

Key Habitat	Habitat targets for Cumbria	Planning Considerations	Enhancement Opportunities
<p><b>General</b></p>	<p><b>Selected from the North West Biodiversity Forum Habitat Targets 30 April 2008 – Local Biodiversity Action Plan breakdown.</b></p> <p>The targets provided for Cumbria have not been considered yet by the Cumbria Biodiversity Partnership and are likely to be revised in due course.</p> <p>A selection of the North West targets have been interpreted below. They focus on those habitats most likely to be impacted upon by the planning system, and where Local Authorities can have the most positive impact.</p> <p>The North West targets provide supporting figures, such as hectareage of habitat. These are not generally repeated below.</p> <p>Targets are underlined, with explanatory comment/ advice (note, to help with clarity, the wording is not identical to the North West wording)</p>	<p>PPS9 states that local authorities should conserve important natural habitat types (priority habitats and habitats of principal importance in England), and identify opportunities to enhance and add to them (paragraph 11).</p> <p>PPS9 and the Regional Spatial Strategy policy EM1 both require Local Authorities to contribute to regional biodiversity targets. PPS9 requires the identification of areas for restoration or creation of habitats, with policy support. (PPS9 paragraph 5(ii))</p>	
<p><b>Bogs</b></p>	<p><b>Blanket Bog:</b></p> <p><u>Maintain all blanket bog in Cumbria, i.e. no loss.</u> Avoid these areas or ensure that no loss or damage occurs through development.</p> <p><u>Increase the extent of blanket bog outside of SSSIs in favourable or recovering condition.</u> This means improving the quality of the habitat to measurable standards. It would involve improved management that can come about through S106 agreements, for example.</p>	<ol style="list-style-type: none"> <li>1. Any development that may impact upon bog habitat would require an assessment of the likely effects on the habitat and, as necessary, appropriate protection and mitigation measures.</li> <li>2. Lowland raised bogs and blanket bogs take thousands of years to develop and therefore cannot be re-created within acceptable timeframes.</li> <li>3. Peatland is a major carbon sink.</li> <li>4. Any development which leads to the direct loss of peat, the disturbance of peat, the lowering of</li> </ol>	<ol style="list-style-type: none"> <li>1. Bogs habitats cannot be created but existing sites can often be restored in the long term if the hydrology of the bog is restored, for example by blocking drains both on the bog itself and on surrounding land (which may have formed part of the bog in the past), provided that all damaging activities such as peat extraction have ceased. Any trees and scrub should also be removed.</li> <li>2. Promotion of peatland habitat conservation for its additional</li> </ol>

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	<p><b>Lowland Raised Bog:</b></p> <p><u>Maintain the raised bog resource in Cumbria.</u> Avoid direct and/or indirect impacts (for example impacts on the water regime).</p> <p><u>Rehabilitate degraded bog habitat still capable of natural regeneration to favourable, or near favourable, condition.</u> This means improving the quality of the habitat to measurable standards. It would involve improved management that can come about through S106 agreements, for example.</p>	<p>the water table or increased drainage within the site will be damaging to this habitat. Peat disturbance introduces air which leads to peat breakdown.</p> <ol style="list-style-type: none"> <li>5. Landscaping and tree planting schemes on bogs are inappropriate.</li> <li>6. Mineral extraction, for deposits under the peat or even at a distance, may impact upon the hydrology of the peatland.</li> <li>7. Wind farm development on blanket bog can impact upon the site's hydrology, cause localised breakdown of peat and surface run-off, and can directly damage the vegetation and reduce habitat availability for breeding and overwintering birds.</li> <li>8. The majority of lowland raised bogs in Cumbria are Special Areas of Conservation and SSSIs, but some small sites remain outside the statutory designation system. These smaller sites are likely to be designated County Wildlife Sites.</li> <li>9. Many large areas of blanket bog are within Special Areas of Conservation and SSSIs, however large areas are also found outside the statutory designation system, as are many smaller areas of blanket bog.</li> <li>10. Any development that may have a significant effect, directly or indirectly, on a Special Area of Conservation would need to be assessed under the Habitats Regulations.</li> </ol>	<p>carbon capture benefits.</p>
<p><b>Calaminarian Grasslands</b></p>	<p>No targets.</p>	<ol style="list-style-type: none"> <li>1. Where schemes are put forward to reduce the potential health hazards of heavy metal rich</li> </ol>	<ol style="list-style-type: none"> <li>1. None apparent.</li> </ol>

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		<p>mine spoil and tailings, to rework spoil or to carry out any other mining activity, careful consideration should be given to the potential to retain areas of this habitat and to ensure that full weight is given to the value of this habitat and its restricted distribution in Britain.</p> <ol style="list-style-type: none"> <li>2. The open nature of this vegetation and extent of bare ground which can be present often means that it is viewed as waste land of no ecological significance, and therefore issues are not raised early enough in the planning process.</li> <li>3. Any development that may impact upon calaminarian grassland habitat would require an assessment of the likely effects on the habitat and, as necessary, appropriate protection and mitigation measures.</li> <li>4. Some of the best examples of calaminarian grassland are within SACs and SSSIs, however a significant amount of this habitat lies outside the statutory designation system, particularly the many smaller areas.</li> </ol>	
<p><b>Calcareous Grassland</b></p>	<p><b>Lowland Calcareous Grassland:</b>  <u>Maintain the lowland calcareous grassland resource in Cumbria.</u> Avoid direct impacts.  <u>Increase the extent of lowland calcareous grassland in favourable or recovering condition.</u> This means improving the quality of the habitat to measurable standards. It would involve improved management that can come about through Section 106 agreements, for example.</p>	<ol style="list-style-type: none"> <li>1. Any development that may impact upon calcareous grassland habitat, or its species interests, would require an assessment of the likely effects on the habitat/species and, as necessary, appropriate protection and mitigation measures.</li> <li>2. Developments on this habitat will lead to direct habitat loss and potential impacts upon dependent invertebrates, such as butterflies.</li> <li>3. Small scale loss, or removal of areas from</li> </ol>	<ol style="list-style-type: none"> <li>1. Limestone quarries, or other quarries with base-rich features, can incorporate calcareous grassland in restoration design, with no importation of topsoils and minimal seeding/ natural regeneration. This is a cheaper restoration option as well as being more natural.</li> <li>2. Biodiversity Management and Enhancement Plans can be used for longer term developments, for the</li> </ol>

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	<p><u>Restore lowland calcareous grassland from suitable semi-improved or neglected grassland that has derived from calcareous grassland.</u> This may involve significant management works and ongoing improved management. It can come about through section 106 agreements.</p> <p><u>Re-establish lowland calcareous grassland from arable or improved grassland.</u> The regional target focuses primarily (75%) on areas adjacent to existing grassland and on (50%) patches of 2ha or more. This does give some scope for small areas to be created. This would involve significant habitat creation works and ongoing improved management. It can come about through section 106 agreements.</p> <p><b>Upland Calcareous Grassland:</b></p> <p><u>Maintain the existing lowland calcareous grassland.</u> Avoid direct impacts.</p> <p><u>Increase the extent of upland calcareous grassland outside of SSSIs in favourable or recovering condition.</u> This means improving the quality of the habitat to measurable standards. It would involve improved management that can come about through S106 agreements, for example.</p>	<p>grazing management, will contribute to habitat fragmentation and isolation.</p> <ol style="list-style-type: none"> <li>4. Care should be taken that landscaping schemes accompanying developments do not result in areas of calcareous grassland being planted with trees or shrubs, or being taken out of appropriate grazing management.</li> <li>5. Much of the calcareous grassland in Cumbria is designated as SAC and SSSI, but significant areas still remain outside SSSIs; many of these are designated as County Wildlife Sites.</li> <li>6. Any development that may have a significant effect, directly or indirectly, on a Special Area of Conservation would need to be assessed under the Habitats Regulations.</li> </ol>	<p>lifetime of the development.</p> <ol style="list-style-type: none"> <li>3. Planning conditions can be used to restore appropriate management to under-managed and unmanaged grassland, including scrub clearance and reintroduction of grazing.</li> </ol>
<p><b>Coastal &amp; Floodplain Grazing Marsh</b></p>	<p><u>Maintain the coastal and floodplain grazing marsh habitat.</u> Avoid direct and/or indirect impacts (for example impacts on the water regime).</p> <p><u>Increase the extent of existing coastal and</u></p>	<ol style="list-style-type: none"> <li>1. Any development that may impact upon this habitat, or its species interests, would require an assessment of the likely effects on the habitat and, as necessary, appropriate protection and mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Protection of this habitat from development and creation of new areas in a planned and well-managed way can help to alleviate problems caused by flooding, and provide new facilities for public</li> </ol>

