2011) Lighting Management Plan

²⁶¹ NPPF 2012 DCLG

²⁶² Exmoor (2011) Core Strategy and Development Management Policies: Habitats Regulations Assessment Scoping Report

should also be in conformity with other design principles to ensure that they are compatible with National Park purposes (CE-S7 Design & Sustainable Construction Principles; SE-S4 Agricultural and Forestry Development).

- 6.176. The National Park Authority will require sufficient information on environmental impacts to enable planning applications to be determined. Where insufficient information is available for potentially high-risk developments, permission is likely to be refused. Development may provide an important opportunity for improving pollution levels and alleviating contaminated land. Proposals which seek to reduce pollution levels in Exmoor and are compatible with the National Park purposes and special qualities are encouraged, for example, through sustainable travel plans, carbon reduction or mitigation e.g. renewable technologies (AC-S1 Sustainable Transport; CC-S1 Climate Change Mitigation & Adaptation; CC-S3 Low Carbon and Renewable Energy Development; CC-D4 Small-Scale Wind Turbines; CC-D5 Freestanding Solar Arrays).
- 6.177. All proposals should avoid pollution where possible by using preventative measures, minimising any residual impacts, storing materials appropriately and remediating contaminated land where required before development proceeds.

CC-S5 POLLUTION

- 1. Through working in partnership with appropriate authorities, organisations, local communities and applicants, proposals should first seek to avoid pollution where possible including through using preventative measures including in groundwater Source Protection Zones. Where pollution cannot be avoided development proposals will be expected to demonstrate that there will be no unacceptable adverse impacts individually or cumulatively on the environment including groundwater Source Protection Zones, natural resources, public health, communities, quality of life, amenity and neighbouring land uses including areas outside of the National Park by:
 - a) minimising any residual impacts to an acceptable level;**
 - b) storing materials including agricultural slurry/by-products in a way that will not pollute the surrounding environment and natural resources including in flood events; and**
 - c) remediating contaminated land before development proceeds (in the case of proposals on or affected by contaminated land).****
- 2. Proposals which seek to reduce pollution and include measures to improve the quality of the surrounding environment and resources will be more favourably considered.**