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National Park Authorities

Assessment of Benefits – working paper

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Executive Summary

The National Park and Broads Authorities ('the NPAs') are small organisations which contribute to a wide range of Government objectives. They have always been judged to be cost effective bodies, providing a good level of value for money.

It is over 10 years since most of the English NPAs were established as stand-alone authorities. With increased experience of monetising environmental benefits, and the development of the Millennium Ecosystems Assessment methodology, Defra decided to test whether it was possible to assess more precisely the contribution made by the NPAs and in particular to see how far one could assess the impact of the Authorities themselves (rather than the value which comes from designating land as National Park).

The study was largely carried out by a Defra economist (reflecting the fact that between 53% and 85% of each NPA's funding comes from Defra) with a steering group made up of experienced Defra, Natural England, NPA, and ENPAA officials.

The study examined data for all 9 NPAs that were designated at the time of commissioning the report. It then focused on three NPAs of differing sizes: namely, the Peak District; Dartmoor; and Northumberland. It also looked at over 20 case studies and brought together financial and other data covering all the NPAs.

The aim of this work was to improve the economic and social research evidence base relating to the English NPAs and provide evidence to help address the following four key questions:

- What are the broad economic, social and environmental benefits associated with NPAs? (section 6)
- What is the added value of NPAs including examination of the costs associated with the NPAs statutory duties and the public benefits provided by NPAs (section 7)
- To what extent does NPA spending reflect Defra/Government priorities and is there any evidence to highlight key areas for reprioritisation to deliver more cost effectively or to achieve enhanced levels of benefits in the future (sections 8)
- Are there any longer term opportunities for alternative funding possibilities for NPAs e.g. payments for ecosystem services, bed tax, entrance fees, source of credits in biodiversity offset banking scheme etc (section 9)

In relation to these questions the conclusions of the report are as follows:

What are the broad economic, social and environmental benefits associated with NPAs?

Section 6 of the report identifies the following benefits of NPAs:

- Non Use values¹
- Option Values
- Recreation and Tourism
- Health and Wellbeing
- Better informed society
- Regulating services
- Rural development
- The economic impacts of National Park spending on the local economy
- Social inclusion
- Transparency and democracy

What is the added value of NPAs?

Section 7 of the report analyses the added value of the NPAs. It is important to note that although the aim of the study was to identify and quantify the benefits of the NPAs rather than the National Park designation in some instances it is not possible to distinguish between the two.

When considering the added value of the NPAs it is useful to refer to the reason that NPAs were introduced in 1995. The report that recommended the establishment of NPAs said that 'we believe the balance of advantage clearly lies with organisations of independent status for all parks. We also suggest that the independent authorities should be formally titled NPAs. Our decision was influenced to some degree by evident administrative difficulties and inefficiencies of long standing in some parks, resulting from existing county council procedures'².

Section 7 of this report shows that the nature of the work of the NPAs means that it is often not possible to place monetary values on the benefits of the NPAs. This is due to challenges including: establishing a clear baseline; the fact that monitoring is costly and therefore not always cost effective to implement; the complexity of the work that NPAs carry out (both with regards to environmental and social benefits) where monitoring additionality can be complex and the subtle impacts that NPAs

¹ Although it is not possible to distinguish non use values for the services provided by NPAs and those that result from National Park designation.

² National Parks Review Panel (1991) <u>Fit for the Future: report of the National Parks Review Panel</u>, CCP 334, ISBN 0 86170 291 3 Page 97/98

have difficult to quantify. In addition it may be argued that with regards to NPAs it may be that the whole is greater than the sum of the parts and therefore using a methodology that segments the work of the NPAs could underestimate their total impact.

The challenges to quantifying and monetising the added value of the NPAs does not mean that they have no impact but just that their impact is difficult to quantify. Where evidence that is amenable to economic analysis is not available, section 7 illustrates the benefits of NPAs with case studies and narratives. For each of the benefits identified and analysed the conclusion and any economic valuation evidence is set out below.

Volunteers – The work of the NPAs with volunteers can provide NPAs with a source of labour and an opportunity to engage with the local community and target groups. Volunteers gain a benefit from volunteering which has been estimated at between £88,831 and £165,229 per year for Dartmoor, £419,915 and £781,056 for the Peak District and £51,888 and £96,513 for Northumberland (there are also possible health benefits which have not been estimated). This is the benefit to the individual volunteer rather than a benefit to the NPA as it is not possible at this time to value the outputs of the activities undertaken. Without the NPAs, volunteering within the National Parks may not be as focused on achieving the National Park objectives.

Conservation: biodiversity and cultural heritage – The NPAs use their own funding as well as the Environmental Stewardship scheme to help achieve the National Park objective to conserve and enhance the beauty, wildlife and cultural heritage of the National Parks. Valuation of the benefits of NPAs in this area is difficult without evaluating specific projects, however analysis found that:

- The annual value of additional upland SSSIs in favourable condition in the National Parks compared to the region is estimated to be around £9m; however this figure should be treated with caution due to the assumptions that under lie it.
- The trees planted by the NPAs have carbon sequestration value. For example the present value benefit of the carbon sequestered by the 115ha of broadleaf woodland planted over 8 years by Dartmoor NPA is £2.3m.
- The NPAs work with Natural England to help ensure that agri-environment schemes help achieve the National Park purposes and as a result on average there is 10% more land in HLS agreements in the National Parks compared to the regions.
- The NPAs also contribute to the conservation and restoration of cultural heritage, this work has an impact on the local economy as well as the landscapes of the National Park. For example in 2008/9 Dartmoor NPA spent £10,084 repairing 6 traditional buildings, the benefit of this can be estimated as £20,168 to the local economy and £29,244 to the wider local economy.

Tourism – The contribution of the NPAs to the tourism industry in the National Parks is difficult to identify as many tourists would visit the National Parks even without the information and facilities provided by the NPA. The NPAs add value in promoting sustainable tourism and for the less known National Parks they help to promote the Park as a tourist destination (although this could be undertaken by a Tourist Board in their absence although they would not necessarily focus on the needs of the National Park). The work of the NPAs in achieving the first purpose also helps to ensure that individuals want to visit the National Parks, however it is not possible to quantify these impacts. Analysis found that:

- The National Parks receive 75million visitors annually.
- Using visitor centre numbers as an indicator of the number of visitors visiting the National Park as a result of the NPAs it is estimated that visitor spend attributable to Dartmoor NPA may be £9.7m and £7.9m in Northumberland. As Northumberland spends approximately £900,000 on tourism annually this gives a cost benefit ratio of 1:9.

Recreation – The facilities provided by the NPAs such as toilets, car parks, multiuser trails and sign posted and downloadable walks enable individuals to access the National Parks for recreation. Initial scoping analysis illustrates that value transfer can be used to estimate cost benefit ratios for recreational spending based on a number of assumptions/available data.

- Initial scoping analysis for the benefits of NPA recreational activities estimated the benefits to be valued at £3-5m for the Peak District, £0.6-1.1m for Dartmoor and £0.4-0.7 for Northumberland.
- When wider benefits of recreation were considered this increased to £36m for the Peak District, £4.1-4.7m for Dartmoor and £4.4-4.8 for Northumberland.
- When these wider benefits are compared to the total Grant in Aid of the NPAs (which cover spending on all activities not just recreation) an illustrative cost benefit ratio of 1:4 was calculated for all Parks. Further detailed analysis is needed to provide robust estimates.

Education, skills and training – The NPAs provide education to the general public on both the qualities of the National Parks and wider environmental issues however it is not possible to identify the impact of this education. The NPAs also train individuals in skills that are needed to ensure the landscape of the National Parks is maintained but for which there is a shortage of skilled supply, for example dry stone walling. Without the co-ordination and leadership of the NPAs in this area it is unlikely there would be a focus on sustaining these important skills. Although successful schemes have led to employment creation it is not possible to place a monetary value on these benefits. **Planning** – Although the speed of planning performance statistics for the NPAs do not always compare favourably with those of the relevant region, the benefit of a cohesive approach to planning in the National Park and focus on community engagement when drawing up planning policy helps ensure the objectives of the National Parks are met. Without the NPAs it is unlikely that such deep participation would take place and there is a risk that there would be a fractured approach to planning across the National Park which may put at risk their special qualities. It is not possible to place a monetary value on these benefits.

Leadership and third party funding – The ability of the NPAs to work with other public sector organisations, business and local communities to overcome collective action problems increases the resources dedicated to achieving the objectives of the National Parks than the Defra grant in aid alone, and more resources dedicated to achieving the objectives of the National Parks than Local Authorities could provide. This is achieved through the ability of the NPAs to lead projects that would not have otherwise been established as well as levering extra funding into the National Parks (for example the Northumberland Area Action Approach has a multiplier of 5.44).

Sustainable communities – Without specific evaluations of the projects undertaken around sustainable communities it is difficult to assign a monetary value to their benefits. Even with specific evaluation information it would not be possible to calculate the value of ensuring a sustainable economy or a more cohesive community. In order for the objectives of the National Parks to be achieved there is a need for sustainable communities with sustainable economies and it is important that the NPAs continue work to ensure that sustainable communities are utilised as a way of achieving the environmental and recreational objectives of the National Parks.

General economic impact - It is not possible to identify the impact of the NPAs on the local economies of the National Parks. Studies currently available tend to estimate the absolute value of the economy in the National Parks rather than the impact of the NPAs for example a study examining the impact of the National Parks in the Yorkshire and Humber region found that businesses in the Parks generated £1.8bn of sales annually, supporting 34,000 jobs and contributing £576m of gross value added (GVA). Although it is clear that the quality of the natural environment has an influence on businesses (especially those reliant on tourism and recreation), because of lack of data it is difficult to assess exactly how much of the GVA could be as a result of the work of the NPA.

Climate Change - The work of the NPAs on the issue of climate change illustrates how the NPAs can use their expertise, local knowledge, partnerships and other skills to tackle new issues on the ground, providing a test bed for new technologies and approaches and helping to educate the public.

Sustainable Development Fund - The evaluation of the Sustainable Development Fund found that 'the SDF programme in the English National Parks continues to fulfil its original objectives. These objectives remain relevant, allowing the SDF to address emerging policy priorities and the needs of communities. The NPAs should build on these achievements. They should seek to maximise the value from the SDF to deliver the purposes of the National Park designation and their socio-economic duty, and to support the priorities of their partner organisations.' In addition the SDF achieves a funding multiplier of 4.3.

Section 7 of this paper illustrates the varied, complex and interconnected nature of the benefits of NPAs and the difficultly in monitoring, quantifying and monetising them. It presents evidence that the local knowledge of NPA members and staff plays an important role in the NPAs maximising the benefits within the National Parks. Analysis of the benefits of NPAs suggests that some benefits would be lost or reduced under the counterfactual of no NPAs and statutory duties transferred to the relevant Local Authorities. However, due to the complex nature of NPAs and the work they do it has not been possible to quantify and monetise many of these benefits.

To what extent does NPA spending reflect Defra/Government priorities?

The NPAs contribute to a number of Government objectives in addition to Defra's. Specifically the Department for Business, Innovation and Skills, the Department of Health, the Department for Culture, Media and Sport, the Department for Education, Department for Communities and Local Government and the Department for Energy and Climate Change.

In addition the NPAs are able to adapt and use their local expertise, knowledge and network to respond to changing government priorities as illustrated with the example of climate change.

Are there any longer term opportunities for alternative funding possibilities for NPAs?

Future funding possibilities for NPAs vary from funding from Payments for Ecosystem Services (such as biodiversity offsets, water purification and carbon sequestration), tourist taxes, congestion charges and possible mutualisation for some functions. As the Cairngorms NPA have already established a charitable trust for outdoor access their progress and achievements should be closely followed in order to assess whether this could be an appropriate alternative funding mechanism for the English NPAs.

Conclusion

This reports demonstrates the challenges to valuing the benefits of NPAs. It is often not possible to place monetary values on the benefits of NPAs due to the nature of the work and the lack of quantified outputs. Identifying a counterfactual is also difficult. It has been assumed throughout the paper that without the NPAs the regulatory framework would remain but the statutory responsibilities of the NPAs would be transferred to the relevant Local Authorities. As such it is assumed that the purposes of the National Parks would not be prioritised as highly as within the NPAs and therefore the resources focused on achieving National Park objectives would be reduced, leading to reduced outcomes.

However, it is often not clear how the absence of NPAs would affect the achievement of the National Park objectives and it is therefore difficult to assess the benefits of NPAs over the counterfactual. For example without the NPAs volunteers are likely to continue to volunteer (probably within the Park) through environmental or cultural third sector organisations, Natural England would still pay particular attention to Environmental Stewardship schemes within the Parks and as some Local Authorities already work in Partnership with the NPAs and so their interest in the National Parks may not reduce. Therefore although the benefits of NPAs have been identified it is not possible to robustly analyse their direct impact.

This paper has highlighted the differences in the approaches taken by NPAs as to how they monitor and measure their expenditure and outputs. If there are certain areas in which it is felt it is important to identify, quantify and monetise the benefits of NPAs it may be advisable for the NPAs to consider a consistent monitoring approach beyond the performance indicators already agreed. There may also be a need to commission primary economic valuation studies so that it is possible to place monetary values on benefits, for example in the area of recreation.

To conclude, it is not possible to provide a full cost benefit analysis of the NPAs due to data and methodological issues, however this paper has identified a number of areas where the NPAs provide benefits. For some of these benefits economic valuation estimation has been possible (although further research is needed to improve robustness), for other areas, such as planning, evidence suggests that NPAs provide additional benefits although it is not possible to quantify and monetise them.

1. Introduction

The aim of this work is to improve the economic and social research evidence base relating to the English National Park Authorities (NPAs). The paper provides evidence to address four key questions

- What are the broad economic, social and environmental benefits associated with NPAs? (section 6)
- What is the added value of NPAs including examination of the costs associated with the NPAs statutory duties and the public benefits provided by NPAs (section 7)
- To what extent does NPA spending reflect the achievement of National Park purposes and Defra/Government priorities and is there any evidence to highlight key areas for reprioritisation to deliver more cost effectively or to achieve enhanced levels of benefits in the future (section 8)
- Are there any longer term opportunities for alternative funding possibilities for NPAs e.g. payments for ecosystem services, bed tax, entrance fees, source of credits in biodiversity offset banking scheme etc (section 9)

The second question is the most complex and therefore three National Parks were selected for detailed analysis – the Peak District, Dartmoor and Northumberland. All National Parks are unique and therefore although these three NPAs may be seen as representative (of large, medium and small National Parks) the analysis could not robustly be aggregated across all NPAs. It does however provide a framework so analysis of the other Parks can be considered in the future.

The paper focuses of the work of the English National Parks in the year 2008-2009.

The members of the project steering group were

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2. Background on the National Parks and NPAs

2.1 History of the National Parks³

National Parks have a long history. In the late 19th century James Bryce MP began a campaign for access to the countryside and although the Bill he introduced failed it launched a campaign which lasted over 100 years with conflicts in the early 20th Century between public interest groups demanding access and landowners.

In 1931 a government inquiry recommended that a National Park Authority be created to help select areas for designation, however, no action was taken due to insufficient funding as a result of the Great Depression. The National Park Inquiry Committee was maintained for a number of years to try to persuade government to reconsider. However the government did not reconsider and so in 1936 a number of interest groups⁴ formed the Standing Committee on National Parks (SCNP) which is the parent of today's Campaign for National Parks.

As part of the Government's post-war reconstruction a white paper on National Parks was produced in 1945. This was followed by the establishment of a committee to prepare National Park legislation lead by Sir Arthur Hobhouse.

In 1949 Parliament passed the National Parks and Access to the Countryside Act (with cross party support) to establish National Parks to preserve and enhance their natural beauty and provide recreational opportunities for the public. The Peak District was the first of the National Parks to be designated in 1951. The 1950's saw 7 National Parks created (2 as independent authorities). The next National Park was not created until the 1980's and the 2000's saw an additional two National Parks created. The dates of Park Designations are shown in table 1. In addition, the Norfolk and Suffolk Broads Act 1988 added the Norfolk Broads to the family.

³ From http://www.nationalparks.gov.uk/learningabout/history.htm

⁴ including the Rambler's Association, the Youth Hostels' Association (YHA), the Council for the Preservation for Rural England (CPRE) and the Council for the Protection of Rural Wales (CPRW)

Table 1: National Parks	Designation	Years
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Park	Year of designation
Peak District	1951
Lake District	1951
Dartmoor	1951
North York Moors	1952
Yorkshire Dales	1954
Exmoor	1954
Northumberland	1956
The Broads	1989
The New Forest	2005
South Downs	2009

In 1977 the SCNP became the Council for National Parks (CNP). In 1995 the Environment Act updated the objectives of the National Parks and saw the establishment of National Park Authorities (NPAs). NPAs are independent bodies within the Local Government framework and came into being in April 1997.

NPAs generally only own a very small percentage (if any) of the land within the National Parks. The State does, however, own substantial amounts of land in National Parks for example nearly half of Northumberland National Park is owned by the Ministry of Defence and the Forestry Commission. Unlike most National Parks around the world which are protected wildernesses, the UK's National Parks are working landscapes.

2.2 Objectives of the National Parks

The vast majority of NPA funding comes from central government, between 53% and 85% of expenditure is from the Defra grant (see table 4). The NPAs have two statutory purposes of; conserving and enhancing the natural beauty, wildlife and cultural heritage of the National Parks and promoting opportunities for the understanding and enjoyment of the special qualities of the National Parks by the public.

Where the needs of recreation conflict with the needs of conservation, statute requires that conservation takes precedence. This conflict resolution mechanism is known as the "Sandford Principle".

In 1995 a duty was placed on NPAs. This required them, in pursuing the two purposes to seek to foster economic and social wellbeing of local communities. This does not constitute a third National Park purpose and is not covered by the Sandford Principle.

The Broads Authority has a third purpose to protect the interests of navigation and under the Broads Act 1988 all three purposes have equal priority.

In addition to the purposes and duty, the NPAs are statutory planning authorities and as such are responsible for planning policy within the National Parks, granting planning permissions for changes in building and land use or new buildings.

NPAs are required to lead on the production of a National Park Management Plan every 5 years. These are statutory plans for the area, rather than just the Authority, and are produced in co-operation with stakeholders, following guidance issued by Natural England, to set out long term objectives for the area. The NPAs have used the preparation of the Management Plan to engage widely with local communities and land owners over what the priorities should be for the National Park.

Information on National Park operation prior to the Environment Act 1995 can be found in annex 8.

3. National Parks – Key Facts and Figures

This section gives some general information on the National Parks and National Park Authorities (NPAs). These figures help illustrate the size of National Parks and their activities. At the time of writing the South Downs National Park had not been established and so the information below does not include information on the latest National Park.

National Park	Area (sq km) ¹³	Population
Peak District	1438	37,937
Lake District	2292	42,239
Dartmoor	953	34,365
North York Moors	1436	23,939
Yorkshire Dales	1762	19,654
Exmoor	694	10,900
Northumberland	1049	2,000
The Broads	303	5,721
The New Forest	567	34,935

Table 2: Area and population

Table 3: Grant, and other incomes (2008/9)

National Park	Defra Grant	Other Grants (excluding SPF)	Fees/ charges	Sales	Investments	other	Gross Income (excluding Defra grant and SDF)
Peak District	8,264,281	£2,182,541	£536,507	£1,825,957	£156,138	£2,000	£4,703,143
Lake District	6,890,824	£1,353,055	£1,871,946	£645,265	£226,518	£142,509	£4,014,000
Dartmoor	4,715,643	£732,761	£296,005	£150,963	£111,856	£6,341	£1,297,926
North York	5,402,230	£964,950	£639,690	£215,540	£117,024	£0	£1,937,204
Moors							
Yorkshire Dales	5,372,616	£464,560	£840,020	£245,621	£139,972	£0	£1,690,173
Exmoor	3,956,834	£658,000	£114,000	£165,000	£137,000	£174,000	£1,111,000
Northumberland	3,291,563	£649,893	£140,243	£71,258	£63,253		£861,394
The Broads	4,304,337	£1,322,000	£2,460,000	£85,000	£101,000	£416,000	£4,384,000
The New Forest	4,010,965	£107,235	£293,850	£188	£158,703	£236,541	£796,517

National Park	Defra Grant	Total Expenditure	% of expenditure from Defra grant	% of expenditure not from Defra grant
Peak District	£8,264,281	£12,972,026	64	36
Lake District	£6,890,824	£12,820,000	54	46
Dartmoor	£4,715,643	£5,800,000	81	19
North York Moors	£5,402,230	£7,080,000	76	24
Yorkshire Dales	£5,372,616	£6,405,200	84	16
Exmoor	£3,956,834	£5,011,508	79	21
Northumberland	£3,291,563	£4,414,280	75	25
The Broads	£4,304,337	£7,692,000	56	44
The New Forest	£4,010,965	£4,692,213	85	15

Table 4: Percentage of funding from Defra grant and other income

Table 5: Volunteer days⁵

National Park	Volunteer days
Peak District	8700
Lake District	4460
Dartmoor	2140
North York Moors	10250
Yorkshire Dales	6000
Exmoor	650
Northumberland	1250
The Broads	5000
The New Forest	0 ⁶

 ⁵ 2009/10 figure extrapolated from information to date
 ⁶ This is because the New Forest was established relatively recently and as of yet do not have the policies and procedures required for volunteers.