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	<p><u>floodplain grazing marsh in favourable or recovering condition.</u> This means improving the quality of the habitat to measurable standards. It would involve improved management that can come about through S106 agreements, for example.</p> <p><u>Re-establish coastal and floodplain grazing marsh of wildlife value from appropriate land (e.g. arable land) so that it is capable of supporting a diverse range of invertebrates, mammals and breeding waders.</u> This may involve significant management works and ongoing improved management. It can come about through section 106 agreements, for example, or as part of a restoration scheme.</p> <p><u>Establish landscape scale wetland complex which includes coastal and floodplain grazing marsh; along with wet woodlands, fens and reedbeds.</u> There is scope for such new complexes in Cumbria. This may not be achieved through specific planning applications but would involve allocation of such land for this purpose, which may impact upon other uses.</p>	<ol style="list-style-type: none"> <li>2. Any development in a river floodplain or flat coastal area may lead to direct loss of this priority habitat and its associated wildlife.</li> <li>3. This habitat is sustained by flooding for part of the year and any development that reduces the capacity to store water is likely to lead to flooding elsewhere, e.g. housing and industrial developments.</li> <li>4. Development adjacent to coastal and floodplain grazing marsh may impact upon the hydrological regime of the marsh.</li> <li>5. Development adjacent to coastal and floodplain grazing marsh may directly disturb sensitive breeding, wintering and migrating birds which use this habitat.</li> <li>6. Many waders require an open landscape and uninterrupted view, such that new buildings or other tall structures can reduce the suitability of land for these species.</li> <li>7. Windfarms can result in the death of wintering and passage birds due to collisions with turbine blades, and some species are susceptible to disturbance from these developments.</li> <li>8. The majority of grazing marsh lies outside the SSSI system.</li> </ol>	<p>enjoyment.</p> <ol style="list-style-type: none"> <li>2. Grazing marsh can be re-created on agriculturally improved land through changes in the field drainage system, the introduction of ecologically sensitive ditch management and incorporation of the land into a less intensive farming system.</li> <li>3. Biodiversity Management and Enhancement Plans can be used for longer term developments, for the lifetime of the development.</li> </ol>
<p><b>Coastal Habitats above High Water</b></p>	<p><b>Coastal Sand Dunes:</b></p> <p><u>Maintain the sand dune resource and its range of habitat types.</u> This target focuses on man-made impacts, either direct or indirect; it is recognised that natural processes can lead to localised changes</p>	<ol style="list-style-type: none"> <li>1. Any development that may impact upon these habitats, or their species interests, would require an assessment of the likely effects on the habitat/species and, as necessary, appropriate protection and mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. The principal opportunities for enhancement of these habitats will be those which (a) allow the restoration of natural processes, (b) reduce disturbance to habitats and birdlife through effective people</li> </ol>

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	<p>to the resource. Avoid direct impacts and indirect impacts (assess indirect impacts from flood risk management schemes and other similar schemes that may affect natural processes).</p> <p><u>Restore sand dune habitat lost or severely degraded as a result of afforestation, agriculture and infrastructure</u>. Some potential to restore sand dune habitat on land that has suffered other uses, as part of restoring natural coastal processes.</p> <p><b>Coastal Vegetated Shingle:</b> <u>Maintain the coastal vegetated shingle resource, and the structures, sediment and coastal process that support them</u>. Avoid direct impacts and indirect impacts (assess indirect impacts from flood risk management schemes and other similar schemes that may affect natural processes).</p> <p><b>Maritime Cliff and Slope:</b> <u>Maintain the maritime cliff &amp; slope resource, i.e. no loss</u>. Avoid these areas or ensure that no loss or damage occurs through development.</p> <p><u>Increase the area of cliff-top semi-natural habitats</u>. This involves taking land out of other land uses, particularly agriculture and can come about through section 106 agreements, for example.</p>	<ol style="list-style-type: none"> <li>2. These coastal habitats occur in locations frequently favoured by golf course, caravan site and wind farm developments. These can result in direct habitat loss, habitat fragmentation and isolation, and disturbance of wildlife.</li> <li>3. Onshore gravel extraction can lead to the direct loss of vegetated shingle and can disturb migrating, breeding and wintering wader and wildfowl roosts.</li> <li>4. Marine sand and gravel extraction can change patterns of deposition, threatening the continued survival of dune systems and shingle banks. Impacts on the local environment from development some distance away can be significant.</li> <li>5. Any development adjacent to these coastal habitats can disturb breeding, wintering and migrating waders and wildfowl either by direct disturbance from the development itself or from increased public use, particularly dog walking.</li> <li>6. Development in the vicinity of soft cliffs (and other habitats) can lead to demands for coastal protection works which can impact upon natural coastal processes, including preventing the natural erosion and slumping of soft cliffs which maintains their characteristic vegetation.</li> <li>7. Creation of facilities for recreational activities such as dirt bike or mountain bike tracks results in erosion and damage to habitats, as do the activities themselves.</li> <li>8. The majority of coastal vegetated shingle, sand dune and maritime cliff habitat in Cumbria is designated as Special Area of Conservation or SSSI, but coastal soft cliffs and slopes are</li> </ol>	<p>management and (c) promote habitat restoration through changes to agricultural management.</p> <ol style="list-style-type: none"> <li>2. Developments should seek to enhance coastal habitats, through appropriate planning conditions and obligations. In particular maximising the potential to re-create habitat, particularly coastal heath, on agriculturally improved land adjacent to the coastal strip.</li> </ol>

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		<p>largely outside the statutory designation system. Some are County Wildlife Sites.</p> <p>9. Any development that may have a significant effect, directly or indirectly, on a Special Area of Conservation would need to be assessed under the Habitats Regulations.</p>	
<p><b>Coastal Intertidal Habitats</b></p>	<p><b>Coastal Saltmarsh/ Mudflat:</b></p> <p><u>No net loss of current extent of saltmarsh and mudflat.</u> Natural processes act on these intertidal sediment-based systems; saltmarsh and mudflat areas are dynamic but the total extent should be maintained. Avoid direct impacts and indirect impacts (assess indirect impacts from schemes that may affect natural processes).</p> <p><u>Create intertidal sediment habitat to offset historical losses.</u> Would require provision of land and liaison across district boundaries.</p>	<ol style="list-style-type: none"> <li>1. Any development either within or adjacent to the intertidal zone may have an impact on this sensitive environment.</li> <li>2. Any development that may impact upon intertidal habitats, or their species interests, would require an assessment of the likely effects on the habitat/species and, as necessary, appropriate protection and mitigation measures.</li> <li>3. The majority of the intertidal habitat in Cumbria is covered by the SAC/SPA/SSSI system, although a significant length of intertidal habitat is not designated.</li> <li>4. Most of the intertidal habitat is of international importance as Special Areas of Conservation, for the habitat itself, and Special Protection Areas, particularly for migratory and wintering bird populations. Any development that may have a significant effect, directly or indirectly, on these sites would need to be assessed under the Habitats Regulations.</li> </ol>	<ol style="list-style-type: none"> <li>1. Any opportunities to reduce pollution and other impacts resulting from existing developments, through new development and design opportunities, will benefit intertidal habitats.</li> </ol>
<p><b>Coastal Subtidal Habitats</b></p>	<p>No targets</p>	<ol style="list-style-type: none"> <li>1. These habitats are physically located outside the jurisdiction of local planning authorities, however planning decisions can still have</li> </ol>	<ol style="list-style-type: none"> <li>1. Any opportunities to reduce pollution resulting from existing or proposed developments will benefit subtidal</li> </ol>