Table 6: Staff numbers⁷

National Park	Total Number FTE posts	Total Number of employees	Number of staff funded by Defra grant	Number of Staff funded by other Grants	Salaries as a % of Gross Expenditure
Peak District	247	322	219	27.5	57.52%
Lake District	190	218	185.3	4.7	45.87%
Dartmoor	109	129	104.6	4.4	66.16%
North York Moors	139	177	116.6	22.3	53.74%
Yorkshire Dales	116	136	129	7	56.74%
Exmoor	88	100	91	9	48.65%
Northumberland	83	97	82	15	51.60%
The Broads	148	164	83.1	79	48.25%
The New Forest	71	73	68.2	2.5	53.40%

Table 7: Visitor numbers, visitor days and tourist spend⁸

National Park	Visitor numbers (Millions)	Visitor days (millions)	Visitor spend (millions)
Peak District	N/K	12.4 ⁹	347
Lake District	8.3	15.2	659
Dartmoor	2.2	2.8	103
North York Moors	6.3	9	317
Yorkshire Dales	9.5	12.6	400
Exmoor	1.4	2	83
Northumberland	1.7	2.415	104
The Broads	5.8	7.2	296
The New Forest	N/K	13.5	123

 ⁷ As of 1st April 2009 – from NPA benchmarking exercise
 <u>http://www.nationalparks.gov.uk/learningabout/factsandfigures.htm</u>. It should be noted that these figures come from surveys that are designed to give trend data rather than accurately estimate the number of visitors and therefore the numbers should be treated with a note of caution. Dartmoor data updated following data from DNPA ⁹ This is the only published figure available for the Peak District National park but is believed to be an

underestimate, other survey data suggests this is the case but is not available for publication.

National Park	Number of scheduled ancient monuments ¹⁰	Length of footpaths and other rights of way km
Peak District	457	3005
Lake District	200+	3047
Dartmoor	1208	734.5
North York Moors	846	2375
Yorkshire Dales	203	2020
Exmoor	208	986
Northumberland	430	1186
The Broads	13	333
The New Forest	61	310

Table 8: Number of ancient monuments and length of public right of way

Annex 2 contains a number of maps which show how National Parks designation relates to a number of areas of interest – a list of these maps can be found in the contents list.

¹⁰ Annex 2 map 8 shows National Parks and scheduled ancient monuments

4. Rationale for Government Intervention

National Park Authorities (NPAs) exist to further the statutory National Park purposes within their Park, namely to:

- conserve and enhance the natural beauty, wildlife and cultural heritage of their areas; and
- promote opportunities for the understanding and enjoyment of the special qualities of National Parks by the public.

In pursuing these two statutory purposes NPAs have a duty to foster the economic and social wellbeing development of the area.

These objectives reflect the rationale for government intervention in designating the areas as National Parks. The first objective can be seen as government intervention in relation to landscape¹¹, biodiversity and cultural heritage and the second in relation access and recreation. The rationale for government intervention in these areas is explained in the following sections.

4.1 Market failure

Government intervention is usually justified on the grounds of market failure or where government distributional objectives need to be met. With regards to National Parks the primary reason for government intervention relates to market failures.

A market failure occurs when a market, when left to itself, does not allocate resources efficiently. There are four key causes of market failure: imperfect information; market power¹²; public goods and externalities. Public goods, externalities and imperfect information are the key reasons for market failure with respect to National Parks.

4.2 Public goods, externalities and information failure

Public goods are goods that are non-rival (i.e. one person's consumption of the good does not prevent another person also consuming the good) and non-excludable (i.e.

¹¹ The term 'Landscape' in this paper is referring only to the aesthetic aspects of landscape.

¹² The presence of firms with large market power (such as monopolies) can result in market failure as the lack of competition results in prices being higher than they would be in a competitive market.

the owner of the good cannot prevent other people from consuming the good)¹³. As private producers cannot gain revenue from the sale of the public goods, they are often not provided even though it may be economically efficient to do so i.e. the value of their provision is greater than the cost of providing them.

In reality there are few pure public goods, there are however goods that have high transaction costs which result in market failure (i.e. the costs to a landowner of installing booths and fences to charge all those wishing to view a beautiful landscape outweigh the benefits received through charges). Therefore in some cases it may be possible for private provision to occur but in order for this to occur there may be a need for technical or institutional changes.

Externalities occur when the production or consumption of one individual/firm affects the production/consumption of another individual/firm¹⁴. Externalities often occur because of the lack of property rights.¹⁵

For a market to operate efficiently *information* is required. Information is needed by buyers, sellers and investors on the goods/services they are buying and the reliability of buyers, borrowers or entrepreneurs. Where information is not available to both sides of the market (i.e. there is asymmetric information) inefficient choices and decisions are made about what to buy and what to supply to the market.

4.3 Market failures in landscape, biodiversity and cultural heritage

Market failure occurs in relation to landscape, biodiversity and cultural heritage because of the public good nature of the goods and the presence of externalities.

Landscape, biodiversity and cultural heritage can be seen as public goods as they are non-rival (as my enjoyment of a landscape does not prevent others from also enjoying the landscape) and non-excludable (as it would be difficult/costly to exclude people from enjoying biodiversity). As landowners have no mechanism to capture

¹³ An example of a public good is street lighting. If I buy a light to illuminate the street outside my house, I cannot prevent those walking along the street benefiting from the lit pavement (i.e. it is non excludable) and one person benefiting from the light does not prevent others from benefiting as well (i.e. it is non-rival). The opposite of a public good is a private good which is rival and excludable, for example bread. Bread is rival as my consumption of the loaf of bread prevents others from consuming it and it is excludable as I am able to prevent others from consuming the bread. ¹⁴ An example of this is a paint factory upstream to a fish farm. If the paint factory emits waste

¹⁴ An example of this is a paint factory upstream to a fish farm. If the paint factory emits waste products into the river which affects the production costs of the fishery, the paint factory has imposed an external cost on the fish farm. This may lead to an inefficient level of production at both the paint factory and the fish farm.

¹⁵ For example, as no one owns the river there is no charge for polluting it. If either the fish farm or the paint factory owned the river, one firm could pay the other for the imposition of the externality i.e. if the paint factory owned the river; the fish farm could pay the paint factory not to pollute it.

the social value of landscape¹⁶, biodiversity or cultural heritage their decision on the quantity to provide is likely to be lower than under a system with no market failures and as such they may be under provided.

However as in reality there are few truly public goods and there may be situations where it is possible to implement technological or institutional provisions to help encourage private provision (i.e. market creation).

A further complication with regards to the provision of landscape goods is that many are provided as co-benefits of agricultural production, therefore changes in agricultural commodity markets can impact landscapes, as can changes in agricultural policy and international trade. An example of this is Hill Farming where a reduction in the economic viability of the sector and thus a decline in the number of Hill Farmers may have large impacts on upland landscapes. While potentially, it may be argued, the impact of this decline could be positive in terms of biodiversity, the impact could also be negative as traditional features of cultural landscapes such as dry stone walls fall into disrepair.

The lack of a market and price for landscape, biodiversity and cultural heritage mean they are subject to both positive and negative externalities.

For example a negative externality would occur if a land owner consumes his landscape by building a power station in an attractive valley thereby imposing a negative externality on society. If society value the view of that valley more than the return the landowner would gain from the building of a power station, it is not efficient for the power station to be built. Some changes to landscape such as the loss of historic assets may be irreversible.

Some activities can lead to positive externalities, for example much of our landscape is a result of farming practices being carried out for nearly 400 generations. Here the benefit of providing the positive landscape externality is not felt by the farmer but by society and as such the farmer may produce less landscape benefits than he would if there was a market for the benefits. The environmental accounts for agriculture estimate that in 2007 the landscape benefits from agriculture were worth $\pounds 153.3$ million¹⁷.

The public good properties of landscape, biodiversity and cultural heritage and the presence of externalities mean that there is no price for them in the market; so their benefits are often underestimated in decision making. Therefore when decisions are made the landscape, biodiversity and cultural heritage implications are not

¹⁶ There have been many economic studies that show that people have a positive value for landscape - see annex B of Swanwick et al. (2007) Scoping study on agricultural landscape valuation

http://archive.defra.gov.uk/evidence/economics/foodfarm/reports/agrlandval/Mainrep.pdf¹⁷ For England in 2008 in 2000 prices

⁽http://archive.defra.gov.uk/evidence/economics/foodfarm/reports/envacc/index.htm)

considered or undervalued leading to an inefficient level of landscape provision. In order to achieve an efficient level of provision government intervention is necessary.

4.4 Government intervention in landscape, biodiversity and cultural heritage

The presence of public goods and externalities with regards to landscape, biodiversity and cultural heritage means that government intervention is required to ensure a socially optimal level is provided. Without government intervention the social benefits would not be considered in decision making and so the socially optimal landscape would not be provided.

To ensure the provision of public goods, Government can intervene in a number of ways for example by paying land owners for providing them (as is done through the Environmental Stewardship Scheme). For negative externalities the government could: allocate property rights so those involved could trade to an efficient allocation; impose a tax so the social cost of action is included in decision making or implement regulations or land use planning which ensures landscape impacts are considered.

One of the methods used for ensuring an efficient level of provision is the designation of National Parks. This designation helps to ensure a socially efficient level of provision for landscape, biodiversity and cultural heritage in the area of the National Parks. This is done through planning regulations and the work of the NPAs to achieve their objective to conserve and enhance the natural beauty, wildlife and cultural heritage of their areas.

4.5 Market failures in access

If left to the market, access will be undersupplied. Although not a pure public good, on the supply side the high transactions costs of allowing and charging for access result in a market failure and on the demand side collective action problems can also lead to market failure.

If a landowner opens his land for public access it is to some degree non-rival¹⁸ and the costs of exclusion may be very high, for example it would be very expensive to put fences around the land and toll booths on all access points. Therefore when deciding whether to allow access, the inability of landowners to capture the value of access by the public means that it is undersupplied. On the demand side collective action problems may mean that those who demand access are unable to work

¹⁸ i.e. consumption by one individual does not prevent others consuming, however there will be congestion effects.

together to negotiate access with a land owner. It is therefore necessary for the government to intervene to ensure an efficient level of supply.

There may also be rationale for government intervention on the basis of equity if there is an aspiration that individuals should have equal access to the natural environment.

4.6 Government intervention in access

Government intervention in relation to access could take many different forms, for example the government could pay landowners to allow access (as it does through the Higher Level Scheme of Environmental Stewardship) or it could regulate to mandate access. In England regulation is in place compelling landowners to not only provide access but also usable access i.e. stiles etc.

4.7 Market failure in recreation

The rationale for government intervention in recreation relates to information failure. Being in the natural environment is generally believed to enhance feelings of wellbeing – these are private benefits. For example recovery from mental fatigue is greater through viewing nature than by watching TV, reading magazines or walking in an urban environment¹⁹ and viewing nature restores the area of the brain that copes with direct attention (concentration). Many individuals who have not had access to the natural environment for recreation may be unaware of the personal benefits of 'being with nature' and therefore carry out less recreation in the natural environment than they would if they were aware of the benefits.

This may be particularly acute in certain groups of society such as those with disabilities or individuals from deprived areas such as inner cities. These individuals may not have information about the benefits of and access to the natural environment to their wellbeing or may be unaccustomed with natural environment traditions in the UK and therefore consume less recreation in the natural environment than would otherwise be efficient.

A further reason for government intervention in relation to recreation is the health benefits of recreation in the natural environment. Inactivity leads to health problems such as heart disease which places increased costs on the National Health Service and therefore part of the government's public health agenda aims at preventing these costs by increasing the public level of activity. Recreation in the natural

¹⁹ Herzog TR, Black AM, Fountaine KA, and Knotts DJ. Reflection and Attention Recovery as distinctive benefits of restorative environments. J Environmental Psychology (1997) **17** 165-170.

environment can be fairly low cost and therefore is a cost effective way for individuals to increase their levels of physical activity. The ability of National Parks to improve the health of the Nation was discussed in Parliament in the 1930's as a means of encouraging the government to reconsider its decision not to create National Parks.

4.8 Government intervention in recreation

Government intervention is required with respect to recreation to inform the public of the benefits of recreation in the natural environment (and how to access it). This intervention can take a number of forms for example specific programmes to take people out into the natural environment and show them how to use it, to educational campaigns that highlight the benefits of recreation in the natural environment to the general public.

4.9 Rationale for government intervention with regards to National Parks

It is therefore clear that the presence of externalities, public goods and information failure in relation to landscape, biodiversity, cultural heritage, access and recreation mean that government intervention is required to ensure they are provided at an efficient level. At present much of this is done through the designation of the National Parks (i.e. planning standards) but the work of the NPAs (i.e. with projects to inform individuals about the natural environment) is important in achieving many of these benefits.

It is the impact of the NPAs (as opposed to National Park designation) that is discussed in the rest of the paper as much as possible, however it should be noted that at times the distinction between the two can be difficult to differentiate.

5. Methodology for Valuing the Benefits of National Park Authority Spend

The aim of this paper is to identify, quantify and monetise the benefits of National Park Authorities (NPAs), not National Park designation. Throughout it is assumed that without the NPAs the National Park designation would remain and the statutory duties would transfer to the relevant Local Authorities. It should however be noted that the transfer of statutory duties would impose additional burdens on Local Authorities and they could not absorb these without additional funding. It should also be noted that this transfer would sometimes be complex due to the number of relevant Local Authorities in some National Parks, for example the Peak District has 11 relevant Local Authorities.

There are a number of ways to assess the benefits of NPA spending and although the ultimate aim of this work is to establish monetary values for the benefits, many other types of evidence has been considered to ensure presentation of a comprehensive picture.

There are a number of frameworks available for analysing policy evaluation evidence. This paper will follow the approach in Defra's 'Introductory Guide on valuing Ecosystem Services'²⁰. This uses two complimentary approaches – the Millennium Assessment (MA) and Total Economic Value (TEV). This has been adapted include the work NPAs undertake which have social and economic rather than environmental benefits.

5.1 Millennium Ecosystem Assessment

Ecosystem services are defined as services provided by the natural environment that benefit people. It is clear that many of the benefits from National Parks stem from services provided by the natural environment and therefore this framework is a useful one to adopt and adapt to assess the value of NPAs. There is no single methodology for categorising ecosystem services but the Millennium Ecosystem Assessment (MA) provides a good starting point. The MA framework divides ecosystem services into four categories;

• *Provisioning services* i.e. products obtained from ecosystems such as food, fuel, genetic resources, and ornamental resources.

²⁰ Defra (2007) An Introductory Guide to Valuing Ecosystem Services http://archive.defra.gov.uk/environment/policy/natural-environ/documents/eco-valuing.pdf

- *Regulating services* i.e. benefits obtained from the regulation of ecosystem processes such as climate regulation, air quality maintenance, and water regulation.
- *Cultural services* i.e. non-material benefits that people obtain through spiritual enrichment, cognitive development and recreation.
- Supporting services, these are the services such as nutrient cycling, and the provision of habitats, that are necessary for the production of all other ecosystem services.

The focus of the 'Introductory guide to valuing ecosystem services' is the policy appraisal context. It follows an impact pathway approach on particular policy change and looks to calculate the marginal change in value as a result of the change. This can equally be applied to policy evaluation. The impact pathway approach (as illustrated in diagram A) follows five key steps;

- 1) Establish the environmental baseline.
- 2) Identify and provide qualitative assessment of the potential impacts of policy options on ecosystem services.
- 3) Quantify the impacts of policy options on specific ecosystem services.
- 4) Assess the effects on human welfare.
- 5) Value the changes in ecosystem services.

Diagram A: Impact Pathway Approach²¹



This methodology will be used for assessing the impacts of NPAs in relation to all impacts, not just environmental. It is assumed that the baseline is no NPA and that the regulatory framework would persist administered through Local Authorities. The methodology used in this paper is therefore as follows

- Identify spending/activities (the baseline is assumed to be no spending)
- Identify and provide qualitative assessment of the potential impacts of the spending on ecosystem services or other outcomes.
- Quantify the impacts of spending/activities on specific ecosystem services or other outcomes.

²¹ Defra (2007), Introductory guide to valuing ecosystem services, Page 4

- Assess the effects on human welfare.
- Value the changes in ecosystem services or other outcomes.

To identify the impacts of NPAs the 'functional heads' used by the NPAs for reporting have been used to provide a framework for considering their spending and activities. The NPAs report their spending under the eight functional heads in their annual accounts.

- Conservation of the Natural Environment
- Conservation of Cultural Heritage
- Recreation, management and transport
- Promoting Understanding
- Rangers, estates service and volunteers
- Development and control
- Forward planning and communities
- Corporate and Democratic Core

Central costs such as insurance and ICT services are allocated across the functional headings. A standard approach to cost allocation is not rigorously followed across the National Parks and so some National Parks place different activities under different heading for example some Parks may place all ranger costs under the ranger heading whereas others may include some of the cost under promoting understanding if some of the rangers time is spent working with visitors. In addition spending will be lower on those outcomes that are achieved through work by other bodies, different allocations will reflect local prioritisation within the NPA (which is part of being locally accountable), there may be spikes in any one year for a particular function and the allocations will also be affected by the priorities, as established by the National Park Management Plan. Therefore table 9 (which shows the percentage of spend under each functional head) should be viewed as illustrative rather than absolutely accurate.

	Broads	Dart- moor	Exmoor	Lake District	New Forest	Northum - berland	Peak District	North York Moors	Yorkshire Dales	Average
Natural Environment	16%	16%	19%	10%	15%	11%	24%	15%	10%	16%
Cultural Heritage	11%	5%	10%	3%	16%	17%	5%	5%	4%	7%
Recreation Management	11%	9%	10%	19%	4%	9%	19%	22%	31%	16%
Promoting Understanding	10%	18%	16%	27%	15%	19%	24%	20%	23%	20%
Rangers, Estates & Volunteers	6%	17%	17%	15%	0%	14%	7%	12%	8%	11%
Development Control	4%	17%	10%	10%	25%	3%	11%	13%	14%	11%
Forward Planning and Community Development	2%	10%	13%	7%	10%	18%	6%	7%	6%	8%
Corporate & Democratic Core	7%	7%	6%	7%	14%	9%	4%	5%	5%	6%
Non distributed costs	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%
Specialist ring fenced account	32%	0%	0%	2%	0%	0%	0%	0%	0%	4%
Service management & support services	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Traffic & Transport	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Training and Development	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Table 9: Percentage of Defra Grant spent under each functional heading (08/09) from the NPAs audited and published accounts
5.2 Total Economic Value

The Total Economic Value (TEV) framework is used alongside the ecosystem service approach to value the changes in the ecosystem services identified.²² TEV is made up of use and non-use values and refers to the gain in wellbeing from a policy, measured by the net sum of willingness to pay or willingness to accept. The TEV method is a useful framework for examining NPAs. More detail on the components of TEV can be found in Annex 1.



Diagram B: Total Economic Value

As can be seen in Table 10, the TEV framework can be used along with the ecosystem services approach to identify what values should be assessed to calculate the benefits of NPAs.

²²Defra (2007), <u>Introductory guide to valuing ecosystem services</u>, pages 30-1

Value			Services from National Parks
Use	Actual/Planned	Direct Use	Engagement/participation
Value	Use		Provisioning Services
			Recreation and Tourism
			Aesthetic Value
			Education
		Indirect Use	Climate regulation
			Air quality regulation
			Natural hazard regulation
			Erosion regulation
	Option Value		Option for future visits/ other uses
Non-Use	For Others	Altruism	Value of availability of NPA benefits
Value			to current generation
		Bequest	Value of availability of NPA benefits
			to future generations
	Existence		Value of existence of NPA benefits

Diagram C shows how the ecosystems service approach has been used for assessing the benefits of NPAs. This approach has demonstrated that there are a number of benefits from NPAs, these are listed below. Some of the benefits identified are not ecosystem service benefits and these are highlighted with **

- Non-use values
- Option values
- Tourism
- Health and wellbeing
- Better informed society
- Regulating services (i.e. carbon storage, avoided damage costs and cleaner drinking water)
- Rural development **
- Economic activity from National Park spending **
- Social inclusion **
- Transparency and local democracy **

Regulating services have been grouped together for ease of discussion. The following section discusses the general evidence on these benefits in turn.

Diagram C: Showing process linking NPA spending to benefits to society



6. Benefits of NPAs

The previous chapter identified the benefits of National Park Authority (NPA) spending (both in terms of ecosystem services and wider), this chapter provides general information on these benefits highlighting some of the key evidence for example the evidence linking health benefits with the natural environment. The chapter covers non use values, option values, recreation and tourism, health and wellbeing, a better informed society, regulating services, rural development, economic impacts of NPA spending, social inclusion and transparency and democracy.

6.1 Non use values

Non use values are the values individuals hold for goods even though they may never use them themselves. Non use values are divided into existence values (individuals value the existence of goods even though they may never use them), altruistic values (individuals value others being able to use/benefit of goods even if they do not) and bequest values (the values individuals hold for ensuring that future generations can access goods). It may be that non-use values are held for the activities and benefits that result from NPAs such as landscape, biodiversity and cultural conservation however it is difficult to distinguish whether non use values would be attributable to the NPA or National Park designation. Non use values for National Parks may be held by a large proportion of the English population and given that 'conservation' is the first purpose of the National Parks; it may be argued that in theory non-use values may form a significant element of the overall value of the National Parks. An IPSOS Mori poll undertaken in December 2009 of over 1,000 adults in England found that 82% of them said that they felt National Parks were important to them personally.

6.2 Option values

Individuals hold values for having options available to them in the future. Individuals may value the work that NPAs conduct in conserving landscape, biodiversity, and cultural heritage so that they have the option of using those services in the future.

6.3 Recreation and tourism

One service supported by NPAs is recreation and tourism. The objective of promoting opportunities to enjoy the National Parks and the duty of fostering economic welfare for local communities can both be satisfied by the promotion of sustainable recreation and tourism.

The conservation of landscape, biodiversity and cultural heritage and the NPAs work on access can all have an impact on the levels of recreation and tourism in the National Parks. Recreation can come in a number of forms for example walking, visiting villages, cycling, horse riding and rock climbing. These activities overlap with tourism as many are carried out by tourists as well as those who live in and around the National Parks. An increased level of recreation and tourism can have positive impacts on the local and wider economy by attracting people and businesses to the area.

A study into tourism in Exmoor National Park found that 'when asked to comment on how important it is to their business that they were in a National Park most had strong opinions and they were mainly very positive.²³ Negative comments from businesses in relation to being in a National Park tend to be around the restrictions it imposes especially regarding planning.

6.4 Health and wellbeing

There are three main theories in the literature linking health and the natural environment. The Biophilia Hypothesis²⁴, the Attention Restoration Theory²⁵ and Psycho-physiological stress recovery theory²⁶. A 2007 Defra paper assessed the evidence of the links between the natural environment and wellbeing²⁷ (physical, mental and social wellbeing). It summarises that there are two main elements of

²³ Exmoor National Park (2008), <u>Exmoor National Park: State of Tourism Report 2008</u>, page 25

²⁴ As a result of our evolutionary history, and its close relationships with nature we have an innate sensitivity to and need for living things, we are attracted to those environments where we feel more content and we are genetically programmed to respond positively to natural environments to help us survive and thrive.

²⁵ There are two forms of attention in our lives. Direct attention involves considerable concentration and focuses on subjects we judge as important. Subjects with less importance (distractions) have to be blocked out and this causes tension and tiredness and indirect attention (fascination) holds our concentration with little to no effort. This allows our brain to restore itself ready to return to direct attention. The natural environment provides an effective restorative environment in three ways; by being away from day to day routine; fascination, a feeling of extent allowing exploration and

compatibility to our expectations. ²⁶ states that stress reduction by viewing nature is an inherent reflex associated with the oldest part of the brain, the limbic system. This is based on empirical findings of an immediate positive response and rapid reduction in stress indicators within minutes of exposure to nature. ²⁷ Newton, J (2007), <u>Wellbeing and the Natural Environment: A brief overview of the evidence</u>, Defra

and ESRC.

wellbeing, the objective (i.e. material and social attributes that affect wellbeing such as wealth and education) and the subjective (i.e. individual's assessment of their own circumstances). The measure of wellbeing employed will depend on how wellbeing is defined in the particular situation but measures often used include GDP. education and mortality. It should be noted that there is no agreed definition of wellbeing.

The majority of published literature on the links between green spaces and wellbeing has come from America, Japan and Scandinavia; to date little work has been done in the UK. Research in this area is still at an early stage and as such it is difficult to draw out any concrete evidence. The research of wellbeing can generally be divided into physical wellbeing, mental wellbeing and social wellbeing, the later possibly being the least well researched.

Green space provides a resource for physical activity, especially activities such as walking, running and cycling. It is clear from these, that physical activities and recreation are often complementary. It is thought that the natural environment may influence physical activity in two ways. Firstly, it may affect the amount of physical activity individuals undertake. Secondly physical activity in the natural environment may be more beneficial than elsewhere, for example at the gym. Studies have shown that green exercise creates an immediate improvement of self esteem²⁸, for the same speed of walking and therefore same energy consumption, walking in a green environment is perceived with less effort than walking on a treadmill ²⁹ and accessibility to nearby attractive public green space and footpaths are more likely to increase levels of walking.³⁰

Newton's paper on Wellbeing and the Natural Environment points out that 'there is substantial evidence demonstrating the positive impact that physical activity has on wellbeing³¹. However, the report goes on to note that 'less certain is the role that green space has on promoting physical activity and whether physical activity in green spaces results in greater wellbeing benefits more generally.³²

²⁸ Pretty J, Griffin M, Peacock J, Hine R, Sellens M, South N.(feb 2005) <u>A countryside for Health and</u> Well-Being: The Physical and Mental Health Benefits of Green Exercise. Report for Countryside Recreation Network.

²⁹ Buchanan, H.C. Bird, W. Kinch, R.F.T. Ramsbottom R.(1999) Physiological and Metabolic Responses of 40-65 yr olds during brisk self selected treadmill walking. Health Education Authority Next Steps. Conference Feb 1999.

³⁰ Giles-Corti B and Donovan R. (2003) <u>Relative Influences of individual, Social Environmental, and</u> Physical Environmental Correlates of Walking. American Journal of Public Health; 93, 9 pg 1583-1589. Humpel N, Owen N, Leslie E, (2002) Environmental factors associated with adult's participation in physical activity: A review. Am J Prev Med 2002; 22(3). Owen N, Humpel N, Leslie E, Bauman A, Sallis J (2004) Understanding Environmental Influences on Walking. Review and Research Agenda. Am J Prev Med 2004; 27(1). ³¹ Newton, J (2007), <u>Wellbeing and the Natural Environment: A brief overview of the evidence</u>, Defra

and ESRC. Page 16. ³² Newton, J (2007), <u>Wellbeing and the Natural Environment: A brief overview of the evidence</u>, Defra

and ESRC. Page 17

There are currently a number of green exercise schemes at different stages of development in the UK. However, 'Few green space based health programmes have been adequately evaluated and this makes it difficult to use this evidence to draw conclusions on the effectiveness of programmes as health interventions.'³³ However more recently Natural England has undertaken work with Primary Care Trusts and it is hoped that evaluations of these projects will help improve the evidence base.

Work on the links between the natural environment and physical wellbeing is ongoing at the University of Essex. One study³⁴ showed that exercise in pleasant rural and urban scenes reduces blood pressure and increases self esteem more than in less pleasant settings. The existence of a tidy environment has also been shown to increase the probability of physical activity: 'there is evidence that a greener and tidier environment increases the probability of frequent physical activity and reduces the probability of residents being overweight or obese.'³⁵ However this evidence only indicates that the 'pleasantness' of a scene has an impact on physical wellbeing rather than the presence of the natural environment per se.

It is clear that it is difficult to quantify the impact of the natural environment on physical activity. The Department for Health has methodologies' for estimating the benefits in terms of Quality of Life Years (QALYs) and savings to the NHS of moving individuals from a sedentary to active lifestyle however this data is not often collected.

With regards to mental wellbeing there is evidence that there is role for the natural environment in improving cognition, increasing concentration and attention, facilitating restoration, aiding personal development and alleviating aggression. There is also perceived to be a general 'wellbeing' benefit that is felt when in the natural environment. However these benefits are very difficult to measure and value.

With regards to social wellbeing there is evidence that the presence of green spaces in urban areas increases wellbeing. One further aspect of the affect of the natural environment on health is the environments ability to remove harmful pollutants especially air pollution. Studies have found that the presence of natural environments such as forests can help cut hospital admissions³⁶.

The Government is committed to providing the environment needed to increase the nation's wellbeing. In his speech on the 25th November 2010 when announcing the

 ³³ CJC consulting (2005), <u>Economic Benefits of Accessible Green Spaces for Physical and Mental Health: Scoping Study</u>, Forestry Commission. p.ii
 ³⁴ Pretty J. Peacock J. Sellens M and Criffin M. (2005). The superstant is in the second statement of the second state

³⁴ Pretty J, Peacock J, Sellens M and Griffin M. (2005). <u>The mental and physical health outcomes of green exercise</u>. International Journal of Environmental Health Research 15(5), 319-337

³⁵ CJC consulting (2005), <u>Economic Benefits of Accessible Green Spaces for Physical and Mental</u> <u>Health: Scoping Study</u>, Forestry Commission. p.i.

³⁶ Forestry Commission (2004), Sustainable Forest in Brief: Social and environmental benefits of forestry. p.5

work of the ONS to develop new national measures of wellbeing the Prime Minister said 'The contention is that just as we can create the climate for business to thrive – by cutting taxes, slashing red tape and so on – so we can create a climate in this country that is more family-friendly and more conducive to the good life.'

The NPAs may contribute to wellbeing in a number of ways from the provision of recreational facilities such as visitor centres and footpaths to specific programmes where they work with Primary Care Trusts and certain target groups to help improve access and recreation in the National Parks.

6.5 Better informed society

Walshe³⁷ states there has recently been significant emphasis placed on environmental education through, for example, the UN's Decade of Education for Sustainable Development. One of the purposes of the NPAs is promoting opportunities for the understanding and enjoyment of the special qualities of the National Parks by the public. Two benefits can be identified here. Firstly the impact access to the natural environment has on the quality of education and secondly the impact environmental education has on environmental behaviours.

Ofsted report that 'outdoor education gives depth to the curriculum and makes an important contribution to students' physical, personal and social education'³⁸. The Learning Outside the Classroom Manifesto states that 'by helping young people apply their knowledge across a range of challenges, learning outside the classroom builds bridges between theory and reality, schools and communities, young people and their futures. Quality learning experiences in 'real' situations have the capacity to raise achievement across a range of subjects and to develop better personal and social skills'. The IPSOS Mori poll referred in 6.1, found that 89% of adults felt that every child should have an opportunity to visit a National Park at least once in their education.

When these experiences in the natural environment are well planned, safely managed and personalised to meet the needs of every child they can:

- Improve academic achievement
- Provide a bridge to higher order learning
- Develop skills and independence in a widening range of environments
- Make learning more engaging and relevant to young people

 ³⁷ Walshe, N. (2008). "Understanding students' conceptions of sustainability." Environmental Education Research 14(5): 537-558.<u>http://dx.doi.org/10.1080/13504620802345958</u>
 ³⁸ Ofsted (2004). Outdoor education: aspects of good practice. London, Ofsted. <u>http://www.ofsted.gov.uk/content/download/10536/126052/file/Outdoor%20education%20-</u>%20Aspects%20of%20good%20practice.pdf

- Develop active citizens and stewards of the environment
- Nurture creativity and provide opportunities for informal learning through play
- Reduce behaviour problems and improve attendance
- Stimulate, inspire, improve motivation
- Improve young people's attitudes to learning
- Develop the ability to deal with uncertainty
- Provide challenge and the opportunity to take acceptable levels of risk

Evidence shows that academic performance has significantly improved across the curriculum in schools when natural environments are integrated into their education.³⁹

With regards to environmental and outdoor education fostering pro-environmental behaviours, a meta analysis by Rickinson concluded that 'In relation to fostering environmental concern and awareness, the evidence of a positive link between outdoor adventure activities and environmental understanding and values is not strong. There seems to be a strong case for questioning the notion that nature experience automatically contributes to environmental awareness, commitment and action.'⁴⁰

However this is specifically around outdoor adventure activities and NPAs educate young people and the public in a more direct way through guided walks, visitor centres, rangers and work with schools, conservation volunteers and outdoor learning centres.

It is believed that educating people with regards to the natural environment will have an impact on the amount of environmentally positive behaviour undertaken. The information provided by the NPAs in their visitor centres and through their ranger services etc. helps to educate people in issues affecting the National Parks and thus it could be argued that this may feed through into people undertaking more environmental positive behaviours. However, in a literature review focusing on behaviour change, Heimlich and Ardoin state

'one view of environmental education suggests that its goal is to "develop a world population that has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively towards solutions of current problems and the prevention of new ones" (UNESCO-UNEP 1976). Embedded within this charge is the teaching of skills and motivations to implement skills, where a skill

³⁹ The National Environmental Education and Training Foundation (2000) Environment – based Education: Creating High Performance Schools and Students. Washington, DC

⁴⁰ Rickinson. M, Dillon. J, Teamey. K, Morris. M, Young Choi. M, Sanders. D & Benefield. P (2004), <u>A</u> <u>Review of Research on Outdoor Learning</u>, National Foundation for Educational Research, page 2.

refers to performance of an act acquired through extended practice and training (Ericsson and Oliver 1995). However, it is often difficult to articulate clearly what skills we teach in conservation education and environmental education focusing on behaviour change or influence. It can be equally challenging to describe the behaviours we are ultimately seeking, identified in the Tbilisi Declaration as "new patterns of behaviour" (UNESCO 1978).⁴¹

In other words, there seems to be difficulty in defining desirable behaviours therefore it's difficult to say how effective interventions have been in achieving desirable behaviour change. It should be noted that these problems are not unique to environmental education - a wide range of educational interventions are often difficult to evaluate as benefits may be intangible but last a lifetime, or have an impact years after the intervention. In addition, it is often difficult to disentangle the benefits from other interventions and experiences.

6.6 Regulating services

Ecosystems and land use and management activities within National Park boundaries provide a number of regulating services such as carbon sequestration and water quality services. The type of regulating services and the extent to which these are provided will depend on the location of the National Park and the habitats that are there. There are two aspects of regulating service provision in the National Parks, those regulating services protected due to National Park designation (for example carbon storage in moorland and clean water from uplands) and those regulating services improved due to specific work carried out by the NPAs for example projects such as SCaMP⁴² in the Peak District.

Forest and woodlands in the UK remove approximately 4 million tonnes of carbon from the atmosphere each year⁴³. NPAs make a small contribution to this through tree planting schemes.

6.7 Rural development

The NPAs duty to foster the economic and social wellbeing of local communities results in projects which help to build social capital, develop sustainable local rural

⁴¹ Heimlich, J. E. and N. M. Ardoin (2008). "Understanding behaviour to understand behaviour change: a literature review." Environmental Education Research 14(3): 215-237. <u>http://dx.doi.org/10.1080/13504620802148881</u>

⁴² http://www.unitedutilities.com/scamp.htm

⁴³ http://www.forestry.gov.uk/forestry/INFD-6VLKKM

economies and businesses which in turn have multiplier effects on the local and wider economies.

6.8 Economic impacts of National Park Authority spending

NPAs impact the local economy both by directly employing staff but also with regards to the funding they distribute on specific projects for example construction projects. Studies in the Lake District and Yorkshire Dales have shown that spending on traditional building and dry stone walls have a multiplier effect of between £2 and £3⁴⁴. NPAs also support economic prosperity through their administration of the Sustainable Development Fund, and levering in funding for community based LEADER projects.

6.9 Social inclusion

The NPAs run specific programmes in order to encourage groups that would not usually access the National Park to enjoy the benefits that the National Parks have to offer. These are specifically aimed at socially excluded groups.

Social exclusion is a short-hand term for what can happen when people or areas have a combination of problems, such as unemployment, discrimination, poor skills, low incomes, poor housing, high crime and family breakdown. These problems are linked and mutually reinforcing. Social exclusion is an extreme consequence of what happens when people do not get a fair deal throughout their lives and find themselves in difficult situations. This pattern of disadvantage can be transmitted from one generation to the next.

6.10 Transparency and democracy

Approximately six percent of the NPAs funding goes into their corporate and democratic core. The NPAs place a high value on being transparent and receptive to local populations needs. The local populations and the objectives of the National Parks are further supported by the NPAs influencing strategic decision making process at the national, region and sub-regional level. This increased focus on local transparency and democracy is reflected in Dartmoor National Park Place Survey

⁴⁴ ADAS (2005) <u>A study of the social and economic impacts and benefits of traditional form building</u> repair and re-use in the Lake District ESA, English Heritage and Defra.

CCRU and ADAS (2007) <u>A study of the social and economic impacts and benefits of traditional farm</u> building and drystone wall repairs in the Yorkshire Dales National Park, English Heritage and Defra.

Results for 2009 which showed that 34% of the population have been involved in decisions that affect the local area in the past 12 months compared to 14% in England and 35% agree that they can influence decisions in their local area compared to 29% in England.

7. Valuing the Benefits of NPAs

7.1 Methodology

Chapter 6 demonstrates that the National Park Authorities (NPAs) may provide a wide range of benefits which are themselves difficult to identify, quantify and monetise. Due to the complex nature of the activities undertaken by the NPAs it was decided that this paper would focus on three National Parks; Northumberland, the Peak District and Dartmoor. Following a start up meeting in November 2009, each of the three NPAs were visited to discuss the information they held and how it could be used to value the benefits of NPAs. At the meetings it was agreed what information could be produced and in what format. As each NPA is unique the approach taken by each NPA was slightly different.

Each NPA provided a vast amount of information, most of which is contained in the main body of the report. Any information thought to be relevant but not directly used in the report can be found in the relevant NPA annex.

Following discussion with the NPAs and analysis of the evidence using the methodology discussed in chapter 5, a number of areas were identified where it appears that NPAs provide additional benefits. These benefits are similar to those discussed in chapter 6 but have been assessed in a way that best suited the data available. The benefits are discussed in the following sections and specifically cover; Volunteers, Conservation: Biodiversity and Cultural Heritage, Tourism, Recreation, Education, Skills and Training, Planning, Leadership and Third Party Funding, Sustainable Communities, Climate Change, General Economic Impact and the Sustainable Development Fund.

The key to this analysis is identifying the additional benefits the NPAs bring compared to the counterfactual of National Park designation remaining and statutory obligations being transferred to Local Authorities. In reality under the counterfactual the impacts of no NPA would be wide and varied and would change over time depending on other organisations stepping into their role (e.g. Natural England or local charities). It is not possible to assess exactly the implications of no NPA and so assumptions have been made. Where specific assumptions have been made they are set out in the relevant sections however the general assumption is that Local Authorities would not prioritise the objectives of the National Parks as highly as the NPAs do.

The analysis presented is mainly for the year 2008/9 however were necessary/appropriate other years have been included.

7.2 Volunteers

All NPAs harness volunteers to help achieve their objectives. Volunteering can lead to benefits through a number of routes for example there are benefits to the volunteers themselves (they are doing something they enjoy), benefits to the NPAs (they may benefit if the cost of organising volunteers is less than the benefits of the work carried out by the volunteers) and public benefits (if the volunteering activities provides public goods that would not otherwise have been provided).

Volunteering activities vary widely (see Dartmoor annex table 26 for detail on the activities undertaken by volunteers in the Park in the first quarter of 2009/10) and include archaeology, walling, drainage, litter picking, vegetation clearance, wildlife surveys, tree planting and path repairs and clearance. There are many benefits resulting from each of these volunteer activities, for example increased recreation due to clear paths. These final benefits will be covered in the relevant sections to avoid double counting i.e. the benefits of clear footpaths in recreation.

Without specific evaluations of individual volunteer schemes it is not possible to assess the value of the volunteering activity to the NPA. The value of the work undertaken by volunteers will depend on a number of factors for example age, ability, expertise etc. Therefore this section assesses the value of volunteering to the volunteer themselves.

There are no valuation studies that directly assess the value of volunteer activities in the National Parks. The value of the volunteering to the volunteer themselves can be estimated using the opportunity cost of the volunteers time (i.e. the marginal wage rate). The opportunity cost of volunteering will depend on a wide number of factors including age, education etc and so national, regional and minimum wage rates (see table 11) are used in the analysis to give a broad indication of the value of volunteering to volunteers.