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		<p>impacts on them via discharges to sea of sewage and industrial effluents, or the development of facilities such as marinas or port facilities for large vessels which require dredging of channels. Pipelines and cables from offshore installations such as windfarms and gas fields may also damage reefs and other seabed features.</p> <ol style="list-style-type: none"> <li>2. PPS9 states that local authorities should conserve important natural habitat types (priority habitats and habitats of principal importance in England), and identify opportunities to enhance and add to them.</li> <li>3. Any development that may impact upon subtidal habitats would require an assessment of the habitat and, as necessary, adequate protection and mitigation measures.</li> <li>4. This habitat lies largely outside the SSSI system.</li> </ol>	<p>habitats.</p>
<p><b>Fen Marsh &amp; Swamp</b></p>	<p><b>Purple Moor-grass and Rush Pastures:</b>  <u>Maintain the purple moor-grass and rush pasture habitat in Cumbria.</u> Avoid direct and/or indirect impacts (for example impacts on the water regime).</p> <p><u>Increase the extent of purple moor-grass/rush pasture habitat in favourable or recovering condition.</u> This means improving the quality of the habitat to measurable standards. It would involve improved management that can come about through Section 106 agreements, for example.</p>	<ol style="list-style-type: none"> <li>1. Any development that may impact upon any of these habitats, or their species interests, would require an assessment of the habitat/species and, as necessary, adequate protection and mitigation measures.</li> <li>2. Any development which affects the local hydrology, either through abstraction or drainage can affect water levels in fens and swamps, even several kilometres away. Limestone quarries which go below the natural water table are perhaps the most likely developments to have such far reaching effects.</li> </ol>	<ol style="list-style-type: none"> <li>1. Incorporation of Sustainable Urban Drainage Systems (SUDS, which are also appropriate in rural situations) in developments can create a range of wetland habitats.</li> <li>2. Reduction of pollution and other impacts resulting from existing developments, through new development and design opportunities.</li> <li>3. Large scale developments, such as mineral extraction, have the potential to create significant new</li> </ol>

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	<p><u>Re-establish purple moor-grass/rush pasture grassland from arable or improved grassland.</u> The regional target focuses primarily (75%) on areas adjacent to existing grassland and on (50%) patches of 2ha or more. This does give some scope for small areas to be created. This could come about as part of a restoration scheme post development, or through a S106 agreement.</p> <p><b>Fens:</b></p> <p><u>Maintain the fen resource and diversity of fen types in Cumbria.</u> Avoid direct and/or indirect impacts (for example impacts on the water regime).</p> <p>Restore former fen habitat. This involves habitat restoration works and continuing improved management that can come about through section 106 agreements, for example, and as part of restoration schemes.</p> <p><u>Establish landscape scale wetland complex which includes fen habitat; along with wet woodlands, coastal and floodplain grazing marsh and reedbeds.</u> There is scope for such new complexes in Cumbria. This may not be achieved through specific planning applications but would involve allocation of such land for this purpose, which may impact upon other uses.</p> <p><b>Reedbeds:</b></p> <p><u>Maintain the reedbed resource in Cumbria.</u> Avoid direct and/or indirect impacts (for</p>	<ol style="list-style-type: none"> <li>3. Any lakeshore development is potentially detrimental to swamp and fen around the margin of the lake, either through direct habitat loss or through disturbance of wildlife.</li> <li>4. Lakeshore paths cause erosion of lakeshore swamp and fen vegetation and disturbance to wildlife.</li> <li>5. Wind farm developments on purple moor-grass and rush-pasture may lead to direct habitat loss and impacts upon breeding and wintering birds.</li> <li>6. Whilst large numbers of fen, marsh and swamp sites are within SSSIs, many examples of this habitat lie outside the SSSI system. Some are designated as County Wildlife Sites.</li> </ol>	<p>habitat.</p>

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	<p>example impacts on the water regime).</p> <p><u>Re-establish reedbeds from land of low nature conservation interest, with the objective of expanding the reedbed resource by 33 ha in Cumbria.</u> This could come about as part of a restoration scheme post development, or through a S106 agreement.</p> <p><u>Establish landscape scale wetland complex which includes reedbed habitat; along with wet woodlands, coastal and floodplain grazing marsh and fens.</u> There is scope for such new complexes in Cumbria. This may not be achieved through specific planning applications but would involve allocation of such land for this purpose, which may impact upon other uses.</p>		
<p><b>Hay Meadows &amp; Pastures</b></p>	<p><b>Lowland Meadows:</b></p> <p><u>Maintain the lowland meadow resource in Cumbria, i.e. no loss.</u> Avoid these areas, or ensure that no loss or damage occurs through development.</p> <p><u>Re-establish lowland meadow grassland from arable or improved grassland.</u> The regional target focuses primarily (75%) on areas adjacent to existing grassland and on (50%) patches of 2ha or more. This does give some scope for small areas to be created. This could come about as part of a restoration scheme post development, or through a S106 agreement.</p> <p><b>Upland Hay Meadows:</b></p> <p><u>Maintain the upland meadow resource in</u></p>	<ol style="list-style-type: none"> <li>1. Any development that may impact upon this grassland habitat, or its species interests, would require an assessment of the likely effects on the habitat/species and, as necessary, appropriate protection and mitigation measures.</li> <li>2. Many developments can impact upon this habitat to cause direct habitat loss and increasing isolation and fragmentation. Infrastructure schemes such as new roads, bypasses and pipelines, and other developments such as quarries and waste disposal sites maybe have an impact.</li> <li>3. Small scale developments such as barn conversions may impact upon meadows though land take for gardens and access</li> </ol>	<ol style="list-style-type: none"> <li>1. Whilst flower-rich grassland creation cannot replace the original habitat there are sometimes opportunities within a development for grassland habitat similar to that found on many roadside verges to be created and sympathetically managed.</li> <li>2. Meadows and pastures require the continuation of the agricultural management which created them (traditional grazing and cutting, no fertiliser application). Opportunities for habitat management should be taken where possible, using planning obligations where developments have had a</li> </ol>

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	<p><u>Cumbria, i.e. no loss.</u> Avoid these areas, or ensure that no loss or damage occurs through development.</p> <p><u>Re-establish upland meadow grassland from arable or improved grassland.</u> The regional target focuses primarily (75%) on areas adjacent to existing grassland and on (50%) patches of 2ha or more. This does give some scope for small areas to be created. This could come about as part of a restoration scheme post development</p>	<p>new roads.</p> <p>4. Roadside verges may be impacted by any planning application which includes changes to the road network, including new access roads linking to the highway network, new junction layouts localised road widening schemes. Also damage to roadside verges can occur during the construction phase of a development by parking and storage of materials on the verges.</p> <p>5. Mitigation proposals to translocate or recreate this habitat are unlikely to result in a habitat of equivalent quality, with loss of much of the ecological interest associated with the original habitat, such as the invertebrate interest.</p> <p>6. Most of the best meadows in Cumbria are SSSIs and many are SACs, however a large number of high quality grasslands lie outside the SSSI system, particularly roadside verges. Many of these grasslands are designated as County Wildlife Sites and Special Roadside Verges.</p>	<p>significant impact upon such species-rich grasslands.</p>
<p><b>Heathland</b></p>	<p><b>Lowland Heathland:</b></p> <p><u>Maintain the lowland heathland resource in Cumbria.</u> Avoid these areas, or ensure that no loss or damage occurs through development.</p> <p><u>Increase the extent of lowland heathland in favourable or recovering condition.</u> This means improving the quality of the habitat to measurable standards. It would involve improved management that can come</p>	<p>1. Any development that may impact upon heathland habitat, or its species interests, would require an assessment of the likely effects on the habitat/species and, as necessary, appropriate protection and mitigation measures.</p> <p>2. Developments on heathland, including quarrying, will lead to direct habitat loss.</p> <p>3. Restoration schemes for time-limited developments should aim to restore to</p>	<p>1. The planning system may offer opportunities to improve the management of heathland through appropriate grazing or burning management or clearance of invasive woodland or scrub via Section 106 agreements.</p> <p>2. If soil nutrient levels are low and there is an available seed source new areas of heathland can be</p>