	UK		North East		East Midlands		South West	
(median	Gross	Hourly	Gross	Hourly	Gross	Hourly	Gross	Hourly
values for	weekly	pay	weekly	pay	weekly	pay	weekly	pay
2009)	wage		wage		wage		wage	
Average	£397	£11.03	£350	£8.90	£313	£8.06	£286	£7.91
wage								
Minimum								£5.93
wage								

Table 11: Weekly and Hourly wage rates⁴⁵

⁴⁵ Regional information from <u>http://www.statistics.gov.uk/downloads/theme_labour/ASHE-2009/2009_gor.pdf</u>, UK wage from <u>http://www.statistics.gov.uk/downloads/theme_labour/ASHE-2009/2009_all_employees.pdf</u>

It is assumed that without the NPA there would be no one to co-ordinate and organise the volunteers and thus the opportunity to volunteer would stop (as would any end benefits of the activities). In reality volunteers are likely to move to third sector organisations working in the Parks and therefore the volunteering opportunities and activities would not disappear completely (although it may be argued that the work of the third sector organisations may not be as focused on achieving the objectives of the National Parks).

To calculate the value to the volunteers of volunteering, the range of hourly wage rates have been used with the assumption that a day consists of 7 hours. As can be seen in table 12, the value of the volunteering changes depending on the wage rate employed.

	Dartmoor	Peak District	Northumberland
Number of Volunteer days in 2008/9	2140	10116	1250
Number of volunteer hours	1 1000	70040	0750
(assuming 7 hour days) Value of volunteers using UK hourly	14980	70812	8750
pay rates	£165,229	£781,056	£96,513
Value of volunteers using regional			
hourly pay rates	£118,492	£570,745	£77,875
Value of volunteers using minimum			
wage rates	£88,831	£419,915	£51,888

Table 12: Value of volunteers in the Peak District, Dartmoor and Northumberland NPAs.

There is a cost to the NPAs of providing volunteering opportunities. The annual net cost of the Peak Districts volunteer service in 2008/9 was £228,450. At a societal level, a comparison of the costs to the NPAs of providing volunteering opportunities to the benefits estimated for the value of volunteering to volunteer's shows that the activity is beneficial (table 13).

Table 13: Volunteers in the Peak District Cost Benefit Analysis	S
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	Benefit	Cost	Net Benefit	Cost benefit ratio
Lower bound	£419,915	£228,450	£191,465	2
Upper bound	£781,056	£228,450	£552,606	3
Average	£600,486	£228,450	£372,036	3

An additional possible benefit from volunteering (which it is not possible to value) is the health benefits to those undertaking the activity. Most volunteer work involves physical activity, the undertaking of which reduces the risk of health problems and thus reduces the burden on the NHS. If it was clear that the act of volunteering in National Parks moved volunteers from a sedentary to active lifestyle it may be possible to estimate the health benefits however, at present this information is not available.

The NPAs often focus their attention with regards to volunteering on ensuring those less likely to participate are given the opportunity to do so. Engaging young people and people from disadvantaged areas or ethnic minority groups has the additional benefit of engaging with those least likely to access the natural environment and National Parks. For example in Dartmoor 56% of their volunteers are from target groups⁴⁶. Although it is not possible to place a value on the NPAs specifically targeting their volunteering activities to certain groups, this can be seen as an additional benefit from the NPAs.

7.2.1 Conclusion

The work of the NPAs with volunteers can provide NPAs with a source of labour and an opportunity to engage with the local community and target groups. Volunteers gain a benefit from volunteering which has been estimated (there are also possible health benefits which have not been estimated), however this is the benefit to the individual volunteer rather than a benefit to the NPA. At present it is not possible to value the outputs of the activities undertaken by NPA volunteers. Without the NPAs volunteering within the National Parks may not be a focused on achieving the objectives of the National Parks.

⁴⁶ Target groups are 5-24 year olds, over 65's, individuals with disabilities and those from an ethnic minority group.

7.3 Conservation: Biodiversity and Cultural Heritage

The second National Park purpose to promote opportunities for the understanding and enjoyment of the special qualities of National Parks by the public cannot be achieved without the fulfillment of the first, to conserve and enhance the natural beauty, wildlife and cultural heritage of their areas.

The NPAs satisfy their objectives to conserve and enhance the natural beauty, wildlife and cultural heritage of their areas through a number of different mechanisms, from direct spending to the use of volunteers (as demonstrated in section 7.2) to ensuring agri-environment schemes add most value.

Achieving objectives in landscape, biodiversity and cultural heritage result in benefits such as increased tourism and recreation, these final benefits are discussed in the relevant sections to avoid double counting. There are benefits other than tourism and recreation; however, arising from biodiversity and cultural heritage, for example the value individuals have for biodiversity itself, these are considered here.

7.3.1 Landscape

The European Landscape Convention defines landscape as an 'area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'. Landscape can be defined as "an expanse of scenery and objects which can be seen in a single view". Landscape and townscape includes the look and form of buildings and includes heritage assets, for example, ancient field patterns and the layout of towns.

One of the original purposes of designating the National Parks was to ensure that the landscapes within them were preserved. NPAs achieve landscape protection and enhancement using many tools, but primarily through the planning process, ensuring development meets with the National Park objectives, therefore landscape conservation is discussed in more detail in section 7.8 on planning. Other tools include working closely with the delivery of agri-environment schemes, woodland and tree planting, townscape and conservation area schemes to both conserve and enhance landscape. In addition some NPAs support specific projects to ensure that the landscape is preserved e.g. undergrounding cables and moors for the future.

7.3.2 Biodiversity

The National Parks contain many important biodiversity habitats – see maps 4, 5, 6, 7 and 8 in annex 2 and as such the NPAs carry out a wide range of activities relating to biodiversity conservation. For example in 2008/9 Dartmoor's activities ranged from blanket bog restoration to surveys of BAP species, to ecological planning consultations to the management and monitoring of sites and species i.e. the Dartmoor pony herd. In Dartmoor 98.5% of the BAP action plans that the NPA lead on are complete or underway.

The public value biodiversity conservation in the National Parks. For example a paper examining public preferences and willingness to pay for nature conservation in the North York Moors⁴⁷ found that individuals would be willing to pay £119.05 per individual per year for nature conservation in all 11 UK National Parks.

In 2008/9 Dartmoor spent £337,743 on biodiversity conservation 19% coming from third parties and 79% from the Defra grant (the rest from fees and charges). Discussion on the ability of the NPAs to bring in additional funding to the National Parks can be found in section 7.8. The benefits of collaborative working for biodiversity benefits can be seen in case study 1 on the 40mph limit, and case study 2 on Crayfish in the Peak District National Park illustrates how the NPAs contribute to the achievement of Biodiversity Action Plan (BAP) Targets.

A study commissioned by Defra and conducted by entec comprised of a survey to establish the impact of the Biodiversity Duty in Section 40 of the NERC Act 2006. The study found that NPAs were more aware of the Biodiversity Duty compared to community councils (100% and 43% respectively), more likely to undertake awareness raising activities (93% and 29% respectively) and were more likely to undertake action to integrate biodiversity into the functioning of the public body. The study also found that NPAs were more likely to undertake projects with a specific aim of conserving or enhancing biodiversity than community councils (100% and 39% respectively), were more likely to undertake land or estate management activities designed to benefit biodiversity (100% and 38% respectively) and NPAs (and AONBS) are most likely to have had contact with a BAP partnership or to have contributed to the BAP process whilst community councils (and universities) were least likely. This suggests that biodiversity benefits for a greater focus of attention within NPAs than community councils.

National Parks contain many SSSIs (see map 8 in annex 2 showing SSSIs and National Park designations). Approximately 26% of land in National Parks are designated SSSIs compared to 7% of land nationally. Table 14 shows the

⁴⁷ White P.C.L and Lovett J.C (1999), <u>Public preferences and willingness-to-pay for nature</u> <u>conservation in the North York Moors National Park, UK</u>, Journal of Environmental Management 55, 1-13.

percentage of SSSIs in favorable and unfavorable recovering condition within the National Parks and compared to the relevant region. It shows that as of April 2009 the condition of SSSIs in five of the National Parks is higher than or equal to that of the region and the condition of SSSIs in four of the Parks are lower than that in the region.

Table 14 also shows the percentage of land in National Parks in favorable condition compared to the region, it shows that Northumberland National Park is the only Park where a higher percentage of SSSIs are in favorable condition in the Park compared to the region.

Table 14: Percentage of SSSIs in favorable and unfavorable condition and favorable condition in the National Parks and in the Region⁴⁸

National Park	% SSSIs in favourable and unfavourable recovering condition	% SSSIs in favourable and unfavourable recovering in region (excluding NP area)	% SSSIs in favourable condition	% SSSIs in favourable condition in the region (excluding NP area)	Difference between region and National Park
Dartmoor	95%	86%	27%	51%	-24%
Exmoor	84%	86%	35%	50%	-16%
Lake District	86%	92%	21%	41%	-19%
North York Moors	82%	87%	15%	35%	-21%
Northumberland	92%	89%	33%	23%	10%
Peak District	89%	89%	16%	49%	-32%
The Broads	55%	80%	31%	67%	-35%
The New Forest	94%	90%	33%	55%	-22%
Yorkshire Dales	94%	89%	32%	41%	-9%
Total	89%	88%	25%	50%	-26%

⁴⁸ Data as of 1st April 2009, Regional percentage is for SSSIs not within the National Park within the Region. For National Parks covering more than one region an average between the relevant regions has been used.

It is argued that comparing the condition of all SSSIs in the region to those in National Park paints an incorrect picture because the majority of SSSIs in the National Parks are upland compared to mostly lowland in the regions. Upland SSSIs are said to face higher pressures than other SSSI sites due to over grazing and burning. Therefore table 15 shows the same analysis as presented in table 14 but using data only for the upland SSSIs⁴⁹ both within the National Parks and regionally (therefore the Broads are not included). This shows that in 6 of the 8 Parks a higher percentage of the upland SSSIs are in favourable or unfavourable recovering condition compared to the region.

Economic valuation of biodiversity poses many challenges including accounting for the site specificity of biodiversity and identifying a clear counterfactual. These challenges apply to valuing the benefits of SSSI condition as a result of NPA activity. However some economic valuation studies are available and assumptions can be made to help to illustrate the value of the difference between the condition of SSSIs within National Parks and external to National Parks.

In order to estimate the value of the difference between the condition of SSSIs within a National Park and outside a National Park the following assumptions are made

- It is assumed that without the NPA the SSSIs would be in the same condition as those in the region and therefore the difference between the regional percentage and the NPA percentage can be attributed to the NPA. This assumption is an oversimplification and does not allow for the roles of different factors in the condition of SSSIs in National Parks for example the fact that the SSSI is in a National Parks may mean that Natural England pay greater attention to it than if it was not in a National Park.
- It is assumed that the net biodiversity benefit of SSSIs in favourable condition is £741 per ha per annum⁵⁰. This estimate is based on a study of 2 SSSIs – Upper Teesdale and the Derwent Ings – both large iconic sites (one of which is largely a floodplain wetland); in addition the study assumes that a site in unfavourable condition has zero biodiversity value. This is a massive

 ⁴⁹ Upland SSSIs are defined as acid grassland –upland, bogs – upland, broadleaf, mixed and yew woodland – upland, calcareous grassland – upland, dwarf shrub heath – upland, fen, marsh and swamp – upland and neutral grassland – upland in ENSIS.
 ⁵⁰ Eftec (2004) Environmental Accounts for agriculture, updated into 2009 priced, value of SSSIs in

⁵⁰ Eftec (2004) Environmental Accounts for agriculture, updated into 2009 priced, value of SSSIs in favourable condition (£811) minus value of SSSIs in unfavourable condition (£90) gives a net benefit of SSSIs being in favourable condition as £741 per ha per annum. Robustness of the valuation evidence is likely to be only medium at best because the valuation evidence is derived from studies that are not that recent and because the use of the £/ha value is a very simplifying assumption. Values of SSSIs in terms of the non market benefits is likely to vary considerably across the country dependent on many factors including characteristics of SSSIs and spatial considerations. A study is being undertaken for Defra reviewing the benefits evidence on SSSIs and this might be helpful to review in the future.

simplifying assumption and as such this figure is likely to be an overestimate and should be treated with caution.

Using these assumptions the annual benefit the NPA adds to the condition of SSSIs can be calculated and is shown in table 15. Table 15 shows that the annual value of additional upland SSSIs in favourable condition in National Parks compared to the Region is around £9m, however this is based on a number of assumptions and so should be regarded with caution.

The costs of this work undertaken by NPAs to improve the condition of SSSIs are unknown and so cost benefit analysis cannot be conducted.

The table shows negative values for both the North York Moors and the Peak District. This is because the percentage of upland SSSIs in favourable condition the National Parks are lower than that in the relevant regions and therefore applying the methodology would suggest that the NPAs are having a negative effect on the condition of the SSSIs compared to what would be the case under the counterfactual. However, this piece of analysis only uses one methodology for assessing the condition of SSSIs within the National Parks. It was carried out as the condition of SSSIs is a good indicator of biodiversity. It should not be viewed as a definitive piece of analysis and further work would be needed to consider this area detail.

The chart that follows table 15 shows an alternative way to look at the impact of the NPAs on biodiversity i.e. to analyse how the NPAs have improved the condition of the SSSIs on land they own compared with other major land owners. This is because NPAs own only a small proportion of the SSSIs within the National Parks and therefore their direct control of SSSI condition is limited. As the charts shows NPAs have made greater improvements to their SSSI condition since 2003 than Local Authorities. They started from a lower base and have now brought them in line with those owned by Local Authorities.

In addition it should be noted that for some SSSIs it is not possible to achieve favourable condition for example in the North York Moors some of the moorland SSSIs are unable to achieve favourable condition as they are too dry.

Table 15: Upland SSSI condition and Value (this table analyses only the upland SSSIs in the National Parks and the Region)⁵¹

National Park	% of upland SSSI area in National Park in favourable or unfavourable recovering Condition	% of upland SSSIs in favourable or unfavourable recovering in the Region (excluding National Park)	Difference between National Park and Regional upland SSSIs in favourable or unfavourable recovering condition	% of upland SSSIs in favourable condition in National Park	% of upland SSSIs in favourable condition in Region (excluding National Park)	Difference between % of upland SSSIs in favourable condition in the National Park and the Region	Annual value of additional upland SSSIs in favourable condition in National Parks compared to the Region
Dartmoor	94.77%	84.67%	10.10%	26.3	5.6	20.7	£3,918,908
Exmoor	83.14%	84.67%	-1.53%	34.8	5.6	29.2	£3,949,923
Lake District	93.01%	87.75%	5.26%	15.5	12.6	2.9	£663,066
North York Moors	72.19%	75.04%	-2.85%	15.6	19.7	-4.1	-£1,398,039
Northumberland	87.88%	83.31%	4.57%	14.5	12.6	1.9	£135,890
Peak District	84.91%	81.26%	3.65%	10.4	13.8	-3.3	-£1,129,581
Yorkshire Dales	88.55%	79.28%	9.28%	23.7	16.1	7.6	£2,405,306
Total	85.19%	81.02%	4.18%	18.9	13.2	5.7	£9,284,255

⁵¹ Data as of 1st April 2009, Regional percentage is for SSSIs not within the National Park within the Region. For National Parks covering more than one region an average between the relevant regions has been used.



7.3.3 Woodlands

The NPAs play an active role in planting woodland in the National Parks. In 2008/9 6.34 ha of native woodland were planted by Dartmoor NPA, over the last 8 years 115ha have been planted. The cost of the woodland work conducted in DNPA (including ancient woodlands) in 2008/9 totalled £230,360 (20% of which came from third parties and 77% from the Defra grant).

The benefits of planting 115ha of broadleaf woodland over 8 years include biodiversity, landscape and recreation benefits as well as a present value benefit from carbon sequestration of £2.3m⁵².

Within Northumberland National Park approximately 100ha of woodland has been planted each year since 1995. Approximately 60ha a year is thought to be due to or with heavy involvement of the NPA. This involvement included

- schemes where the NPA drew up the scheme, applied for FC grant and organized planting,
- schemes where the NPA drew up the scheme and gave grant aid towards fencing or paying the difference between replanting with native woodland rather than conifers,
- woodland created as part of HLF projects run by NPA,
- woodland planted and grant aided under NPA Amenity tree planting scheme.

Assuming that the full 60ha is due to the NPA (which is an overestimation) the present value of the carbon sequestered (assuming 60ha planted each year for 8 years) over 50 years would be £9.7m.

The Peak District NPA own, lease or manage 530.7ha of woodland, 54.1 ha of which are leased to other parties such as wildlife trusts for nature reserves. The cost of managing these woodlands is £77,000 per year. As these woodlands are not newly planted as a result of NPA activity it is difficult to establish the value of the carbon sequestered as a result of the NPA activity.

Over the last 10 years in the Peak District approximately 50ha of woodland has been planted a year, currently there are 525ha in the Woodland Grant Scheme and 4,348ha in the England Woodland Grant Scheme all of which has included heavy involvement of the NPA including

- SCAMP and the development of planting schemes and management at a landscape scale to improve water quality
- Working with key landowners e.g. Chatsworth estate and utility companies

⁵² Assuming 14.375ha planted each year for 8 years and carbon valued at the central DECC estimate over 50 years.

- Schemes were the NPA drew up the scheme and assisted the applicant to apply for FC grant
- Schemes were the NPA was consulted by the FC and provided multi objective information and comments to inform application proposals where the NPA did not help with the proposals
- Schemes where the NPA drew up the scheme and gave grant aid towards fencing and planting.

7.3.4 Agri-environment schemes

Many of the NPAs work closely with Natural England to ensure that the agrienvironment schemes within the National Parks focus on the National Park objectives. For example the Peak District NPA works in partnership with other organisations to provide a Peak District Land Management Advisory Service. This includes the joint prioritisation of existing classic scheme renewals and holdings new to agri-environment for HLS and the provision of a weekly first stop shop advisory service for land managers to: provide support to local businesses and enhance the environmental qualities of the Peak District through increased take-up of agrienvironment schemes; clarify procedures and help people through environmental land management advice and regulation and to help secure conservation agreements and explore other opportunities. Staffing resource for this comes from PDNPA, NE, FC, and EA. It is estimated that the costs to the NPA is approximately £250,000 a year.

Table 16 shows the percentage of land in agri environment schemes in the National Parks compared to the relevant region⁵³. It shows that in total the percentage of land under agri-environment schemes is slightly higher in the National Parks than in the country as a whole. The National Parks themselves present a mixed picture with four National Parks containing a higher percentage of land in agri-environment schemes than the region and 5 containing less. Part of the explanation for this may be that a significant area of many National Parks is uplands, where the uptake of ELS has been low. The introduction of the UELS is intended to help address this factor.

In addition to the central government schemes shown in table 16 (Environmental Stewardship – ES, Environmentally Sensitive Areas – ESA and the Classic Scheme – CSS), the NPAs operate their own grant and management schemes to fill in the gaps within the National Park that the National schemes do not address. These local schemes are not reflected in the following tables.

⁵³ Where a National Park covered more than one region an average of those regions covered has been used. These figures exclude woodland grant schemes, inheritance tax exemption plans, other Natural England and NPA grant schemes and NPA owned land which is not eligible for ELS

Table 16: Percentage of land in agri environment schemes compared to regions

National Park	ES (a) ha	ESA ha	CSS ha	Total in scheme ha	Total area(b) ha	% in scheme in National Park	Regional ⁵⁴ % in scheme (excluding National Park)
Dartmoor	14,754	42,271	79	57,105	95,575	60%	56%
Exmoor	16,604	35,519	1,303	53,426	69,312	77%	56%
Lake District	28,670	130,501	2,650	161,821	229,377	71%	47%
New Forest	9,626	114	18,312	28,052	56,652	50%	53%
North York Moors	42,996	0	10,431	53,427	144,106	37%	70%
Northumberland	47,265	0	26,585	73,850	105,093	70%	78%
Peak District	17,469	52,903	8,471	78,844	143,783	55%	56%
The Broads	5,510	15,063	577	21,150	30,151	70%	58%
Yorkshire Dales	58,233	14,266	30,460	102,960	176,793	58%	62%
Total	302,309	310,153	109,811	722,274	1,216,113	59%	56%

⁵⁴ Where National Parks cover more than one region an average of the relevant regions has been used.

The focus of the NPAs work is primarily on the Environmental Stewardship Higher Level Scheme (HLS) which provides funding for specific projects providing public benefits. NPAs use Higher Level Environmental Stewardship Schemes to help achieve their aims by working with Natural England to target resources to areas where most benefit can be achieved. For example the NPAs ensure that specific local knowledge of habitats, species, and archaeology is considered. In Northumberland the NNPA has been working with Natural England to target its resources for HLS irrespective of whether the farm falls within the target area map (i.e. focus on beneficial outcomes rather than a line on a map). The work of the NPAs has resulted in a higher percentage of land in higher level Environmental Stewardship within the Parks compared to the regions – see table 17 and as illustrated in the case studies, the NPAs can add value to the agreements leading to improved outcomes. It may also be argued that the difference in uptake and quality may not always be wholly attributed to the NPAs as Natural England will also pay particular attention to National Parks.

National Park	% of land under agreement in park	% of land under agreement in Region (excluding National Park)	Difference between % in National Park and % in Region
Peak District	5.7	2.7	3.0
Lake District	8.7	3.9	4.7
Dartmoor	9.3	2.3	6.9
North York Moors	12.4	3.2	9.2
Yorkshire Dales	18.4	5.5	12.8
Exmoor	17.0	2.3	14.7
Northumberland	31.0	9.8	21.3
The Broads	7.4	1.7	5.7
The New Forest	11.9	1.5	10.4
Average	13.5	3.7	9.9

Table 17: Percentage of land under HLS in National Parks compared to Regions^{55 56}

⁵⁵ Where National Parks cover more than one region an average of the relevant regions has been used.

⁵⁶ It should be noted that these figures use all area within the National Park and the region, not just agricultural land; therefore for National Parks such as Northumberland where 20% of land is forested the percentage of agricultural land in HLS would be higher.

Examples of the added value of NPAs can be seen in case study 3 where the Authority used its relationship with the estate owner and 5 individual tenants to negotiate the 5 agreements to complement one another at a landscape scale to deliver natural and historic environment benefits. A further example is case study 4 which illustrates how the Authority has negotiated agreements to gain access to the capital grants element of the scheme to restore the historic environment that otherwise would not have occurred. However it should be noted that this funding would have been used elsewhere if not in the National Park and therefore although it may be seen as an additional benefit to the National Park, it would not be an additional benefit overall i.e. as the funding could have been used elsewhere and the cost effectiveness of its different uses is not known.

Agri-environment schemes add to the sustainability of the agricultural sectors in the National Parks. Over the life of the agreements (in place as of Nov. 2009) £22m will be invested in Northumberland National Park (£18m via HLS over 10 years) to support natural and historic environment outcomes and sustain rural communities. This equates to annual income from Environmental Stewardship schemes of approximately £2.6m, excluding income from the Countryside Stewardship Scheme. However it should be noted that even without the expertise and input of NPAs, Natural England would still focus HLS funding in National Parks in order to achieve the scheme objectives although they may not have the resources to focus on the small scale farms that sometimes do not access agri-environment schemes. The NPAs often focus on these owners.

7.3.5 Cultural Heritage

Cultural heritage is an integral part of the National Parks, giving character and distinctiveness to the landscapes. The work NPAs carry out on cultural heritage is varied and includes giving advice to land owners with cultural heritage on their land, education, archeology, surveying listed building and rescuing buildings at risk.

A study by English Heritage in 2005⁵⁷ found that 7.4% of working farm buildings showed signs of structural failure nationally. The comparable figure was 2.3% of buildings in National Parks and 6.8% in areas of outstanding national beauty (AONB), this shows a significant difference in quality of farm building stock in National Parks. The study also found that National Parks have 1.9 FTE historic building officers vs. 1.7 FTE in District authorities and that National Parks have 3.34 FTE archaeological officers vs. 5.97 county councils (a much bigger area).

The contribution of the NPAs to cultural heritage is illustrated by the Peak District NPA being the first ever recipient of English Heritage's Heritage at Risk Award in

⁵⁷ English Heritage (2005) Heritage counts: The state of England's Historic Environment

2008. English Heritage said 'the Peak District NPA has undertaken outstanding work with its strategic and often innovative approach to managing historic sites and landscapes within its boundary. We believe the Authority should be especially commended for its highly effective partnership working.' The PDNPA undertake work with a wide range of stakeholders including partner organisations, landowners and managers to conserve and protect nearly 3,000 listed buildings, more than 450 scheduled monuments, 109 conservation areas. The award was in recognition of the conservation track record of the Authority and, in particular, the key role the Authority has played in reducing the number of Scheduled Monuments at high risk in the Peak District, from 17 in 2001 to just 2 in 2008.

Studies are available on the value to the local economy of restoring traditional buildings and stone walls in the Lake District and Yorkshire Dales National Parks⁵⁸. The Yorkshire Dales study estimates that spending on building restoration has a multiplier effect of £1.65 (£2.00) on the local economy and £2.41 (£2.90) on the wider local economy (which included the market towns serving the Park). For wall repairs the multiplier estimated at £1.92 (£2.30) for local economy and £2.35 (£2.80) for wider local economy for stone wall repairs⁵⁹.

In 2008/9 Dartmoor NPA spent £10,084 repairing 6 traditional buildings. Using the multipliers provided by the Yorkshire Dales study the benefit of this spending to the local economy equates to £20,168 and to the wider local economy of £29,244. This is a clear additional benefit to the local and wider community as without the NPA this work would not have gone ahead.

Some of the NPAs use the Environmental Stewardship scheme to help achieve the Parks' goals with relation to cultural heritage. Cultural heritage goes wider than traditional buildings and stone wall restoration but as valuation data is available for these activities these have been examined. The Higher Level Scheme in Environmental Stewardship contains four options around traditional buildings and stone wall restoration⁶⁰. Data from the Genesis System in February 2010 shows how much has been spent through these options to date in the National Parks. Assuming that all the spending is spent on stone wall and traditional building restoration the multipliers for these activities can be used to calculate the benefit to the local economy and wider local economy of this spending.

CCRU and ADAS (2007) <u>A study of the social and economic impacts and benefits of traditional farm</u> <u>building and drystone wall repairs in the Yorkshire Dales National Park</u>, English Heritage and Defra.

⁵⁸ ADAS (2005) <u>A study of the social and economic impacts and benefits of traditional form building</u> repair and re-use in the Lake District ESA, English Heritage and Defra.

⁵⁹ Brackets indicate value updated to 2008 prices. The values from the Yorkshire Dales study have been used as they are similar to those in the Lake District study but are slightly more conservative.
⁶² HD1 = Maintenance of traditional Farm Buildings, WR = stone wall restoration, WRD = stone wall supplement – difficult, WRQ = stone wall supplement - stone from quarry

Table 18: Multiplier effects of spending on traditional buildings (TB) and stone walls (SW) in the National Parks through the Higher Level Scheme of Environmental Stewardship⁶¹

National Park	Total spent to date on TB	Total spent to date on SW	Impact on local economy from TB (2008 prices)	Impact on wider local economy from TB (2008 prices)	Impact on local economy from SW (2008 prices)	Impact on wider local economy from SW (2008 prices)	Total benefit to local economy of TB and SW	Total benefit to wider local economy of TB and SW
Dartmoor	7,100	152,202	14,201	20,591	350,065	426,166	364,265	446,757
Exmoor	4,850	0	9,701	14,066	0	0	9,701	14,066
Lake District	1,046	86,795	2,092	3,033	199,629	243,027	201,721	246,060
North York Moors	930	103,125	1,860	2,697	237,187	288,750	239,047	291,447
Northumberland	7,753	153,210	15,506	22,484	352,382	428,987	367,889	451,471
Peak District	2,855	426,606	5,711	8,281	981,193	1,194,496	986,904	1,202,777
The Broads	28	0	56	81	0	0	56	81
Yorkshire Dales	12,464	253,335	24,928	36,146	582,671	709,339	607,599	745,485
Total	37,027	1,175,273	74,055	107,379	2,703,127	3,290,764	2,777,182	3,398,143

 ⁶¹ TD = traditional building restoration
 SW = stone wall restoration (includes relevant supplements)

Table 18 shows the positive benefit spending on the restoration of traditional buildings and stone walls can have on the local and wider local economy in the National Parks. However there is a question over how much of this benefit should be attributed to the NPAs. Although some NPAs work closely with land owners and Natural England to ensure that the objectives of the National Park are satisfied through the use of Environmental Stewardship funding it is clear that this funding would continue even without the input of the NPAs.⁶²

7.3.6 Conclusion

The NPAs use their own funding as well as the Environmental Stewardship Scheme to help achieve the National Park objective to conserve and enhance the beauty, wildlife and cultural heritage of the National Parks. It is difficult to establish the exact proportion of land covered by Environmental Stewardship that is due to the NPAs. It is also not possible to value the impact of the direct activities of the NPAs without evaluating specific projects.

⁶² There is also a question around the use of multiplier to analyse benefits. Although there are clear multiplier effects in reality these impacts need to be compared to the multiplier effects of spending the money elsewhere such as on different agri-environment options or even different types of government spending.

7.4 Tourism

Tourism and recreation are closely related and often overlap e.g. those undertaking recreational activities such as walking may also be tourists. For simplicity these two areas are analysed separately; this section on tourism focuses on the visitors to the National Parks, how much they spend and their impact on the local economy, the recreation section (7.5) analyses the recreational activities undertaken in the Park, the facilities the NPAs provide and the benefit of the these facilities to the public.

The National Parks receive 75million visitors annually⁶³. The work of the NPAs contributes to the number of visitors through the achievement of their objectives for example by conserving the landscape; biodiversity and cultural heritage the NPAs ensure that the National Parks are an attractive place to visit. By fulfilling the objective 'to promote opportunities for the understanding and enjoyment of the special qualities of the National Parks by the public' through the provision of facilities such as visitor centres, well sign posted walks and toilets the NPAs encourage tourists to visit the area.

It could be argued that the under the counterfactual scenario (i.e. no NPA) tourists would still visit the National Parks however the NPAs work to ensure that tourism is sustainable and that the National Parks are not damaged by the high levels of tourism, this agenda may not be as a high a priority should the NPAs not exist.

Some National Parks are not well known and require the NPAs to promote them. However it could be argued that in the absence of the NPA this role would be undertaken by the relevant tourist board. In addition it is argued that the provision of facilities such as toilets and car parks mean that individuals may visit and undertake activities such as walking that otherwise they may not have contemplated.

Tourism plays a large role in the economies of the National Parks. Studies have found that

- The Peak District National Park attracts 12.8m visitor days per annum to the East Midlands resulting in a net additional income to the region of £135m in visitor spend⁶⁴.
- The total annual value of tourism in the Broads is £124m and 2,529 tourism related jobs⁶⁵.
- For every job directly supported by tourism in the North East, 1.05 further indirect and induced jobs are supported, for every £1 of tourist spend a further

 ⁶³ ENPAA(2009) Climate Change mitigation and adaptation in National Parks
 http://www.enpaa.org.uk/enpaa_statement_on_climate_change_in_national_parks.pdf
 ⁶⁴ SQW (2008) <u>Contribution of the Peak District National Park to the economy of the East Midlands,</u>
 East Midlands Development Agency.

⁶⁵ East of England Tourism (2007) <u>Economic Impact of Tourism: East of England Protected</u> Landscapes and the Brecks.

£1.79 of expenditure is generated and for every £1 of value added in the tourist industry a further £1.64 is added across the region⁶⁶.

- In Exmoor 2000 jobs are supported by tourism in the Park ⁶⁷
- The direct impact on the Yorkshire and Humber Region of visitors in the National Parks was £660m (£400m within the Parks); this was expected to support 12,000 jobs⁶⁸.
- Tourism is worth over £100m a year to the local economy of Dartmoor National Park and supports nearly 2000 full-time jobs.

Data is available on the number of visitors, visitor days and visitor spend for the National Parks see table 19.

National Park	Visitor numbers (millions)	Visitor days (millions)	Visitor spend (millions)
Peak District	N/K	12.4	347
Lake District	8.3	15.2	659
Dartmoor	2.2	2.8	103
North York Moors	6.3	9	317
Yorkshire Dales	9.5	12.6	400
Exmoor	1.4	2	83
Northumberland	1.7	2.415	104
The Broads	5.8	7.2	296
The New Forest	N/K	13.5	123

Table 19: Visitor numbers, visitor days, tourist spend⁶⁹

The NPA visitor centres play a crucial role in attracting and educating visitors to the National Parks. In 2008/9 206,533 visited National Park Information Centres in Dartmoor National Park and 118,000 in 2008/09 in Northumberland (i.e. 1 in 14 tourists to the National Park). The visitor satisfaction score for Northumberland's three centres (combined) was 93% in 2007/08 and one of its visitor centres was judged by Visit Britain to be the best in England in 2007.

If it were assumed that the NPAs contribution to tourism was indicated by the number of visitors to their visitor centres (although this assumption does not account for the fact that some of these people would have visited the National Park anyway and that many people that visit the National Parks that do not visit visitor centres) the visitor spend attributable to Dartmoor NPA is £9.7m and to Northumberland is

⁶⁶ SQW (2004) <u>The economic value of Protected Landscapes in the North East of England</u>.

⁶⁷ Exmoor NPA (2008) Exmoor National Park: State of Tourism Report 2008

⁶⁸ Council for National Parks (2006) <u>Prosperity and Protection: The economic impact of National</u> Parks in the Yorkshire and Humber Region.

⁶⁹ <u>http://www.nationalparks.gov.uk/learningabout/factsandfigures.htm</u>. It should be noted that these figures come from surveys that are designed to give trend data rather than accurately estimate the number of visitors and therefore the numbers should be treated with a note of caution. Dartmoor data updated following data from DNPA

 \pounds 7.9m. Using the \pounds 1.79 multiplier from the North East, the multiplier effect of the spending of visitors the NPAs are responsible for is \pounds 14.1m for Northumberland and \pounds 17.3m for Dartmoor. Northumberland NPA spends approximately \pounds 900,000 on tourism annually giving an annual net benefit of \pounds 7m (excluding multiplier effects) and a cost benefit ratio of 1:9. For a more robust estimation further information is needed on the direct impact of NPA activity on visitor numbers

7.4.1 Sustainable Tourism

Although tourism can have a positive impact on the local and regional economies of the National Parks, it can also have a negative environmental impact. To ensure that the beauty, wildlife and cultural heritage of the National Parks is conserved the National Parks work to ensure that tourism is sustainable. For example Dartmoor NPA has launched a sustainability award –Dartmoor First. It is an award for all businesses (not just tourism enterprises) on Dartmoor to recognise their commitment to sustaining Dartmoor and its special qualities.

A number of the NPAs have implemented sustainable tourism projects which minimise the impact of tourism as well as helping widen access to the National Parks. For example in Dartmoor National Park 259 people used the Freewheeler bus, 2500 the canoe bus and 937 the Haytor Hopper resulting in reduced vehicle access and traffic management problems. A further example of sustainable transport is the Hadrian's Wall bus in Northumberland National Park (see case study 6), and the new cycle route being built in the Peak District (see case study 7) which illustrates how the National Parks can achieve a number of benefits through one project i.e. recreation and tourism, sustainable transport and health benefits.

7.4.2 Conclusion

The contribution of the NPAs to the tourism industry in the National Parks is difficult to identify as many tourists would visit the National Parks even without the information and facilities provided by the NPA. The NPAs add value in promoting sustainable tourism and for the less known National Parks they help to promote the Park as a tourist destination (although this could be undertaken by a Tourist Board in their absence although they would not necessarily focus on the needs of the National Park). The work of the NPAs in achieving their first purpose also helps to ensure that individuals want to visit the National Parks but it is not possible to calculate the impact of no NPA on the environment and the impact that would then have on tourism.

7.5 Recreation

With over 75million visitors annually and a population of 210,000 the National Parks are home to many forms of recreation, from walking and rambling to cycling to rock climbing to gliding. The NPAs provide many facilities which enable residents and visitors to enjoy the National Parks including car parks, toilets, clearly marked and accessible footpaths, cycle trails and downloadable walks from the internet.

Recreation in the National Parks has a number of public and private benefits including helping support the local economy, informing and educating individuals about the benefits of the National Parks and health benefits from undertaking physical activity. The National Parks also focus effort on ensuring those who may have difficultly accessing the natural environment have access to recreation in the National Parks, for example by providing public transport (see case study 6 on Hadrian's Wall Bus) and running specific programmes targeting certain groups.

7.5.1 Car Parks and Toilets

The provision of facilities such as car parks and toilets play an important role in the ability and willingness of the general public to access the National Parks for recreational purposes. The 2007/08 Northumberland Visitor Survey highlighted public transport and public toilets as the services/facilities that visitors are most concerned about and the NPA plays an important role providing facilities of this nature. It is likely that without the NPAs, Local Authorities would not provide these facilities. Indeed, many Local Authorities have closed down public toilets in National Parks in recent years,

Without this basic visitor infrastructure, access to the National Parks by the general public would be significantly compromised. Northumberland NPA operates 7 public toilets, Dartmoor NPA 6 and the Peak District NPA 18. Without the NPAs it is unlikely that these toilets would have been established and maintained as their rural nature often means they do not meet Local Authority requirements for establishing and maintaining a public toilet.

Northumberland NPA operates 32 car parks (7 have charges) ranging from small lay-bys to larger car parks, positioned at strategic access points to the Park providing 600 parking spaces. In 2008/09 ticket sales for the 7 charging car parks numbered 58,000 raising revenue of £94,000. The Peak District operates 49 car parks of which 19 are pay and display and in 2006/7 136,901 car parking tickets were sold. Dartmoor National Park maintains 150 car parks (ranging from lay bys to small town centre car parks). Without car parks the opportunities for access would be reduced.
Income from parking charges and letting refreshments concessions helps maintain the car parks and toilets.

7.5.2 Valuing the Benefits of Recreational Spending

In February 2010 Defra published a case study on 'Estimating Value for Money of National Park Expenditure'⁷⁰. The study focussed on the provision of visitor amenities in the Peak District National Park and used value transfer methodology to perform an initial scoping assessment of the benefits generated from NPA spend. The aim of the study was to apply the Value Transfer Guidelines to illustrate the types of analysis possible. It was therefore an initial scoping study and should be viewed as an illustration of how the benefits of recreational spending can be valued rather than a definitive piece of analysis.

Value transfer is the process by which readily available economic valuation evidence is applied in a new context. In this case economic valuation evidence from recreational services in another location is applied to recreational services provided by the Peak District NPA. Value Transfer has been used to estimate the value of the loss of visitor services such as visitor centres, ranger guided walks, volunteer days and education activities. The aggregated estimates of loss of annual benefits to visitors is in the region is calculated to be £3-5m per year. Considering a wider range of visitor services that are not included in the calculation above, such as the maintenance of footpaths, basic facilities and ranger services, a value of up to £36m per year is calculated. Compared to total grant in aid from Defra of approximately £8m per year, this gives a ratio of benefits to costs of 4:1. While this 'result' is subject to significant caveats, which are detailed in the annex, it does indicate that expenditure by PDNPA does represent 'value for money', based on basic costbenefit and economic efficiency definition of value for money.

A similar exercise was conducted for Dartmoor NPA where the value of the loss of annual benefits to visitors of specific visitor services was calculated to be $\pounds 0.6m$ to $\pounds 1.1m$. Considering a wider range of visitor services resulted in a value of $\pounds 4.1-4.7m$ per year which when compared to the level of Defra grant resulted in an approximate ratio of benefits to costs of 4:1.

The same exercise was conducted for Northumberland NPA which valued the loss of annual benefits of the specific visitor services previously detailed in the range of ± 0.4 -0.7m. Considering a wider range of visitor services, a value of ± 4.4 -4.8m which, when compared to the level of central Government funding for related activities, gives an approximate benefits to cost ratio of 4:1.

⁷⁰ Full details of the case study can be found in the Annex.

These examples give an initial scoping assessment of value for money that should be subject to more detailed assessment for the purposes of policy decision-making. The benefits of expenditure on recreation is difficult to match to all the different types of visitor services and this exercise only monetises a small amount of the potential range of benefits generated by NPA spend. To the extent that benefits from only a small range of activities are monetised, and other public policy goals are not taken into consideration, these figures could be considered a conservative estimate of the value for money of NPA spend. The detailed methodology and calculations used for this analysis can be found in annex 7.

7.5.3 Walking Information

In order to encourage recreation in the National Parks the NPAs ensure footpaths are accessible and well signposted, they also provide guided walks and walks that can be downloaded from the internet. The local knowledge of the NPAs means that they can focus their access efforts where they will provide most benefit. Northumberland National Park estimate between 90,000 and 100,000 walks are downloaded from their website each year. In Dartmoor National Park 2,748 people attended guided walks, 7,194 attended educational walks and 204 children and 193 adults attended Ranger Ralph walks.