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	<p>about through Section 106 agreements, for example.</p> <p><u>Increase the extent of lowland heathland by 155ha in Cumbria.</u> This could come about as part of a restoration scheme post development, or through a S106 agreement.</p> <p><b>Upland Heathland:</b></p> <p><u>Maintain the upland heathland resource in Cumbria.</u> Avoid these areas, or ensure that no loss or damage occurs through development.</p> <p><u>Increase the extent of blanket bog outside of SSSIs in favourable or recovering condition.</u> This means improving the quality of the habitat to measurable standards. It would involve improved management that can come about through S106 agreements, for example.</p>	<p>heathland and other appropriate habitats, and instigate wildlife management plans during the working life of the development.</p> <ol style="list-style-type: none"> <li>4. Wind farm developments on heathland will lead to direct habitat loss, impact upon habitat availability for breeding and wintering birds, and may increase bird mortality as birds can be killed by turbine blades. This is potentially a major issue for rare species, such as Hen Harrier, as a small number of deaths can have a major effect on the population.</li> <li>5. Caravan sites and golf courses may impact upon coastal heathland, but there may also opportunities for habitat protection, management and enhancement through these schemes.</li> <li>6. Landscaping and tree planting schemes on heathland are inappropriate.</li> <li>7. Most lowland heathland in Cumbria is within SSSIs, and the largest upland sites are SAC/SSSIs, but large areas of upland heathland lie outside the SSSI system.</li> <li>8. Any development that may have a significant effect, directly or indirectly, on a Special Area of Conservation would need to be assessed under the Habitats Regulations.</li> </ol>	<p>established via natural seeding as part of developments to complement existing areas of this habitat.</p> <ol style="list-style-type: none"> <li>3. Biodiversity Management and Enhancement Plans can be used for longer term developments, for the lifetime of the development.</li> </ol>
<b>Hedgerows</b>	<p><u>Maintain the net extent of hedgerows.</u> Avoid loss of all hedgerows, especially ancient and species-rich hedgerows. Any hedgerow length lost should be replaced.</p> <p><u>Maintain the overall number of individual, isolated hedgerow trees.</u> Any hedgerow trees lost should be replaced, through these will take many years to mature and</p>	<ol style="list-style-type: none"> <li>1. Any development that may impact upon hedgerow habitat, or its species interests, would require an assessment of the likely effects on the habitat/species and, as necessary, appropriate protection and mitigation measures.</li> <li>2. Hedgerows are protected by the Hedgerows Regulations 1997. Under the Regulations, it is</li> </ol>	<ol style="list-style-type: none"> <li>1. Enhanced management of all hedgerows, including poorer hedgerows, within development.</li> <li>2. Planting of new species-rich hedgerows as part of developments using native species.</li> <li>3. Planting of new species-rich</li> </ol>

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	<p>perform the same function.</p> <p><u>Maintain the species-richness of native woody species.</u> Any hedgerows removed should be replaced with at least as rich a mix of native woody species.</p> <p><u>Improve the hedgerow tree population by increasing the number of young trees (1-4 years).</u> New hedgerow schemes should include hedgerow trees.</p> <p><u>Achieve a net increase in the length of hedgerows of 300km.</u> Where possible schemes should include new native hedgerows comprised of native species.</p>	<p>against the law to remove or destroy certain hedgerows without permission from the local planning authority. Permission is required before removing hedges that are at least 20 metres in length, over 30 years old and contain certain species of plant.</p> <ol style="list-style-type: none"> <li>3. Any development in the countryside is likely to impact upon hedgerows due to their widespread nature, leading to loss of this habitat.</li> <li>4. Hedgerows are ecological links through the landscape and piecemeal loss will lead to fragmentation of linked habitats such as woodlands and grasslands. These links are recognised in the Habitats Directive and Regulations as being important for migration, dispersal and genetic exchange.</li> <li>5. Ancient and/or species-rich hedgerows are of greatest importance, as these are far less replicable than more recent and species-poor examples, and measures should be taken to avoid destruction/ decline of these hedgerows.</li> <li>6. There are no SSSIs specifically designated for this habitat.</li> </ol>	<p>hedgerows to link existing woodlands together.</p>
<p><b>Lakes, Ponds &amp; Tarns</b></p>	<p><b>Mesotrophic Lakes:</b></p> <p>There are several targets but they are specific to the current known conservation importance. Further information is required on this to take this forward.</p> <p>However, to achieve these targets developments would need to at least maintain, and preferably improve, the condition of any lakes.</p>	<ol style="list-style-type: none"> <li>1. Any development that may impact upon lake, pond or tarn habitat would require an assessment of the likely effects on the habitat and, as necessary, appropriate protection and mitigation measures.</li> <li>2. Any lakeshore development may be detrimental to the ecology of the lake through direct loss of lakeshore habitat such as swamp or woodland, possible pollution of the lake, increased disturbance to wildlife, or damage to</li> </ol>	<ol style="list-style-type: none"> <li>1. Incorporation of Sustainable Urban Drainage Systems (SUDS, which are also appropriate in rural situations) in developments.</li> <li>2. Use of soft surfaces such as grass in place of hard surfacing wherever possible, or 'grasscrete' where hard surfacing is necessary, to allow water to soak away.</li> <li>3. Enhancement of lakeshores through</li> </ol>

Key Habitat	Habitat targets for Cumbria	Planning Considerations	Enhancement Opportunities
		<p>fragile underwater and marginal plant communities.</p> <ol style="list-style-type: none"> <li>3. Boating, in all forms, causes disturbance of birds and other wildlife and can result in erosion of lakeshores from wash and scouring of lake beds by mooring chains causing the loss of aquatic and marginal vegetation.</li> <li>4. Lakeshore paths also cause erosion of lakeshore vegetation and disturbance to wildlife.</li> <li>5. Water abstraction upstream can exacerbate pollution effects by reducing flows into the lake, concentrating pollutants and increasing the amount of time taken to flush polluted water out of the lake.</li> <li>6. Fish farms can be very damaging to the ecology of lakes and tarns due to nutrient enrichment resulting from waste fish food, the potential for the introduction of fish species not native to the lake and the use of chemicals to treat fish diseases.</li> <li>7. Many of the major Lake District lakes are SSSIs, as are many tarns, and some lakes and tarns are also internationally important as Special Areas of Conservation.</li> <li>8. There are also many high quality tarns which lie outside the SSSI system. Ponds almost entirely lie outside the SSSI system. Many of these are designated as County Wildlife Sites.</li> </ol>	<p>appropriate native woodland and scrub planting, or restriction of access to allow the development of marshy areas, wetland and mire.</p> <ol style="list-style-type: none"> <li>4. Creation of new ponds, ditches and wetlands in appropriate situations to enhance the connectivity of habitat through the landscape.</li> <li>5. Creation of protection zones for lakeshores with important examples of aquatic flora or fauna or of importance for breeding or wintering birds. Development would be proscribed in such areas.</li> <li>6. Reduction of pollution and other impacts resulting from existing developments, through new development and design opportunities.</li> </ol>
<p><b>Lowland Dry Acid Grassland</b></p>	<p><u>Maintain the lowland dry acid grassland resource in Cumbria, i.e. no loss.</u> Avoid these areas, or ensure that no loss or damage occurs through development.</p>	<ol style="list-style-type: none"> <li>1. Any development that may impact upon this grassland habitat, or its species interests, would require an assessment of the likely effects on the habitat/species and, as</li> </ol>	<ol style="list-style-type: none"> <li>1. If soil nutrient levels are low and there is an available seed source new areas of lowland acid grassland can be established via natural</li> </ol>