7.5.4 Health

Recreation which includes physical activity has health benefits resulting in reduced costs for the NHS. As well as the health benefits gained by the general public from the recreation undertaken in an accessible National Park, the NPAs work directly with PCT to encourage people to use the National Parks as a way to improve their health. For example in 2008/9 500 people attended Dartmoor National Park Easy Going Tours which provide improved access for those who are less physically able. The Peak District Next Steps project is a further example of the National Park working with the PCT (see case study 8). A similar programme was undertaken in Northumberland (see case study 9). Although it is not possible to quantify the health benefits of recreation in the National Parks without specific project evaluation, by providing facilities and projects which allow access there are health benefits associated with the work of the NPAs.

7.5.5 Conclusion

The facilities provided by the NPAs such as toilets, car parks, multi-user trails, sign posted and downloadable walks enable individuals to access the National Parks for recreation. Initial scoping analysis illustrates that Value Transfer can be used to estimate cost benefit ratios for recreational spending and based on a number of assumptions/available data an illustrative cost benefit ratio of 1:4 for the recreational facilities provided by the NPAs has been calculated. Further more detailed analysis is needed to provide robust estimates.

7.6 Education, Skills and Training

The second statutory purpose of the National Parks is to promote opportunities for the understanding and enjoyment of the special qualities of the National Park by the public. On average around twenty percent of NPA spending is on promoting understanding (see table 4 Percentage of Defra Grant spent under each functional heading). In recent years the NPAs have expanded their work on education to cover sustainable development and climate change.

The NPAs work in this area can be divided in two; firstly education of the general public and secondly specific training in skills that are needed but lacking in the National Park area. The latter has the additional benefit of helping to sustain the local economy.

7.6.1 Education

The primary objective of the NPAs activities on education is to increase the general public's understanding of the special qualities of the National Parks and wider environmental issues.

The NPAs educate the public through a number of different ways including providing information at their visitor centres, guided walks by rangers and specific work with schools and clearly identified under represented target groups. It can be argued that without the presence of the NPAs this education would not be undertaken as it is unlikely to be a priority of a Local Authority.

As discussed in chapter 6 although it is generally believed that education leads to more environmentally aware behaviour at present there is little evidence to support this. It is not possible, therefore, to assign monetary values to the benefits of education. However that is not to say that educating the public and children about the National Parks and wider environmental issues is not important.

Visitor Centres play a key role in providing education to those visiting the National Park. In total the National Parks operate 33 Visitor Centres and 82 information points⁷¹. Northumberland NPAs visitor centres attract between 120,000 – 130,000 visitors each year. The Centres' provide access to educational and interpretative materials on the special qualities of the National Park. For example, as part of the 'Cheviot Futures' climate change adaption project the Ingram National Park Centre has interpretive material on the impacts of climate change and the measures which

⁷¹ ENPAA(2009) Climate Change mitigation and adaptation in National Parks http://www.enpaa.org.uk/enpaa_statement_on_climate_change_in_national_parks.pdf

are being undertaken in the area to mitigate and adapt (see case study 21 for more information). Overall visitor satisfaction with the National Park Centre's (including satisfaction with interpretation) was 90% in 2008/09.

In 2008/9 the PDNPA made 457,980 contacts through information including visitor centres. In the same year 206,533 people visited Dartmoor NPA visitor centres with 133,697 visiting their wider information network. NPAs have a wide range of educational material on the websites and therefore individuals can access educational material even when they are not physically in the Park. For example in 2008/9 380,000 unique users visited the Dartmoor NPA website.

In addition to visitor centres in some National Parks the NPA rangers provide guided walks and educational activities for school groups. In 2008/09, 28 school groups and approximately 1,400 children benefited from school visits or outside the classroom learning led by NNPA Rangers and 18,669 contacts were made in the Peak District through face to face encounters for example national curriculum linked field trips. Annually around 61,000 young people in England visit National Parks on school visits organised by the NPA⁷².

Dartmoor NPA held 219 education events in 2008/9 including 7194 participants. These events ranged from primary and secondary education to adult learning to outreach to foreign visitors. The types of activities ranged from walks to class room activities to conservation work. In addition 431 ranger guided walks were undertaken, including 2249 participants. As Dartmoor NPA charge for a number of these guided walks the net cost of providing this service was £2275. (See Dartmoor Annex – tables 27, 28 and 29 for more detailed breakdown).

Examples of programmes run by the Peak District NPA include the Moorlands as an indicator of Climate Change Initiative (MICCI) and the John Muir Awards. MICCI was a project for schools and young people about the inter-relationship between the moorland landscape, people and climate change and included working with scientists to collect primary data). The John Muir Award sees rangers work with schools on an accredited project which develops children's understanding of the significance and history of the National Parks as well as practical conservation skills. More information can be found in case studies 10 and 11.

Educational projects are also undertaken in partnership with other organisations. For example a project in the Peak District National Park used partnership to double the output of environmental education offered to young people from targeted areas in Manchester, Stockport and Oldham. With United Utilities, the PDNPA delivered 2,506 educational visits for young people to learn about biodiversity and the links to

⁷² ENPAA(2009) Climate Change mitigation and adaptation in National Parks http://www.enpaa.org.uk/enpaa_statement_on_climate_change_in_national_parks.pdf

the water cycle. The project targeted young people who lived within half an hour of the National Park but who had rarely if ever visited it.

The education agenda is not only focused on children but also the local communities living within or close to the National Park, and tourists. NPAs undertake specific education projects for example interpretation and education is provided to passengers on the Hadrian's Wall bus reaching up to 38,000 passengers in 2008/09 as a result of project activity undertaken by the NNPA.

Other projects undertaken by the NNPA in 2008/09 included the 'Seeding Change' hay meadow restoration project and the 'Cheviot Hills Heritage Project' both of which include a large amount of community education. Over the course of the Seeding Change community biodiversity project the following engagement and educational outputs were achieved:

- 127 school visits to approx 35 different schools (12 school grounds planted);
- 46 community walks and talks;
- 22 Business and Tourism walks and talks;
- 15 National Park guided walks;
- 60 volunteer projects.

In total nearly 7,000 people benefited through practical projects, school visits, walks, talks, and training days.

The Cheviot Hills Heritage Project worked with 8 separate communities on both side of the England/Scotland border, encouraging the communities to identify important local heritage and access features. The locally important features were then mapped and interpreted into a 'heritage and access atlas and map' providing a record of the features and a product to encourage tourism in the local area, thus increasing the benefits of the activity.

7.6.2 Skills and Training

As well as educating the general public, the NPAs provide specific skills and training in areas where there is lack of capacity in the local economy. The training tends to centre around traditional skills that are required to sustain the rural economy and community but which having trouble recruiting new entrants example are dry stone walling or hill farming. A lack of trained skilled crafts people in these areas can have a significant effect on the conservation of the landscape in the National Parks as without hill farmers or dry stone wallers the landscape would alter considerably. In addition to developing practical skills for countryside workers some NPAs provide continuing professional development, supporting employment for people from a wide range of backgrounds, for example Rights of Way officers, countryside rangers and land managers. In the Peak District some of this training is linked to new entrants into the work place, whilst other provision was targeted at developing skills in emerging areas such as sustainable water management. In 2008/9 the 398 people took part in professional training provided by the PDNPA.

Projects that provide individuals with training in traditional skills have many benefits (all of which are difficult to quantify and monetise) including providing supply of skills to the markets enabling land owners to implement Environmental Stewardship requirements earlier, maintaining the landscape of the National Parks and providing multiplier effects in the local economies through the establishment of new businesses and employment of new individuals who may have had to move elsewhere to find employment in a different sector.

In 2008/9 the Dartmoor NPA trained 28 people in the rural skills of hedge laying and stonewalling, which the Yorkshire Dales National Park study⁷³ indicates has a local multiplier effect of £2.30. They also employed an apprentice stonemason.

Northumberland NPA runs a Traditional Boundaries Traditional Skills (TBTS) project. It was instigated by the Authority in response to a local shortage of skilled boundary management contractors and the poor state of repair of the region's dry stone walls. Repair of dry stone walls (and therefore compliance with agri-environment scheme prescriptions) was either not taking place, or was being carried out to a poor standard by wallers from outside the region used to working with different stone and to different vernacular styles. It is believed that none of this training would have occurred if it was not for the NNPA.

TBTS trains 10 people from different backgrounds each year in boundary management techniques and micro-business start-up skills. The project completed its fourth training year in November 2009 and is now in the final year (ending November 2010). To November 2009 40 trainees were recruited with 37 graduating from the course. 34 achieved LANTRA/DSWA Intermediate qualification (3 achieving Initial level qualification). Of the 40 original recruits 90% are in employment or full time education, 2.5% unemployed, 7.5% status unknown and 57.5% work full or part time in boundary maintenance. 40% of graduates of the course are self employed.

⁷³ CCRU and ADAS (2007) A study of the social and economic impacts and benefits of traditional farm building and drystone wall repairs in the Yorkshire Dales National Park, English Heritage and Defra.

Table 20: Status of Northumberland Traditional Boundaries Traditional Skills project

Status	Number	Percentage
Working full or part time as a boundary contractor only	18	45
In another full or part time role and working part time in	5	12.5
boundary management		
Working full time in a non boundary role	11	27.5
In full time education	2	5
Unemployed	1	2.5
Current status unknown	3	7.5
Total	40	100

In addition to the training, the project in the first three years also achieved 6,052 metres of wall repaired, 4,920 metres of hedgerows, fences, footpaths, and supported 25 Engagement events.

Following this project in Northumberland NPA has developed the "Upland Farming Traineeship" in conjunction with Land Skills North East, Northumberland College and in association with North Northumberland Agricultural Training Association (NNATA). This is in response to local demand to keep traditional upland livestock farming skills in the countryside. As the average age of upland farmers is now 58, many children of farming families opt for alternative careers and only one in seven farmers have a planned succession for their farm. There is a therefore, to ensure there is a trained workforce to take over the farms as public benefits are gained from Hill Farming i.e. landscape.

In addition to this programme Northumberland NPA is supporting a 'college in the Park' concept which will deliver a portfolio of training, work experience and development opportunities focused on the special qualities of Northumberland National Park to facilitate growth in the Green Economy in a rural setting (see Northumberland annex for more information).

7.6.3 Conclusion

The NPAs provide education to the general public on both the qualities of the National Parks and wider environmental issues; however, it is not possible to identify the impact of this education. NPAs activities developing skills which are in shortage in the National Parks help to ensure that public benefits such as landscape are conserved. Without the co-ordination and leadership of the NPAs in this area it is unlikely there would be a focus on sustaining these important skills.

7.7 Planning

Control of the planning system enables the NPAs to achieve their statutory purpose to conserve and enhance the natural beauty, wildlife and cultural heritage of their areas. Through the planning system the NPAs are able to ensure that only development that helps to meet the National Parks objectives is undertaken. They also use the planning system positively to help rural regeneration and enhance local distinctiveness. Compared to the counterfactual of planning being the responsibility of the relevant Local Authority NPAs ensure that a cohesive approach is taken to planning policy across the National Parks and that the specific needs of the National Parks and their communities are considered.

'Planning' in National Parks fall into two areas; development management and forward planning. Development management covers the day to day running of the planning system for example giving pre-planning advice and allowing/declining planning permission. Forward planning is the process through which the NPAs deliver plans and policies required by central government, ensuring that plans and policy help achieve the objectives of the National Parks.

It is not possible to place a monetary value on the benefits that arise from the development management and forward planning undertaken by the NPAs, however the work of the NPAs in this area (especially forward planning) can be seen as an additional benefit arising from the NPAs as opposed to the relevant Local Authorities undertaking this role. When undertaking development management and forward planning NPAs ensure that the objectives of the National Park are realised, should this function be undertaken by Local Authorities there is a risk (and past experience supports this) that the National Park objectives would not be considered as highly in the process.

This can be illustrated through the decision of Northumberland NPA to take their planning function in house where it had previously remained with the County Council. Prior to internalisation there was very limited forward planning activity undertaken on the new National Park Local Development Framework, the National Park purposes were not appropriately represented in local and regional policies and the quality of development management decisions and services was variable. Therefore the planning functions were internalised in 2005 in order to:

- Deliver higher quality and more locally relevant services for the National Park and its communities
- Increase the influence of the Authority in the Region and beyond in terms of strategic and local policy

• Integrate strategic and forward planning with policy development for the National Park (e.g. National Park Management Plan)

2005/06 was the last full year that the planning service was undertaken by Northumberland County Council under a Service Level Agreement. That year what the planning service delivered was weak and the Authority became a 'standards authority' and was required to prepare an action plan for the Government Office to produce a step change improvement. As a result the planning for Northumberland National Park was internalised. Comparing the 2004/05 figures with 2008/09, the additional cost of Northumberland NPA operating the full Planning Service instead of the County Council is £24,600 p.a. i.e. about 0.5% of the annual budget.

In December 2009, the NNPA's 'Review Panel' scrutinised the decision to invest in the Planning Service and concluded that the additional cost of circa £25,000 p.a. was good value for money considering the increased scope and quality of the service provided. It concluded that the Authority has been successful in achieving the original aims for internalising the service.

The NNPA believe that the added value arising from taking the planning function back in house comes from ensuring the interests of the National Park and its communities are represented within regional policy; having an LDF-Core Strategy focused on the needs of the Park and its communities; having policies that improve the design and sustainability criteria of developments; improved consultation and relationships ('place shaping') with the public; improved efficiency of dealing with applications, and promoting appropriate development that safeguards and enhances the special qualities of the National Park, and stimulates the local rural economy and community. It could be argued that these benefits apply to the planning functions of all NPAs.

7.7.1 Development Management

The NPAs are responsible for development management in the National Parks. As can be seen from table 3 between three and twenty-four percent of the NPAs funding is spent in this area. This variation is reflective of the different levels of development and populations in the National Parks, for example, the lowest percentage is from Northumberland which has a small population (2,000 people and a housing stock of 800) living within the National Park whilst the highest is from the New Forest which has one of the highest populations.

As with all Local Authorities the NPAs receive fees from planning applicants which in theory should cover the cost of the service; however this is often not the case. The NPAs also have (until recently) received Housing and Planning Delivery Grant from

CLG which is designed to reward Local Authorities for improved delivery of housing and other planning outcomes as part of their strategic, place shaping role and to provide more support to communities and local councils who are actively seeking to deliver new homes⁷⁴.

Evidence from Northumberland National Park shows that the planning management function has improved with respect to meeting its targets since being moved in house. Table 21 shows the last year that development management was with the County Council and the three years that it has resided with Northumberland NPA.

Processing of planning applications (major, minor, other)	2005/06	2006/07	2007/08	2008/09
a) % of major applications determined	No	No	No	100%
within 13 weeks	apps	apps	apps	(1app)
b) % of minor applications determined	43%	80%	78%	68%
within 8 weeks				
c) % of 'other' applications determined	68%	94%	81%	71%
within 8 weeks				

Table 21: Northumberland National Park Planning Process Statistics⁷⁵

Table 22 shows the percentage of planning applications by type dealt with in a timely manner for all NPAs in 2008/9 compared to the national and regional average. Comparing the National Park and national average figures the National Parks do slightly better on the percentage of major applications dealt with in 13 weeks but worse on major and other applications dealt with in 8 weeks. Comparing the data from the National Parks to the relevant regional data gives a mixed picture (for example the Broads perform better than the region in all areas where as the Lake District perform worse) although generally it can be seen that the National Parks are not achieving as high a percentage as the regions. This is in part due to the added complexity of planning within National Parks compared to urban and peri-urban planning authorities. It is also due to the fact that the complex cases require less delegation to staff and greater input from elected members as many difficult and important decisions require a democratic mandate, which the NPAs are keen to encourage, in addition data was only available as percentages and so the table does not reflect the fact that some Parks receive far fewer applicants than others for example the Peak District receives many more than Northumberland.

⁷⁴http://webarchive.nationalarchives.gov.uk/+/http://www.communities.gov.uk/planningandbuilding/pla nning/planningpolicyimplementation/planningdeliverygrant/ ⁷⁵ The dip in 2008/09 was due to human resource continuity issues and the small sample size means

percentage figures can be skewed by small numbers of applications going out of time.

It should be noted that meeting timing targets is only one measure of success as it is argued that a good planning service is one that gives good pre-application advice and then reaches the right decisions when the applications are made as well as dealing with applications in a timely manner. For example in 2009, 78% of users of Dartmoor development management service said that they were very or fairly satisfied, a 2009 survey showed the same figure for Northumberland.

National Park	% of major applications in	% of major applications in 8	% of other applications in
	13 weeks	weeks	8 weeks
Broads	75 (68)	81 (77)	91 (89)
Dartmoor	0 (68)	63 (74)	74 (86)
Exmoor	100 (68)	49 (74)	79 (86)
Lake District	64 (73)	66 (78)	84 (88)
New Forest	75 (71)	74 (76)	84 (87)
Northumberland ⁷⁷	100 (77)	68 (80)	71 (89)
North York Moors	56 (74)	71 (77)	81 (89)
Peak District	100 (71)	77 (76)	82 (87)
Yorkshire Dales	50 (73)	69 (78)	82 (88)
National Parks Average	72	70	81
National Average	71	76	87

Table 22: Percentage of planning applications by type dealt with in a timely manner⁷⁶ (brackets indicate regional percentages)

The ability of the NPAs to meet their planning performance targets is not the only indication of the value provided by the planning service. Many of the National Parks have developed design guides and provide free pre-planning advice to help ensure that design and development helps meet the objectives of the National Park. For example in Northumberland National Park new developments must have a minimum 10% of their energy requirements from renewable sources. It is also argued that the NPAs have stopped developments that may have been allowed by Local Authorities that would have negatively impacted the National Parks (which in turn could impact tourism) and allowed other developments that would have been blocked but with NPA involvement the developments have helped to achieve the objectives of the National Park.

⁷⁶ Data on the National Parks from Dartmoor NPA (2009) <u>Annual Review 2008/9</u>, page 62. Regional, National and National Park Total information from DCLG(2009) <u>Development Control Statistics:</u> <u>England 2008-9</u>,

<u>http://www.communities.gov.uk/publications/corporate/statistics/developmentcontrol200809</u> For regional figures where a National Park spans more than one region an average of the relevant regions has been used.

⁷⁷ It should be noted that NNPA's planning performance dipped in 2008/9 due to staff continuity issues so in any other year would be expected to be higher.

An example of this is from Northumberland National Park where, the development of "Grandy's Knowe" a Listed Building and Scheduled Monument situated within a World Heritage Site and in the open countryside into a 'live/work unit' would most likely have been refused by other authorities on the grounds that it is residential development in the open countryside. The NNPA approved the development (after negotiation and with conditions) in 2008 because it restored and safeguarded a Listed Building and Scheduled Monument, removing them from the 'at risk' register. Further, it allowed for the establishment of an outdoor activity/education business based on the special qualities of the National Park, increasing the tourism and recreation infrastructure of the Park and ensuring that over £300,000 of restorative work on the scheduled ancient monument was undertaken by the developer and was not a cost to the public purse.

7.7.2 Forward Planning

The second area of Planning covered by NPAs is Forward Planning. The NPAs develop local policy and local development frameworks following detailed engagement with local communities.

The NPAs input into the core strategies of neighbouring authorities to ensure that development at the edge of the National Parks either do not adversely impact the special qualities of the National Parks or can address environmental and social issues such as affordable housing provision or education services.

The Local Development Frameworks (LDF) are the responsibility of the NPAs and a key tool for achieving their objectives as well as providing an opportunity for the NPA to engage with the local communities by ensuring that planning policy reflects the needs to the populations as well as the purposes of the National Parks. It is argued that if there was no separate LDF for the National Parks, and it formed part of a wider LDF for a bigger authority (or was part of a number of LDFs for a number of Authorities), that the views of local residents within and adjoining the National Park would not be fully heard or written into planning policy. If planning policy was transferred to local authority control it is unlikely that the needs of the National Park would be paramount in the Local Development Plans and for Parks spanning more than one local authority the cohesive nature of planning policy would be lost.

An example of this is from Northumberland NPA who undertook significant consultation on the documents that make up the LDF. A large number of residents were included in community consultation events (92 in 2006/7, 160 in 2007/8, and 150 in 2008/9). In addition the Authority received over 250 written responses to the LDF Core Strategy (since preparation began in 2005); around 80% which were from

members of the local community. These figures represent high engagement and response rates as the total population of the National Park is fewer than 2,000.