Key Habitat	Habitat targets for Cumbria	Planning Considerations	Enhancement Opportunities
		<p>necessary, appropriate protection and mitigation measures.</p> <ol style="list-style-type: none"> <li>2. Developments, including sand quarries, road schemes, housing and industrial developments, can result in significant losses of lowland dry acid grassland, though in some instances they may also present opportunities for the creation of areas of this habitat.</li> <li>3. It is possible that areas of lowland dry acid grassland may be wrongly considered as rough ground suitable for landscape planting in conjunction with developments.</li> <li>4. The majority of lowland dry acid grassland lies outside the SSSI system.</li> </ol>	<p>seeding as part of developments to complement existing areas of this habitat.</p> <ol style="list-style-type: none"> <li>2. Sand extraction sites are most likely to provide suitable habitat for establishment of this habitat provided areas are identified within the agreed restoration plans, and they are in locations that cannot easily be agriculturally improved.</li> <li>3. Biodiversity Management and Enhancement Plans can be used for longer term developments, for the lifetime of the development.</li> </ol>
<b>Montane Habitats</b>		<ol style="list-style-type: none"> <li>1. This habitat is unlikely to be affected by planning issues; there is a small possibility that it could be affected by wind farm developments but these are most likely on hills below 600m.</li> <li>2. Any development that may impact upon montane habitat would require an assessment of the likely effects on the habitat and, as necessary, appropriate protection and mitigation measures.</li> <li>3. Most good quality montane habitat is found within SAC/SSSIs, however, some Lake District summits with good montane heath and grassland also occur outside the SSSI system.</li> <li>4. Any development that may have a significant effect, directly or indirectly, on a Special Area of Conservation would need to be assessed under the Habitats Regulations.</li> </ol>	<ol style="list-style-type: none"> <li>1. There are limited opportunities for enhancing this habitat within the planning system, however any opportunity to reduce grazing of this habitat would be beneficial.</li> </ol>

Key Habitat	Habitat targets for Cumbria	Planning Considerations	Enhancement Opportunities
<p><b>Open Mosaic Habitats on Previously Developed Land</b></p>	<p>No targets.</p>	<ol style="list-style-type: none"> <li>1. Any development that may impact upon any of this range of habitats, or their species interests, would require an assessment of the likely effects on the habitat/species and, as necessary, appropriate protection and mitigation measures.</li> <li>2. There is a policy conflict between the national policies to protect UK priority habitats to redevelop previously developed land. This priority habitat is under-recorded in Cumbria and the majority of the known habitat is unsurveyed for the full range of relevant biodiversity interests. It is therefore difficult for local planning authorities to make informed policy decisions without an improved evidence base. Such surveys are therefore required.</li> <li>3. Sites with this habitat are at risk from redevelopment, landfill, industrial and commercial use, or housing. 'Reclamation' of these habitats as amenity greenspace can be just as damaging, commonly involving re-grading of the land, burial of existing substrates with imported fertile topsoils, and sowing/ planting of amenity grass mixes shrubs and trees, usually with the intention of 'quick greening'.</li> <li>4. Large brownfield sites can support very large populations of protected species such as reptiles, Great Crested Newt and Natterjack Toad. Adequate surveys are required of these species and their habitats prior to planning permission being granted and, where permission is granted, measures to mitigate and compensate impacts on these species</li> </ol>	<ol style="list-style-type: none"> <li>1. Developments on this land can be planned in such a way as to retain and/or recreate these early successional habitats that support rare amphibians, reptiles, plants and invertebrates. They should aim to provide a mosaic of habitat features, including a varied vegetation structure, areas of exposed friable substrate and flower-rich grassland, pools and refuges.</li> <li>2. These habitats are often the only locations where people can enjoy wildlife directly in their day-to-day lives. Opportunities should be taken to retain the best examples as managed public space, such as the nature reserves at Millom Ironworks and Kingmoor Sidings, and to create networks of similar smaller sites.</li> <li>3. Living roofs can provide the opportunity to recreate some forms of this habitat if the roofs are sufficiently extensive.</li> <li>4. Biodiversity Management and Enhancement Plans can be used for longer term developments.</li> </ol>

Key Habitat	Habitat targets for Cumbria	Planning Considerations	Enhancement Opportunities
		<p>must be appropriate and of a suitable scale.</p> <ol style="list-style-type: none"> <li>5. Potential impacts upon populations of European Protected Species such as Great Crested Newt and Natterjack Toad may be significant.</li> <li>6. Retention of this habitat on site, and creation of new habitat, will require the industrial substrate to be retained, such as slag, building rubble, concrete etc.</li> <li>7. The majority of these sites lie outside the SSSI system, though some of the best examples are SSSIs, such as at Maryport and Millom Ironworks. Some are of international importance for the species they support.</li> </ol>	
<b>Rivers</b>	No targets	<ol style="list-style-type: none"> <li>1. Any development that may impact upon the habitats of rivers and streams, and their species interests, would require an assessment of the likely effects on the habitat/species and, as necessary, appropriate protection and mitigation measures.</li> <li>2. Any development adjacent to a river or a tributary stream can potentially result in pollution of the river system.</li> <li>3. Developments resulting in abstraction of groundwater or impounding of surface water can reduce flows affecting the ability of the river to support life; this can be particularly significant in times of drought. Such developments can also affect natural river processes of deposition and erosion.</li> <li>4. Roads, car parks and housing, which increase the impermeable surface area, may reduce the potential for rainwater absorption, increasing run off to the catchment and higher flood</li> </ol>	<ol style="list-style-type: none"> <li>1. Incorporation of Sustainable Urban Drainage Systems (SUDS, which are also appropriate in rural situations) in developments.</li> <li>2. Use of soft surfaces such as grass in place of hard surfacing wherever possible; also green roofs which absorb rainwater, and 'grasscrete' for necessary hard standings and parking areas to allow water to soakaway.</li> <li>3. Enhancement of riverbanks through appropriate native woodland and scrub planting, and creation of grassland buffer strips by fencing alongside river banks.</li> <li>4. Reduction of pollution and other impacts resulting from existing developments, through new development and design</li> </ol>

Key Habitat	Habitat targets for Cumbria	Planning Considerations	Enhancement Opportunities
		<p>discharges.</p> <ol style="list-style-type: none"> <li>5. Development on flood plains reduces their natural flood storage capacity, resulting in higher flood discharges downstream.</li> <li>6. Changes to riverbank morphology, such as installation of hard surfaces in the form of gabions or concrete or metal pilings can result in the transfer of energy, and hence erosion, downstream, often with detrimental and unexpected effects.</li> <li>7. A significant proportion of river systems are included in the SSSI system, all of which are also internationally important as Special Areas of Conservation. Note that many high quality rivers are, however, not covered by the SSSI or non-statutory sites system.</li> <li>8. Any development that may have a significant effect, directly or indirectly, on a Special Area of Conservation would need to be assessed under the Habitats Regulations.</li> </ol>	<p>opportunities.</p>
<p><b>Rock Habitats</b></p>	<p><b>Limestone Pavement:</b>  <u>Maintain the limestone pavement resource in Cumbria, i.e. no loss.</u> Avoid these areas, or ensure that no loss or damage occurs through development.</p> <p><u>No deterioration in the quality of biodiversity and geodiversity of limestone pavement.</u> No damage to the habitat or geodiversity of the limestone pavement.</p>	<ol style="list-style-type: none"> <li>1. Whilst it is not possible to add to this priority habitat it can be enhanced through better management.</li> <li>2. Any development that may impact upon these rock habitats would require an assessment of the likely effects on the habitat and, as necessary, appropriate protection and mitigation measures.</li> <li>3. Most limestone pavement in Cumbria is covered by Limestone Pavement Orders. It is illegal to disturb or remove limestone pavement, or even loose rock (including stone walls), within Limestone Pavement Order sites.</li> </ol>	<ol style="list-style-type: none"> <li>1. There are limited opportunities for enhancing this habitat within the planning system, however any opportunity to reduce grazing of ledges would be beneficial.</li> </ol>

Key Habitat	Habitat targets for Cumbria	Planning Considerations	Enhancement Opportunities
		<ol style="list-style-type: none"> <li>4. Quarrying can impact upon rock outcrops, screes and ledges, and new roads, tracks or pipelines may also result in the loss of important areas of this habitat.</li> <li>5. The majority of limestone pavement is designated as Sites of Special Scientific Interest and Special Areas of Conservation and, of the remaining sites, many are County Wildlife Sites.</li> <li>6. Other rock exposures are integral to many upland SACs and SSSIs, though many areas of rock ledge, outcrop and scree, including areas with rare plants, are outside the SSSI system.</li> </ol>	
<p><b>Saline Lagoons</b></p>	<p><u>No net loss in extent and number of saline lagoons.</u> Avoid these areas, or ensure that no loss or damage occurs through development.</p> <p><u>Create new saline lagoon habitat to offset estimated historical losses.</u> Extensions to existing lagoons will be difficult to achieve since most of the current sites are in restricted urban dockland areas. Creation of wholly new sites is also likely to be very difficult to achieve.</p>	<ol style="list-style-type: none"> <li>1. Any development that may impact upon this habitat, and its species interests, would require an assessment of the likely effects on the habitat/species and, as necessary, appropriate protection and mitigation measures.</li> <li>2. Saline lagoons are highly sensitive to changes in water quality, both in the form of changes in the balance of sea and fresh waters they receive and in the form of pollution impacts from adjacent developments.</li> <li>3. Birds using the lagoons can also be highly sensitive to disturbance.</li> <li>4. The lagoons at Walney Island, Cavendish Dock and Hodbarrow are of international importance as European Marine Sites, designated as Special Areas of Conservation and/ or Special Protection Areas, as well as SSSIs. Other sites are not designated.</li> <li>5. Any development that may have a significant effect, directly or indirectly, on the European</li> </ol>	<ol style="list-style-type: none"> <li>1. Any opportunities to reduce pollution and other impacts resulting from existing developments, through new development and design opportunities, will benefit saline lagoon habitat.</li> </ol>

Key Habitat	Habitat targets for Cumbria	Planning Considerations	Enhancement Opportunities
		Sites would need to be assessed under the Habitats Regulations.	
<b>Semi natural Woodland</b>	<p><u>Maintain the ancient broadleaved woodland resource in Cumbria, i.e. no loss.</u> Avoid these areas, or ensure that no loss or damage occurs through development.</p> <p><u>No net loss of native woodland.</u> Avoid these areas, or ensure that no loss or damage occurs, or that full replacement is provided.</p> <p><u>Expand the area of native broadleaved woodland by c 3000 ha through a combination of converting (restocking) existing plantations and creating native woodland on ex-agricultural land (2760ha).</u> Opportunities within the planning process are woodland planting and/or enhancement as a planning Condition, as part of a restoration scheme and/ or through S106 agreements on additional land.</p>	<ol style="list-style-type: none"> <li>1. Any development that may impact upon woodland habitat, or its species interests, would require an assessment of the likely effects on the habitat/species and, as necessary, appropriate protection and mitigation measures.</li> <li>2. Development can lead to direct loss of habitat area and habitat fragmentation which can seriously affect woodland species which require large areas of woodland for their survival.</li> <li>3. Small woodlands can form important links through the landscape for migration, dispersal and genetic exchange. This is recognised by the Habitats Directive &amp; Habitats Regulations.</li> <li>4. The ecological interest of woodland can be lost or seriously compromised not just by direct landtake, but also by disturbance of the groundflora from recreational activities, compaction of soils around the edge of the woodland or the storage of materials and machinery in the wood during construction on adjacent land.</li> <li>5. Conversion of woodland to wooded garden is also a problem, as whilst tree cover may be maintained the groundflora and even shrub layer may be removed, such that the site is no longer a functional woodland.</li> <li>6. Noise disturbance from new roads/ industrial sites can adversely impact on breeding birds.</li> <li>7. Cumbria supports woodland that is of national and international importance with some of the</li> </ol>	<ol style="list-style-type: none"> <li>1. Creation of new native woodland adjacent to existing ancient woodland or connecting two or more areas of woodland.</li> <li>2. Fencing of woodlands grazed by livestock.</li> <li>3. Replacement of non-native canopy species with native woodland species, particularly on Plantations on Ancient Woodland Sites (PAWS).</li> </ol>

Key Habitat	Habitat targets for Cumbria	Planning Considerations	Enhancement Opportunities
		<p>best examples of the resource designated as Special Areas of Conservation (SACs) and Sites of Special Scientific interest (SSSIs).</p> <p>8. Any development that may have a significant effect, directly or indirectly, on a Special Area of Conservation would need to be assessed under the Habitats Regulations.</p> <p>9. Due to the extent of woodland within the county a very large proportion of this habitat lies outside the SSSI system. Most ancient woodlands are likely to qualify as Cumbria Local Wildlife Sites, as will other woodlands with good structure and species composition.</p>	
<p><b>Traditional Orchards</b></p>	<p>No targets</p>	<p>1. Any development that may impact upon traditional orchards would require an assessment of the likely effects on the habitat and, as necessary, appropriate protection and mitigation measures.</p> <p>2. This priority habitat is easily overlooked in planning decisions as small orchards can be dismissed as a “few old apple trees in a corner of the garden”. They are particularly vulnerable to housing developments, particularly those which involve the development of clusters of houses around farms or barns or indeed any house in the countryside. Existing fruit trees can be protected by condition.</p> <p>3. The biodiversity of orchards can be damaged not only direct impacts, but also by indirect impacts such as the use of the orchard for storing machinery and materials during construction work.</p> <p>4. There are no orchards within the SSSI system</p>	<p>1. New orchard planting with appropriate, and where possible traditional varieties, should be encouraged.</p>

Key Habitat	Habitat targets for Cumbria	Planning Considerations	Enhancement Opportunities
<p><b>Wood Pasture &amp; Parkland</b></p>	<p><u>No loss of, or significant damage to, wood-pasture and parkland sites.</u> Would also include no loss of quality.</p>	<ol style="list-style-type: none"> <li>1. Any development that may impact upon wood-pasture and parkland habitat, or its species interests, would require an assessment of the habitat/species and, as necessary, adequate protection and mitigation measures.</li> <li>2. The extensive root systems of old and veteran trees can be damaged by developing too close to the trees, or by additional soils being placed over the roots.</li> <li>3. Felling of old trees, or tree limbs, for safety or visual reasons is detrimental to the habitat.</li> <li>4. Fallen/ dying timber, important for wood-eating invertebrates and fungi, should be retained.</li> <li>5. Veteran trees have a high potential to host bat roosts.</li> <li>6. Veteran trees hold strong cultural associations with local communities.</li> <li>7. Most parkland and wood-pasture lies outside the SSSI system in Cumbria. But a small number of sites are designated as SSSIs.</li> <li>8. Some of the most important parks in landscape and historic terms are included on the Register of Parks and Gardens of special historic interest in England. This provides some protection to these parks as registration is a material consideration in planning terms.</li> </ol>	<ol style="list-style-type: none"> <li>1. Veteran trees can be made a feature of developments, provided that suitable care is taken to protect their roots from damage during construction and that the development design provides sufficient long term protection for the trees.</li> </ol>