The involvement of local communities was significant in shaping the policies contained within the LDF Core Strategy. For example:

- Settlement envelopes are areas around current developments that determine where new development can be built. The consultation revealed that the majority of residents did not support the proposal for defined settlement envelopes as they were concerned that drawing envelopes too tightly would restrict development that may be needed in the future and drawing them too wide may encourage speculative development which was not needed by the local population. Given the local opposition, the Authority took the decision to remove the proposal to define envelopes around the National Park settlements;
- Defining sustainable settlements/ access to services LDFs define what services are required to define a settlement sustainable. As settlements in Northumberland National Park are quite remote residents felt that a different definition of services was needed than that usually used, for example access to, or daily delivery from a shop selling food to meet basic daily needs; access to a school, either located within the settlement or accessible via a school bus service; public transport connection to a larger settlement with a wider range of services; and either a village hall, community centre or public house. These criteria now form the basis for the future development strategy set out within the LDF Core Strategy;
- Definition of housing for local needs there was strong support from the local community to restrict new housing within the National Park to people who meet defined local needs criteria. However, during consultation communities expressed concern that the definition would not allow new housing to be developed for a non National Park resident, who is proposing to set up a viable business which would clearly help achieve National Park purposes. The local needs definition was changed to respond to this concern.

7.7.3 Minerals

Some National Parks have extensive mineral resources, for example the Peak District and the Yorkshire Dales have extensive resources of limestone. It is government policy to prevent major mineral development taking place unless there is a need in terms of national considerations of mineral supply; there are no alternatives; and the development can be accommodated without detriment to the valued characteristics of the National Park. NPAs rigorously adhere to this policy in order to conserve and enhance the natural beauty of these areas and the recreational opportunities they provide for the public. If the responsibility was transferred to other Local Authorities it is uncertain whether these authorities would make a distinction between areas within and outside the Park and whether the rigorous approach taken by NPAs would be adopted. However, LAs currently deal with differing approaches with regards to other types of designations such as SSSIs, SACs, Ramsar sites and SPAs and therefore they may be able to also distinguish with regards to National Park boundaries.

7.7.4 Conclusion

Although the speed of planning performance statistics for the NPAs do not always compare favourably with those of the relevant region, the benefit of a cohesive approach to planning in the National Park and focus on community engagement when drawing up planning policy helps ensure the objectives of the National Parks are met. Without the NPAs it is unlikely that such deep consultation would take place and there is a risk that there would be a fractured approach to planning across the National Park which may put at risk their special qualities.

7.8 Leadership and Third Party Funding

The NPAs increase the benefits they are able to provide through three mechanisms. Firstly by bringing third party contributions into projects, secondly by helping projects within the National Parks access other funding and finally by leading projects that due to lack of experience, co-ordination or free rider problems would not otherwise get off the ground. Through these mechanisms the NPAs ensure more resources and thus benefits are achieved in the National Parks than would have been the case without their presence.

7.8.1 Third Party Funding

Table 23 shows the percentages of funding NPAs receive other than through their Defra grant and also the percentage that comes from non-Defra grants. The table shows that in addition to the Defra grant the NPAs receive a relatively high proportion of their third party funding from other sources within Defra and the proportion from non Defra grants ranges from between 3% and 28%.

National Park	% total income from Defra Grant	% total income from other sources	% total income from non Defra grants	% total income from other Defra Grants
Peak District	53	47	28	19
Lake District	62	38	7	31
Dartmoor	80	20	7	13
North York Moors	68	32	21	11
Yorkshire Dales	73	27	16	11
Exmoor	77	23	10	13
Northumberland	79	21	15	6
The Broads	59	41	3	38
The New Forest	83	17	3	14

Table 23: Percentage of funding from Defra grants, other income and other grants

An evaluation of the Sustainable Development Fund found that NPA's achieve a third party funding multiplier of 4.3 (see Sustainable Development Fund section for more information) and evidence on the Northumberland Action Area Approach (see section on sustainable communities for more information) shows it has a multiplier of 5.44.

7.8.2 Other Funding

Not all of the additional funding brought into the National Park area is shown on the NPA accounts. Often the NPAs will contribute to projects administered by other organisations (the total funding for this would not show on the NPAs books) and also help organisations access funding from other sources. This increases the total amount of funding within the National Parks working to achieve the National Park objectives. Examples include the Princetown projects in Dartmoor where the NPA contributed £7,500 and staff time to a project whose capital costs were £1.5m (see case study 16).

In addition the NPAs help to facilitate pooled partnerships by providing a 'home' for projects so that additional governance and etc is needed for example the Moors for the Future project in the Peak District National Park where the NPA provided the administration home and £425k over five years. This basis has been fundamental to ability of the Moors for the Future Partnership to operate. The Moors for the Future Partnership runs a number of moorland restoration, research and awareness raising projects (thus contributing to achieving the objectives of the NPA) and has funding of between £11-13m over the next 5 years (including funding from the EU, agrienvironment schemes, private sector and NGOs) See case study 12 for more information.

NPAs also work with charities in order to maximise mutual objectives, for example the PDNPA has leased the Eastern Moors Estate to the RSPB and National Trust who will achieve greater outcomes at a lower cost to the NPA – for more detail see case study 13.

The NPAs provide advice and support to small local projects, helping them to access funding and thus bringing extra resources into the local community to help meet the objectives of the National Parks.

7.8.3 Leadership

Another role that NPAs play is in establishing and leading projects that are funded by others but which help contribute to the objective of the National Parks. Often the NPA can act as a catalyst bringing together interested parties who would not necessarily work together.

An example of this is the Peak District Fire Operations group and the response to flooding in Northumberland.

In September 2008 the North of Northumberland experienced a 1 in 150 year flood event which caused serious damage to infrastructure; roads, bridges and public

footpaths and affected communities and land managers in and around the National Park. A number of organisations responded to the damage but largely in an uncoordinated way with some agencies using emergency powers to speedily repair the damage but often at the expense of the environment or impact on the landscape; farmers and land managers unable to access the information they needed and community representatives asking for agencies to work more closely together.

Though not specifically responsible the NPA worked closely with Northumberland County Council Highways, the Environment Agency, Natural England, Tweed Commissioners and Tweed Forum to find ways of improving the joint response to this and future events. Whilst all of the agencies readily accepted the need for this joint approach and were keen to improve their service to the communities none but the NPA had the track record locally or connections to make it work. Over the succeeding months the various agencies relied increasingly on the Park Authority to lead the consultation with the landowners, farmers and communities.

In July of 2009 the same area of North Northumberland was hit by another extreme weather event and the Cheviot valleys within the National Park suffered more severe flooding damage. As the NPA had established its role as the key facilitator in the area it was quickly able to bring the agencies and the communities together. By chairing public meetings, leading river side walks to jointly look at solutions with agencies and representatives of the communities they were able to agree actions. As a direct result there was speedy but sustainable investment in the repairs to infrastructure and the restoration of farmland. This work took account of the impact upon the landscape, habitats and species and critically of the views of local people. All involved from the agencies and the local communities have acknowledged the invaluable role of the Northumberland NPA.

A major moorland fire in the Bleaklow area of the Peak District in August 1997, which burned for over two weeks, served as a catalyst for the formation of the Peak District Fire Operations Group as it was recognised that the risk of wild fires is likely to increase with climate change. The group includes the PDNPA, relevant fire services, National Trust, water companies, local landowners, a helicopter company and the Moors for the Future partnership. Wildfires can cost from £8,500 for a small fire close to an urban area, to a broad estimate of £132,000 for a typical fire in a remote location on a Pennine moor. A recent large event in the North-West just outside the National Park perimeter cost £1 million in public resources. This is the cost of putting out the fire alone and does not include the cost of the ecological damage caused.

Peak District Fire Operations Group (FOG) has compiled a programme of measures to deal with the risk of future wild fires including

• A fire plan for all areas of moorland in the National Park which provides information to help ensure rapid and effective response to wildfires.

- Ensuring the use of compatible material by all partners, for example, the same fittings for pumps and hoses.
- regular and appropriate training,
- developing a fire risk plan, produced by the Moors for the Future Partnership (www.moorsforthefuture.org.uk) in collaboration with The University of Manchester, which identifies locations on the moors where a fire is likely to break out (although it doesn't provide information on likely timing) which are subsequently closely observed and conduct 'Firewatch' observations, triggered by the National UK fire Severity index reaching level 5.

More information can be found in case study 14.

7.8.4 National Park Management Plans

A further area where NPAs show leadership is in the construction of their Management Plans. NPAs are legally required to prepare and publish a National Park Management Plan and the guidance states that in its preparation NPAs need to 'actively engage and gain the support of all key stakeholders who will assist in its delivery'⁷⁸. The role of the Management Plan is to guide the delivery of the National Park purposes and duty.

National Park Management Plans are the overarching strategic document for the National Park. They co-ordinate and integrate other plans, strategies and actions, and set the vision and objectives for the National Park which guide the park over 20-30 years and so set the framework for all policy and activity pursued by the NPA.

The key components of the management plan are a description of the role of the management plan, the key characteristics and special qualities of the National Park, the issues facing the Park and associated trends, the ambition of the National Park and the means for delivering that ambition.

By working with key stakeholders such as government agencies, regional government offices, Local Authorities, farmers, land owners, NGOs and local communities the NPAs are able to show leadership and promote the achievement of the National Park objectives through others. For more information see case study 15.

⁷⁸ The Countryside Agency (2005) <u>National Park Management Plans – Guidance</u>.

7.8.5 Conclusion

The ability of the NPAs to work with other public sector organisations, business and local communities to increase the resources dedicated to achieving the objectives of the National Parks result in greater benefits than the Defra grant in aid could achieve alone, and more resources dedicated to achieving the objectives of the National Parks than Local Authorities could provide.

7.9 Sustainable Communities

In 1995 a duty was placed on the NPAs when pursuing the two purposes 'to seek to foster the economic and social well-being of local communities within the National Park'.

The work of the NPAs with regards to sustainable communities can be divided into two, firstly working with communities to improve their local environment and economies and secondly working with businesses to improve their sustainability and reduce their environmental impact which in turn helps ensure the sustainability of local communities.

7.9.1 Community engagement

Community engagement is key to the NPAs achieving their objectives, this has been demonstrated in the sections on planning and third party funding. One example of how NPAs engage with the community and help foster development is the Northumberland National Park 'Action Area' approach the aim of which is to engage and empower citizens to enable sustainable communities.

The Northumberland NPA works with and through local communities using the 'Action Area' approach. It reflects both the central role of thriving communities in securing a sustainable future for the National Park and the fact that the special qualities express themselves differently from one part of the Park to another, creating areas of locally distinctive character. It recognises that broad and generalised prescriptions are unlikely to be the most effective way to maintain the rich variety of landscape, wildlife and cultural heritage and that action tailored to the local context will frequently be more appropriate.

'Action Area' working seeks to use local distinctiveness as a framework for engaging communities and other partners in the planning, care and management of local landscapes. It uses the knowledge, expertise and enthusiasm of local people and supports them with expert technical advice, help and funding to strengthen local connections between people and place.

The National Park is divided into four 'Action Areas' based on a mix of geographical and social factors. 'Action Areas' extend beyond the National Park boundary, as the 'gateway settlements' outside the Park are essential to maintaining strong and sustainable communities. Each of the action areas is allocated £25,000 annually from the NPA core budget to support small grant applications. The Authority's 'Action Area' fund helps establish and run local community and business initiatives that would otherwise not happen or would be significantly reduced in scope. Beyond providing funding, the Authority's 'Action Area' approach also builds community knowledge and capacity by sharing specialist advice.

In 2008/9 87 projects were undertaken under the 'Action Area' approach, the grant from the NPA for these projects totaled £81,689 and they received £444,442 in match funding resulting in a funding ratio of 5.44. Many other initiatives received advice and expert support from the Authority's staff.

An example of an 'Action Area' project is the Village Hall Welcome, Elsdon (further examples can be found in the Northumberland annex). The Elsdon village hall was in danger of being condemned but the community decided a final time to try and save it. Northumberland NPA provided practical help through Voluntary Rangers and Rangers and a grant of £1,200 through 'Action Area' funds towards the costs of materials which enabled the local community volunteers to make repairs, build planters and hanging baskets, and raise the standard of appearance of the hall. Local people came together on an unprecedented scale which created new social networks and a greater capacity to act. The Authority provided a further £1,800 towards small scale improvements which have allowed the hall committee to stage a community art project. The Authority has subsequently assisted the hall with advice and support to make a substantial funding application to the SDF, EON and other funds which has replaced the out-dated heating system with ground source heat pumps, built a new kitchen and insulated the roof. The Authority is continuing to work with the hall to transform the old games room into office space, remodel the car park and build a picnic area. This would not have been possible without the small sums (c. £3,000 over two years) available through the Action Area Fund which pump primed the process. The outcome is a more carbon efficient community building (environmental sustainability) and increased community capacity and cohesion (social sustainability).

The Princetown Village Centre regeneration project is a further example of how NPAs work with local communities to achieve the objectives of the National Park. For the past 20 years or so, the Dartmoor NPA has strived to assist the regeneration of Princetown, a settlement of less than 1000 people in the heart of the National Park. It was characterised by extremely poor environmental quality and the indices of multiple deprivation indicated considerable social and economic problems. The community felt it was unable to influence change. While problems still remain and work still needs to be done, great improvements have been made and the Authority has made a considerable contribution to the village's regeneration. This has involved support for a parish appraisal, the establishment and ongoing operations of a local development trust and undertaking a series of enhancement schemes. Crucially, it also included locating the Authority's flagship information and interpretation centre in a prominent building in the heart of the village, ensuring that its visitors and their spending helps to support local businesses.

The work was undertaken under a Local Strategic Partnership with the community, the Duchy of Cornwall and other agencies under the banner of 'Princetown Partners'. Through this partnership a number of significant improvements to services were achieved including the provision of a fare car scheme, increased access to training opportunities, business support, skills, back to work, debt & benefits advice, increased police liaison as well as support for child care and after school facilities.

In addition, two major projects have been undertaken in the village, the construction of a multi-functional community centre (the village centre – case study 16) and, through the redevelopment of a site in the heart of the village, the provision of a centre for creativity (the Duchy Centre – see case study 17). Both projects were completed in 2009.

7.9.2 Sustainable Business

The work of the NPAs in relation to sustainable businesses can be divided into two areas, firstly work to help ensure existing business have a positive impact on the National Parks (or minimise negative impacts) and secondly projects that help businesses take advantage of the benefits of being within a National Park. Work in both these areas help to ensure that the purposes of the National Parks are met by ensuring the landscape is conserved and that businesses are sustainable thus helping support local communities.

The Dartmoor Hill Farm project is an example where the NPA has helped to ensure that Hill Farms remain economically viable. This is vital to the conservation of the landscape in the National Park. Case study 18 sets out the detail of the project and shows that although the focus of the project is ensuring the viability of Hill Farming many other benefits have been realised from tourism to training.

The second area where the NPAs help develop sustainable businesses is by working with businesses to take advantage of the benefits of the National Park especially through tourism. Examples include the Peak District National Park New Environmental Economy programme and the Dartmoor Partnership.

Between 2002 and 2008 the Peak District National Park ran a New Environmental Economy Programme, the aim of which was to use a package of linked projects and schemes to encourage and support businesses in the Peak District National Park. The project combined funding from a variety of regional, national and European sources (20 in total) into a single budget of £3.75m. The programme operated through a Business Development Grant Scheme and ten special linked projects.

An evaluation of the programme⁷⁹ found that the majority (nearly 80%) of participating businesses were located in rural areas and 70% were outside the larger market towns. A total of 625 businesses participated in the scheme and businesses directly supported by the programme through grants created 132 new jobs and contributed to the maintenance or enhancement of 1,543 jobs. A fifth of participating business said that their businesses had increased by more than 10% and a further third said by up to 10%. The programme funded the creation of 2,880m³ of new workspace, helped to launch 193 new products/services and 70 new or improved facilities or attractions. However the evaluation found that the potential for strong advocacy of the special environmental qualities of the Peak District as a driver of business growth across the National Park was not optimised. This has been taken on board by the NPA within the successor programme 'Live & Work Rural'.

The Dartmoor Partnership was established to form a tourism and trade organisation in the National Park. The Dartmoor NPA (DNPA) was instrumental in firstly identifying the need for a formal partnership and crucially in writing funding bids which procured the necessary funding (£120,000 over 3 years) to establish the Partnership. Once a full time manager had been appointed the DNPA played an active role in their mentoring and in developing their work programme. Furthermore officers from the DNPA support the ongoing operation of the Dartmoor Partnership through management of the local sustainability initiative, Dartmoor First; joint promotion at local events; product development; brochure production and advice and support on a variety of Dartmoor matters (see case study 19 for further information).

7.9.3 Conclusion

Without specific evaluations of the projects undertaken around sustainable communities it is difficult to assign a monetary value to their benefits. Even with specific evaluation information it would not be possible to calculate the value of ensuring a sustainable economy or a more cohesive community. This is a difficulty that applies broadly and is not specific to NPAs. Nevertheless, it is clear that in order for the objectives of the National Parks to be achieved there is a need for sustainable communities with sustainable economies, ensuring that activities that provide public goods continue to be undertaken. And it is important that the NPAs continue to ensure that their work to ensure sustainable communities is used as a way of achieving the environmental and recreational objectives of the National Parks.

⁷⁹ Land Use Consultants (2008) <u>Independent Evaluation of the Peak District New Environment</u> <u>Economy Programme</u>, Peak District NPA.

7.10 General Economic Impact

NPAs impact the local economy through the money they spend both directly on employing staff but also with regards to the funding they distribute on specific projects i.e. construction. The presence of a high quality environment also has benefits to the local economy in addition to attracting tourism and recreation (the benefits of which are discussed in sections 7.4 and 7.5).

By employing local people directly and through contracts with local businesses the NPAs have an impact on the local economy. The section on cultural heritage illustrated the multiplier effect of spending on dry stone walls and traditional buildings. However it is difficult to establish whether this impact is greater than the impact the funding would have had should it have been used for another purpose or in an alternative way.

A study examining the economic impact of National Parks in the Yorkshire and Humber Region⁸⁰ found that the businesses in the Yorkshire Dales, North York Moors and Peak District National Parks generated £1.8bn of sales annually, supporting 34,000 jobs and contributing £576m of Gross Value Added⁸¹ to the economy. The paper also shows that compared to the region as a whole the National Parks have a slightly higher economic activity rate, a lower unemployment rate and a higher proportion of self employed individuals. There are a greater proportion of skilled workers and higher level occupations in the Parks than in the region as a whole suggesting that the National Parks attract more economically active individuals.

The work the NPAs undertake conserving the landscape and environment has an impact on the businesses within the National Parks. The Yorkshire and Humber study⁸² also found that 65% of business activity either directly or indirectly depended on the quality of the environment and 26% of businesses would be seriously affected by any deterioration. A study of the Peak District National Park⁸³found that 56% of the 300 business surveyed said that landscape and the environment had a major or minor impact on their businesses with 40% of business saying their performance would be seriously affected by a deteriorating landscape. These 40% of businesses contribute £408m in turnover and £155m in regional GVA supporting 7000 jobs. This

⁸⁰ Council for National Parks (2006) <u>Prosperity and Protection: The economic impact of National</u> <u>Parks in the Yorkshire and Humber Region</u>.

⁸¹ Gross Value Added measures the contribution to the economy of each individual producer, industry or sector in the United Kingdom.

⁸² Council for National Parks (2006) <u>Prosperity and Protection: The economic impact of National</u> <u>Parks in the Yorkshire and Humber Region</u>.

⁸³ SQW (2008) <u>Contribution of the Peak District National Park to the economy of the East Midlands</u>, East Midlands Development Agency.

highlights the impact the NPA work on maintaining a high quality environment can have on the local environment.

A limitation of studies such as those described above is the lack of a counterfactual. This means that studies such as these are useful to illustrate the number of jobs etc in the National Parks, however these are absolute figures and not a comparison with what the situation would be without the NPA (or even the National Park designation) and so should not be used to illustrate the impact of the NPA.

7.10.1 Conclusion

Although it is clear that the quality of the natural environment has an influence on businesses (which are most likely to be those reliant on tourism and recreation) the data limitations mean it is difficult to assess exactly how much of the GVA could be assigned to the work of the NPA.

7.11 Climate Change

The 2009 English NPA Association Statement on Climate Change⁸⁴ illustrates how the benefits of NPAs previously discussed can be applied and utilised to tackle new challenges such as climate change.

The statement sets out how the NPAs can contribute to climate change mitigation and adaptation through a sustainable approach to land management, the development of rural low carbon communities, adaptation to climate change at a landscape scale and by engaging with the public on issues and solutions around climate change. All these activities utilise the benefits of NPAs such as planning, education, engaging with local communities and conservation.