Species	Planning Considerations	Enhancement Opportunities
<b>Barn Owl</b>	<ol style="list-style-type: none"> <li>1. The re-use of rural buildings has significantly contributed to the population decline of Barn Owls in Cumbria. However, if properly planned and implemented, the redevelopment of such buildings can retain, protect, and enhance resting and breeding opportunities for the species.</li> <li>2. Active Barn Owl nests are afforded protection against disturbance, as are breeding adults and dependent young whilst at or near the nest. Any proposed development affecting barns and outbuildings, and other buildings with undisturbed roof voids with direct access to open countryside, should trigger a survey for Barn Owls.</li> <li>3. Any development that would impact upon Barn Owls would require adequate protection and mitigation measures.</li> <li>4. Development during the breeding season should be avoided where there is any evidence of occupation by Barn Owls. In cases where a roosting-only site is affected it is entirely possible that the development may have a detrimental 'knock on' effect if the Barn Owl has a nest nearby.</li> </ol>	<ol style="list-style-type: none"> <li>1. Incorporation of Barn Owl boxes and other suitable structures within buildings in appropriate locations, especially barn conversions. Barn Owls will also utilise externally mounted boxes.</li> <li>2. Provision of rough grassland and woodland edge habitat for foraging, in particular linking to existing habitat.</li> <li>3. Promotion of the above through appropriate planning conditions.</li> </ol>
<b>Bats</b>	<ol style="list-style-type: none"> <li>1. Bats are mobile creatures and almost any building, structure, cave, mine or tree has the potential to be used by bats.</li> <li>2. Bat roosts are protected whether bats are present or not.</li> <li>3. Any proposed development that may affect a bat roost or bat habitat requires a survey – see Bat Surveys - Good Practice Guidelines.</li> <li>4. Consideration must be given to the maintenance and provision of habitat corridors that are used for feeding or as flight routes.</li> <li>5. Surveys of buildings and structures for summer and autumn roost sites may take place at any time of the year as the signs of roosting bats such as droppings, urine staining, bodies and bones should remain throughout the year, though signs on the outside of buildings such as droppings and staining may be removed by the weather especially during the winter months. Hibernating bats may be found during winter surveys. Access would need to be gained to the entirety of the building or structure to ensure that all parts have been assessed. If this is not possible and there is bat potential (e.g. potential bat access points and roost sites) then further survey when bats are active would be necessary.</li> <li>6. If bat roosts are present, summer surveys will be required to determine species and</li> </ol>	<ol style="list-style-type: none"> <li>1. Incorporation of new roost features, such as bat bricks, within buildings or other structures. Projects such as the refurbishment of derelict or semi-derelict buildings, barn conversions, alterations to non-domestic premises, including churches, or other structures can all provide opportunities for roost features to be incorporated.</li> <li>2. Provision of wildlife-friendly shrubs, trees and grassland to improve feeding habitat.</li> <li>3. Creation of hedgerows, tree-lines and other linear features linking feeding and roosting habitats (corridors).</li> <li>4. Enhancement of the foraging habitat and movement corridors, and provision of bat boxes and other structures on trees and buildings, in areas where bats may occur.</li> </ol>

	<p>population size, and their use of surrounding habitat in order to assess the potential impacts of development and appropriate protection and mitigation measures.</p> <p>7. Any development that would impact upon bats, their roosts and/or significant bat habitat would require adequate protection and mitigation measures, and the developer would require a European Protected Species Development Licence, under the Habitats Regulations 1994, to proceed.</p>	
<b>Great Crested Newt</b>	<p>1. Great Crested Newts have been found throughout Cumbria, including some unlikely-looking places such as working quarries.</p> <p>2. Any proposed development that may affect a Great Crested Newt pond or its terrestrial habitat requires a Great Crested Newt survey.</p> <p>3. Consideration must be given to the maintenance and provision of habitat corridors that are used for foraging or dispersal between ponds, and as terrestrial habitat.</p> <p>4. Surveys for Great Crested Newts cannot be carried out adequately during the autumn and winter months. This may mean that decisions have to be delayed until after a suitable survey window.</p> <p>5. Any development that would impact on Great Crested Newts and their breeding and resting places and/or significant habitat would require adequate protection and mitigation measures, and the developer would require a European Protected Species Development Licence, under the Habitats Regulations 1994, to proceed.</p>	<p>1. Incorporation of wildlife ponds, including suitable adjoining terrestrial habitat, into new developments, even if Great Crested Newts are not affected by the development. Where they are affected mitigation measures should include recreation of ponds on a two for one basis.</p> <p>2. Creation of 'networks' of ponds linked by suitable terrestrial habitat.</p> <p>3. Creation/enhancement of refuges/over-wintering sites within existing as well as new habitat.</p>
<b>Hen Harrier</b>	<p>1. The main winter roost complex area and associated foraging areas are vulnerable to impacts from developments. Any development proposals that fall within, or adjacent to, this area will require assessment of potential impacts upon the wintering population and its habitat requirements.</p> <p>2. The wintering Hen Harrier population of the 'West Cumbria foothills' should be considered to be equivalent to Special Protection Area quality.</p> <p>3. Since over-wintering can occur on other extensive areas of rush and heath, hen harriers may sometime be an issue for developments outside the current mapped area; developers should be encouraged to seek advice from Natural England or the Cumbria Bird Club.</p> <p>4. Developments within the uplands of Cumbria may impact upon Hen Harriers during the breeding season. This may occur on or off protected sites, and may include extensions to quarries, re-opening of mines, new buildings and tracks.</p>	<p>1. Developments within the areas identified have potential for enhancement and creation of habitat through planning agreements and obligations, and restoration schemes.</p>
<b>Natterjack</b>	<p>1. Natterjack toads have a limited distribution on coastal sand dunes, saltmarshes and</p>	<p>1. In areas where Natterjack Toads may occur</p>

<p><b>Toad</b></p>	<p>specific other locations. Terrestrial habitat is as important to the survival of the population as breeding ponds.</p> <ol style="list-style-type: none"> <li>2. Any proposed development that may affect Natterjack Toads should trigger a survey; as a guide any proposed development within 1km of a known Natterjack site has the potential to impact upon their activity.</li> <li>3. Surveys for Natterjack Toads and their use of habitat cannot be carried out adequately during the winter months. This may mean that decisions have to be delayed until after a suitable survey window .</li> <li>4. Any development that would impact upon Natterjack Toads and/or significant habitat would require adequate protection and mitigation measures and the developer would require a European Protected Species Development Licence, under the Habitats Regulations 1994, to proceed.</li> </ol> <p>Developments with potential impacts are:</p> <ol style="list-style-type: none"> <li>5. Sea defence schemes which are damaging because they prevent the tidal inundation of upper saltmarsh pools, disrupt the flushing of the remaining saltmarsh by fresh water from the land, and therefore impact upon the natural cycle of sediment deposition that creates new saltmarsh and dune.</li> <li>6. Housing, industrial and leisure industry developments (golf courses and holiday developments), as well as to forestry and agriculture, which can lead to direct habitat loss.</li> <li>7. Developments that encourage concentrated access to coastal sites that support Natterjack Toads.</li> </ol>	<p>the potential for enhancement of breeding ponds, foraging habitat and movement corridors should be maximised.</p> <ol style="list-style-type: none"> <li>2. New developments may provide opportunities to create or restore habitat to link Natterjack Toad sites, or to create new breeding ponds, terrestrial habitat or hibernation areas, in particular creation of satellite sites within 1 km of a known breeding site.</li> <li>3. Tidal inundation and managed retreat would provide significant opportunities for habitat creation.</li> <li>4. Sand and Gravel extraction has tremendous potential for Natterjack conservation through future habitat creation and restoration schemes.</li> </ol>
<p><b>Otter</b></p>	<ol style="list-style-type: none"> <li>1. Otters are widespread and may be affected by any development that impacts on a watercourse or on habitat adjacent to a watercourse.</li> <li>2. Any proposed development that may affect Otters or their holts should trigger a survey and assessment of potential impacts.</li> <li>3. Any development that would disturb Otters, impact upon their breeding and resting places and/or significant habitat would require adequate protection and mitigation measures, and the developer would require a European Protected Species Development Licence, under the Habitats Regulations 1994, to proceed.</li> <li>4. Otter holts and couches are covered by the legislation whether or not an Otter is present. During any work it is essential that Otter holts are not disturbed – at least 50m either side of a holt should be left unmanaged or undisturbed if possible.</li> </ol>	<ol style="list-style-type: none"> <li>1. Enhancement to riverbank vegetation, by fencing off to allow regeneration of riverbank habitat.</li> <li>2. Creation of lying up and breeding sites (holts).</li> <li>3. Provision / enhancement of buffer strips between developments and watercourses.</li> </ol>

	<p>5. A range of developments can affect otters and otter habitat: these include built developments adjacent to rivers, tributary streams and ditches, riverside lighting, river bank modification, road construction, bridge works over waterways or culverting, flood alleviation works and new fishing lakes/ponds.</p> <p>6. In addition to direct impacts through disturbance, or habitat change, developments may impact on water quality, through pollution or siltation, any degradation of which would be detrimental to otters.</p>	
<b>Red Squirrel</b>	<p>1. Red Squirrels breed throughout Cumbria and potentially any woodland within Cumbria may contain squirrels and their dreys. Woodlands or individual trees or groups of trees that are used for breeding are also material to planning decisions.</p> <p>2. Red Squirrels may be impacted by development which affects individual or small groups or trees, by poor management, loss of larger areas of woodland, and by the loss of tree lines and hedgerows that link woodland patches.</p> <p>3. Any development that may impact upon Red Squirrels and their habitat would require a Red Squirrel survey with particular focus on their protected dreys and, as necessary, adequate protection and mitigation measures.</p> <p>4. In Red Squirrel reserves and buffer zones the potential for protection and enhancement of habitat should be optimised where ecologically appropriate.</p>	<p>1. Take opportunities to manage the mix of species required by Red Squirrels in the reserves and buffer zones. This may include planting the correct tree species or retaining conifers within woodlands, avoiding large-seeded broadleaved species such as oak and beech.</p> <p>2. Design layout of developments, including new roads, in such a manner that habitat links are created or maintained.</p>
<b>Reptiles</b>	<p>1. Any proposed development that may affect reptiles would require a reptile survey.</p> <p>2. Surveys for reptiles and their use of habitat cannot be carried out adequately during the winter months. This may mean that decisions have to be delayed until after a suitable survey window.</p> <p>3. Any development that would impact upon reptiles and their habitat would require adequate protection and mitigation measures.</p>	<p>1. Creation of wildlife corridors through urban and semi-urban spaces could include open grassland habitat, sown with native species and with structural diversity, e.g. rock and wood refuge piles, built in for reptiles.</p> <p>2. Species-rich grasslands on previously developed land could be enhanced for reptiles to form core areas of reptile habitat.</p> <p>3. Creation of refuges/over-wintering sites to enhance existing sites.</p>
<b>Small Blue Butterfly</b>	<p>1. The Small Blue is largely dependant upon previously-used land (brownfield sites) in Cumbria.</p> <p>2. Any proposed development within and nearby the current Small Blue area should trigger a Small Blue assessment. Timing for butterfly survey is restricted to May-June,</p>	<p>1. Management of existing habitat and populations can be successful within current developments provided linked patches of kidney vetch grassland are identified and</p>

	<p>but kidney vetch can be surveyed throughout the year.</p> <ol style="list-style-type: none"> <li>3. Development proposals should seek to maintain and/or create a mosaic of habitat and Small Blue population throughout the Small Blue distribution area, and its surrounds.</li> <li>4. The Small Blue is sometimes confused with the Common Blue and Chimney Sweeper Moth.</li> </ol>	<p>maintained with open, sunny conditions.</p> <ol style="list-style-type: none"> <li>2. Creation of new species-rich kidney vetch grassland habitat within the Small Blue butterfly distribution area of Allerdale to provide sites for colonisation from nearby populations.</li> <li>3. Breeding conditions for the Small Blue are relatively easy to create by either allowing sites to colonise naturally with kidney vetch or by planting kidney vetch of local provenance; best results are seen on uneven ground with thin calcareous soils.</li> <li>4. Development proposals should seek to maintain and/or create a mosaic of habitat and Small Blue population throughout the Small Blue distribution area, and its surrounds.</li> </ol>
<b>Water Vole</b>	<ol style="list-style-type: none"> <li>1. Any modification or management of the banks can impact upon resident Water Voles, such as ditch clearance, flood alleviation works and culverting.</li> <li>2. Any proposed development which may affect the rivers or streams within the Water Voles' current range will potentially affect Water Vole habitat and distribution and should therefore require a Water Vole/ Water Vole habitat survey.</li> <li>3. It should be noted that, since it is possible that there may still be isolated, small populations in parts of Cumbria where Water Voles have been recorded post 1980 but not recently, developments that significantly affect suitable watercourses should consider the possibility of Water Voles being present.</li> <li>4. Any development that would impact upon Water Vole or Water Vole habitat would require adequate protection and mitigation measures.</li> <li>5. In areas where Water Voles may occur the potential for enhancement and long-term management of the river/ streamside habitat should be maximised.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduction in the amount of habitat damage, disturbance and burrow destruction by promoting better and more timely bank-side management, e.g. so as not to affect both banks at the same time.</li> <li>2. Protection and/ or creation of enhanced bank-side vegetation through fencing and planting and reduced grazing levels, especially within the Water Vole re-introduction area.</li> </ol>
<b>Wintering Geese &amp; Swans</b>	<ol style="list-style-type: none"> <li>1. Developments may impact upon the feeding areas directly or may cause impact on the flight-lines of the birds between the feeding areas and roosting areas.</li> <li>2. Any proposed development would require a survey and assessment of use during the</li> </ol>	<ol style="list-style-type: none"> <li>1. Large scale developments can create new, or improve the management of, feeding areas for these birds, both during the operation of the development or as part of the site</li> </ol>

	<p>appropriate time of year.</p> <ol style="list-style-type: none"> <li>3. Any development that would impact upon these birds would require adequate mitigation and, where appropriate, compensation.</li> <li>4. Since Pink-footed Geese, Barnacle Geese and Whooper Swan are protected through SPA designation any development that impacts upon these birds, or the habitat on which they depend, when they are off-site may result in an adverse effect on the integrity of the site itself. This would require the planning authority to carry out a Habitats Regulations Assessment under the Habitats Regulations 1994.</li> <li>5. Any impact to the designated species (or habitat on which the population is dependent), which causes a significant decline in the size, distribution, structure or function of the population within the designated site, should be considered to have an adverse effect on the integrity of the site.</li> <li>6. It should be noted that a clear link would need to be made between the population being impacted upon and the population within the designated site (functionally linked).</li> <li>7. In Cumbria this will be particularly relevant for development within the Core Areas.</li> <li>8. Developers should be encouraged to seek advice from Natural England, RSPB or the Cumbria Bird Club.</li> </ol>	<p>restoration.</p> <ol style="list-style-type: none"> <li>2. Pink footed geese are a legal quarry species (during the open season September 1 to January/ February), under Section 2, and listed in Schedule 2 Part 1, of the Wildlife and Countryside Act 1981. Large numbers of birds are shot each year. Shooting occurs both on estuaries and on farmland. One form of compensation (associated with developments) is the buying out of shooting rights and the creation of refuges for feeding geese.</li> </ol>
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