The conservation work of the NPAs can be harnessed to help prevent carbon release. For example NPAs champion and actively support work to prevent further green house gas emissions by maintaining and where needed restoring peat lands, fens, moors and woodlands. At present 119Mt carbon are held in the 449,000ha of peat soils in the National Parks, this is equivalent to England's entire emissions in a year. This is in addition to the 143,000ha of woodland in National Parks that store 7Mt carbon. As well as helping to maintain the current situation the NPAs have committed to supporting appropriate land management techniques that help to absorb carbon dioxide and other greenhouse gas emissions and will work with farmers to reduce their emissions which are estimated to be 410kt of carbon dioxide per year across the National Parks.

The NPAs use their planning powers to safeguard natural resources, promote appropriate renewable energy (for example small scale renewable energy which can help those in remote areas) and energy efficient measure and shape future development on the National Parks. The NPAs hope to move from isolated demonstration projects to a situation where renewable energy and energy efficiency is the norm in remote areas.

The NPAs also use their conservation work to protect and develop resilient habitat networks that allow the Natural Environment to adapt, providing ecological links within the National Parks and beyond. They also work to increase their understanding of how climate change and societies response to it will affect National Parks.

As section 7.6 demonstrated NPAs have established education networks and they use these to promote understanding of the climate change mitigation and adaptation

⁸⁴ ENPAA (2009) <u>Climate Change mitigation and adaptation in National Parks</u> http://www.enpaa.org.uk/enpaa_statement_on_climate_change_in_national_parks.pdf

work taking place and planned within the National Parks, this includes informing young people about the issues around climate change and the value of National Parks now and in the future. They also use their visitor centres and information points to engage with visitors on energy efficiency, sustainable transport and local food.

For more detailed information on the work of the NPAs in tackling climate change see case study 21 on the Cheviot Futures project in Northumberland National Park.

7.11.1 Conclusion

The benefits provided by NPAs such as education, community engagement and leadership can (and are) all being utilised to deal with new environmental issues such as climate change.

7.12 Sustainable Development Fund

The Sustainable Development Fund (SDF) is a grant scheme that supports new ways of living and working within National Parks in a sustainable manner. It seeks to promote sustainable development, partnership working and social inclusion among communities and businesses in ways that support the two statutory purposes of the National Parks. A further aim of the fund is that it develops models of sustainable development that can be applied more widely by other Local Authorities.

The SDF began in 2002 and the Parks each receive £200,000 per year to distribute to projects. In February 2010 Land Use Consultants completed an evaluation of the SDF⁸⁵, the information in this section is drawn from that report and further information can be found there.

Each NPA operates it SDF independently but all employ or contract a SDF officer to run the scheme. Funding decisions are made by SDF panels made up of members and representatives of local communities. Since 2002 1,235 projects have received funding from the SDF.

The overall findings of the evaluation are that 'the SDF programme in the English National Parks continues to fulfil its original objectives. These objectives remain relevant, allowing the SDF to address emerging policy priorities and the needs of communities. The NPAs should build on these achievements. They should seek to maximise the value from the SDF to deliver the purposes of the National Park designation and their socio-economic duty, and to support the priorities of their partner organisations.'

The evaluation highlights the following key achievements of the SDF⁸⁶

Administration: the SDF has been designed to minimise the administrative burden on applicants, making grant aid accessible to small community-based groups and businesses.

Support to applicants: Applicants with little previous experience of undertaking publicly funded projects find the 'hands on' approach taken by the SDF officers to be particularly helpful. Many projects also value the additional assistance (such as signposting to other initiatives and advice on project planning) that is available from and through the SDF officers.

⁸⁵ Land Use Consultants (2010), Evaluation of the Sustainable development Fund in the English National Parks 2002-2009.

⁸⁶ Taken from the executive summary of the report.

Delivering sustainable development: By requiring all projects to demonstrate a sustainable development approach (delivering a mix of economic, social and environmental benefits), the SDF encourages integrated policy outcomes and stretches the aspirations of projects that would otherwise seek narrower objectives. In this way, the programme continues to deliver the core purpose for which it was established by Defra.

Responding to new priorities: Emerging policy issues, such as climate change and renewable energy have grown to become one of the most significant topics addressed by the SDF. The experience gained from the SDF could put the NPAs in a good position (with additional funding) to deliver the Government's low carbon policies to communities in National Parks.

Providing support in small packages: Most SDF projects, and the grants awarded to them, are small compared to many other publicly funded projects. In this way the SDF supports community projects that cannot access other sources of funding. The SDF has shown that low levels of intervention can produce disproportionately high positive impacts.

Supporting innovation: By giving priority to innovative ideas and being prepared to take a risk on projects with no proven track record, the SDF often provides the first offer of funding from which other support, within communities or from other funders, is generated.

Drawing down funding from other sources: The SDF has typically 'unlocked' a relatively high level of matched funding from other sources (producing an average funding multiplier of 4.3). This compares favourably with other small grant schemes operating in rural areas. Over the seven years it has operated NPAs have received £9.9m in SDF, and have been able to lever in an additional £42.5m.

Engaging with communities: Community and voluntary groups have been the most frequent organisers of projects (accounting for just over a third of all projects). This is consistent with the original objectives for the programme set out by Defra.

Stimulating job creation: The SDF has proved effective at contributing to significant levels of job creation relative to the small amounts of funding involved, even though little attention has previously been drawn to this aspect of the programme. 340 jobs have been created from 198 projects⁸⁷.

Liaison within NPAs: Knowledge of the SDF and what it achieves is generally strong within NPAs, both at the level of Authority members and at a senior level amongst staff. This ensures that opportunities to link the SDF with delivery of NPAs' statutory responsibilities are generally good, leading to 'joined-up' delivery.

⁸⁷ Land Use Consultants (2010), <u>Evaluation of the Sustainable development Fund in the English</u> <u>National Parks 2002-2009</u>. Page 42.

Changing community perceptions of NPAs: The SDF has, over its seven years, contributed to a broader change in the way many organisations and individuals view NPAs and the National Park designation. The programme is contributing (amongst a range of other work) to a view of NPAs as 'enabling' rather than 'regulating' bodies.

The Evaluation also highlighted a number of challenges and opportunities including:

- Considering how the SDF can be more fully used to engage with communities in urban areas who experience barriers to accessing the Parks.
- Assessing how high levels of grants can be justified by the benefits produced. A standard set of 'exceptional circumstances' criteria should be agreed by the NPAs, through a working party of SDF officers, and confirmed with Defra.
- There is a need for NPAs to do more to promote the approaches pioneered by SDF projects through regional bodies and networks.
- Consideration should be given as to how benefits can be maximised by providing ongoing support on a collective basis.
- NPAs should build upon the existing relationships with other statutory organisations and the voluntary sector, both within and beyond the National Parks, so that the SDF is able to add more value to the programmes and priorities of these organisations.

7.12.1 Conclusion

From the evaluation it is clear that the Sustainable Development Fund is achieving its purpose and levering in significant additional funding for rural projects. But more can be done to ensure maximum value for money. The NPAs are developing an Action Plan in response to the report's findings and recommendations.

8. National Park Authorities contribution to Government Priorities

The National Park purposes to conserve and enhance the natural beauty, wildlife and cultural heritage of their areas; and promote opportunities for the understanding and enjoyment of the special qualities of National Parks by the public. The National Park Authorities (NPAs) in doing this have a duty to seek to foster the economic and social well-being of local communities within the National Park. Combined, this means that their activities contribute to a number of government objectives.

8.1 Contribution to Defra Objectives

With regards to Defra objectives the NPAs contribute to the objectives in the Defra Structural Reform Plan. These are

- To support and develop British farming and encourage sustainable food production. The NPAs work closely with Natural England to ensure that agrienvironment schemes have high uptake in the National Parks and help achieve the National Park objectives – see section 7.3 for more information.
- Help to enhance the environment and biodiversity to improve quality of life. The work of the NPAs on protecting and enhancing the natural environment through their work on biodiversity and landscape contribute to the achievement of this priority – see section 7.3 for more information
- Support a strong and sustainable green economy, resilient to climate change. The work of the NPAs in sustaining a high quality environment that is the underpinning for much economic activity in the National Parks contributes to this agenda – see section 7.10 and 7.12 for more information. The NPAs are also working with rural communities to develop small scale renewable energy and leading plans for adapting to climate change within the National Parks – see section 7.11 for more information.

8.2 Contribution to Other Government Department Objectives

Tables 24 shows how the work of the NPAs contributes towards the objectives of other non Defra Government priorities.

It is clear from this table that the NPAs contribute to a number of government objectives in addition to Defra's. Specifically the Treasury (HMT), the Cabinet Office Page | 104

(CO), the Department for Business, Innovation and Skills (BIS), the Department of Health (DH), the Department for Education, Department for Communities and Local Government (DCLG) and the Department for Energy and Climate Change (DECC).

The NPAs are able to adapt and use their local expertise; knowledge and network to respond to changing government priorities such as climate change (see section 7.11)

Priority	Lead Department	Ways the NPAs contribute
Ensuring high and sustainable levels of economic growth, wellbeing and prosperity for all.	HMT	Through their support of tourism and recreation, farmers and local produce, by helping to pump prime sustainable businesses and running apprenticeship schemes.
Support the building of the Big Society by encouraging volunteering and involvement in social action	CO	Through the volunteering opportunities that they provide (over 44,800 volunteer days across the ten National Parks in 2009/10), by supporting local community projects through LEADER, providing funding for local enhancements proposed by Parish Councils, and helping the voluntary sector to manage key areas within National Parks.
Raising the quality and scope of apprenticeships	BIS	The NPAs work with partners to support and deliver schemes such as the Duke of Edinburgh Award, apprenticeships and work experience placements.
Improving the education and well-being of children and young people	DfE	NPAs provide formal and informal learning opportunities for all ages and abilities. This includes providing opportunities for physical activity and outdoor experiences, enabling them to learn new skills and promoting safe and responsible behaviour outdoors. The NPAs promote the Learning Outside the Classroom initiative and support and deliver teacher training in relation to outdoor learning, the environment

Table 24: NPA contributions to non Defra Priorities

Priority	Lead Department	Ways the NPAs contribute
		and sustainable development. In 2006/7 the National Park Education Services engaged with 72,000 children and young people ⁸⁸ .
Promote better public health	DH	The NPAs provide programmes of walks, opportunities for volunteering (including work with social services for health related volunteering), and provide recreational facilities (such as bike hire) and information. They have projects to increase accessibility through removing stiles and other obstacles and surfacing work. The Peak District NPA for example has developed over 40 miles of easy access trails. They also are working on initiatives aimed at specific target groups. The Mosaic Partnership, for example is providing funding, leadership and organisational support for Community Champions who then promote the use of National Parks for outdoor recreation amongst under-represented groups.
Making localism and the Big Society part of everyday life through meeting people's housing aspirations, putting communities in charge of planning, and increasing accountability	CLG	On housing, NPAs adopt planning policies that aim to ensure local dwellings are retained as affordable in perpetuity as well as making sure applications for new housing are of a type that will respond to parish housing needs surveys. On planning, the NPAs invest considerable effort in pre-application advice, in providing planning surgeries in the evenings and at remote locations, and in running training days for Parish Councils on the planning system. NPAs undertake extensive participation exercises (including Planning for Real) to ensure local people can influence local planning policies and the priorities of the National Park Management Plan. In terms of accountability, the NPAs are visible and engaged with the local communities through a variety of mechanisms (e.g. staff being accessible to the public, establishing a range of forums with

⁸⁸ From ENPAA

Priority	Lead	Ways the NPAs contribute
	Department	independent chairs, providing regular information to residents on performance, seeking feedback through surveys; proactively meeting Parish Councils etc.).
Deliver ambitious action on climate change at home and abroad and securing energy on the way to a low carbon energy future	DECC	The NPAs contribute to reducing domestic emissions, securing carbon stores and communicating the effects of climate change through education of visitors and those who live and work in the Park, adopting stretching targets themselves, working with partners to reduce emissions and having ambitious tree planting plans. They have supported local communities' aspirations for renewable energy (e.g. North York Moors Community Renewable Project); commissioned studies themselves on the potential hydro power; and allocated £2.8 million since 2002 into renewable energy projects through the Sustainable Development Fund.
Supporting the tourism industry; protecting the historic environment for future generations and increasing people's understanding, appreciation and enjoyment of it; and delivering the role out of universal broadband.	DCMS	The NPAs promote sustainable tourism and work closely with the industry. The NPAs seek to ensure tourists have high quality experiences that contribute towards their understanding of the National Park; that negative environmental impacts are minimised; and that the economic benefits from tourism support local economies. The National Parks are home to an abundance of historic sites, landscapes and heritage. NPAs work to protect, restore and enhance these assets and encourage improved public understanding of them - through specific restoration projects (often in partnership), the operation of their planning functions, provision of advice, and seed corn funding for community projects. NPAs are also working in partnership with ICT providers on universal broadband, and seeking to ensure resident communities of National Parks benefit from this technology.

9. Alternative Funding Mechanisms

The ability of National Park Authorities (NPAs) to generate income is dependent on a number of factors including;

- the asset base
- visitor profile
- national systems i.e. rates for planning fee
- compliance with legislation i.e. state aid rules

Currently NPAs raise revenue through a number of different mechanisms namely fees and charges, 'trading', visitor payback and private sector partnerships.

9.1 Fees and Charges

Fees and charges income comes from planning fees, car park charges and services such as guided walks, room hire, filming rights etc.

Planning fees are a key source of income for NPAs. The fee level is set at a national level by DCLG. Although some local planning authorities charge for pre-application advice at present many NPAs provide this free of charge as it is felt that to charge for this advice could reduce take-up and actually increase costs.⁸⁹

Income raised through planning fees has reduced in the recession. This is due to a reduction in the number of larger planning applications (which attract a higher fee) and an increase in householder developments which attract a lower fee. Dartmoor NPA received £206,234 in planning fee income in 2006/07; £141,884 was received in 2009/10.

Many NPAs levy a car parking charge or actively seek donations. Such charges/donations have often been instigated as part of wider visitor management/conservation programmes with income generated used to fund footpath restoration or public transport programmes. In addition charges have been used as an incentive to encourage modal shift. The North York Moors NPA charges £2.20 at 8 car parks raising over £300,000 in 2009/10. They also actively support the MoorsBus programme that provides an extensive and viable alternative to travel by the private motor car.

⁸⁹ Some LPAs who have introduced charges for pre-application advice have found that their costs have increased and the time taken to process an application increased due to poor quality submissions.
The ability to raise income through such charges depends on the asset base (not all NPAs own car parks) and local circumstances.

9.2 Trading

All NPAs are involved in trading activities (but to different degrees) including through the sale of publications, the provision of cycle hire, licenses for mobile vending and café outlets in visitor centres. Dartmoor NPA generated sales through its three information centres worth £152,528 in 2009/10 (this is not a net profit figure) – an increase of 6.5% on 2008/09. The North York Moors NPA generates approximately £50,000 through licenses to operate tea rooms at the visitor centres run by the NPA.

The ability of NPAs to generate income through trading depends on local circumstances such as ownership of assets and impacts on local businesses. NPAs try to maximise 'trading income' within the constraints of statutory powers. NPAs also need to ensure they do not deter people within the National Park, and therefore there are additional risks associated with some of these measures. For example, the Peak District are working with the East Midlands Development Agency to develop a business opportunity for a new range of cycle hire facilities, refreshment concessions and related marketing opportunities.

9.3 Visitor Payback

There are voluntary visitor payback schemes in many National Parks. These are often operated by third parties. For example, in the Lake District the visitor payback scheme has been operated through the Tourism and Conservation Partnership (originally constituted as a charitable company). The Partnership has over 240 business members who, with the help of their visitors/customers, contribute over £120,000 each year to conservation in the Lake District and Cumbria. A key part of the scheme's success has been the focus on giving for practical conservation work.

9.4 Private Sector Partnerships

Until the recession private sector partnerships had been a growing area of income generation for NPAs. For example, Dartmoor and Exmoor NPAs helped to secure with other partners from South West Water £3.8m for a Mires for the Moor project to support delivery of certain ecosystem services. The project was developed with South West Water as lead partner as part of the Price Review 2009 process. It is the first time that OFWAT have accepted a business case for investing water

company money on land not owned by the company. The money will be used to fund restoration of upland catchments (primarily blanket bog/mires) to generate downstream benefits of improved water quality thereby reducing costs for the water company. Both NPAs are now working with South West Water (and Natural England) on a model for a private sector agri-environment scheme which would provide revenue payments to landowners/managers.

9.5 Future funding possibilities

As the Mires for the Moors project illustrates there is an increasing interest in payments for ecosystem services. As National Parks contribute to the delivery of a wide range of ecosystem services (e.g. clean water, carbon storage, recreational and educational opportunity, biodiversity, high quality food etc.) it is possible that in the future a revenue stream could be established for providing ecosystem services such as clean water or as a provider of biodiversity offsets.

In the past some National Parks have considered a congestion charge as a way of both raising revenue and also helping deal with congestion causing local damage in National Parks.

Another potential source of income may, in future, come from renewable energy on NPA land/ buildings through the use of the feed-in tariff. This would currently require a change in legislation but would enable NPAs to generate income (as Local Authorities will soon be able to) from installing micro-generation projects. Related to this, there is scope to explore how the desire by the private sector to invest in domestic low carbon projects (such as tree planting) might be linked to the National Parks.

There is an increasing interest in the establishment of charities to provide public goods such as recreation. Through this mechanism those directly benefiting from the recreational benefits pay for them rather than society as a whole.

This model has already been taken up by the Cairngorms National Park who has established a charitable trust to undertake works on access infrastructure which would usually be carried out by the NPA, the Cairngorms Outdoor Access Trust (COAT)⁹⁰. 'The objective of the Trust is to manage, advance and effect the sustainable development and improvement of access infrastructure and associated facilities, including provision of information, the facilitation of sustainable transport and the development of linkages to wider recreation, health improvement and business opportunities, for the benefit of the residents and visiting public, delivery of the mission being at all times compatible, complementary and contributory to the

⁹⁰ http://www.cairngormsoutdooraccess.org.uk/

conservation and enhancement of the natural and cultural heritage of the Cairngorms National Park.⁹¹

COAT is seen to be an innovative environmental charity promoting sustainable access to the Cairngorms area. The company has five main strands of activity:

- Community Path Networks upgrading paths and developing new paths in, around and between communities to facilitate more and higher quality access opportunities for locals and visitors.
- Upland Paths repairing eroded paths in the mountains so that access can be sustained without damaging the landscape and environment.
- *Walking To Health* developing a suite of structured health walks.
- Strategic Routes delivery of strategic long distance routes.
- *Promotion and Interpretation* -providing information about Outdoors Access through leaflets, interpretive boards and signposting.

Since its formation 2 years ago COAT has secured funding from a wide range of sources, including ERDF and possibly in the near future the Heritage Lottery Fund. Should this approach continue to be successful this is a model that could be considered by other National Parks in the future.

⁹¹ From the draft framework document for the establishment of the trust.

10. New National Park Indicators

From 2009/10 National Park Authorities (NPAs) have collectively agreed a set of 22 common indicators that will be collected across the National Parks. The list below describes the indicators and indicates whether it may be possible to assign monetary values to these new indictors. This shows that while those more outcomes focused indicators will be helpful for Defra, Natural England, ENPAA and NPAs, there are very few of the indictors which are amenable to monetary valuation.

Indicator	Indicator Description	Possible to place monetary
Reference		values on the indicator?
PI CH 1	a) No. of Conservation Areas	a) no
	b) % of Conservation Areas with up-	b) no
	to-date character appraisals	
PICH2	a) No. of Listed Buildings "at risk"	a) no
	rescued during the year	b) no
	b) % of Listed Buildings "at risk"	
	rescued during the year	
PI (Ctx 2)	a) No. of Listed Buildings	a) no
	b) No. of Listed Buildings "at risk"	b) no
PICH3	a) No. of scheduled monuments 'at	a) no
	risk' rescued during the year.	b) no
	b) % of scheduled monuments 'at risk'	
	rescued during the year.	
PI (Ctx 3)	a) No. of scheduled ancient	a) no
	monuments	b) no
	b) No of scheduled ancient	
	monuments 'at risk'	
PI NE1	% of SSSI Land in 'favourable or	a) no
	recovering' condition in	b) no
	a) NPA Management	
	b) the National Park as a whole	
PI (Cxt 1)	a) Area of SSSI Land in the National	a)no
	Park	b) no
	b) Area of SSSI in NPA management	
PI CD 3	CO ₂ reduction from NPA operations	Carbon prices could be used
		to calculate the value of this
		reduction.
PI CD2	Member participation in attending	no
	committees	

Table 25: New NPA Indicators

Indicator	Indicator Description	Possible to place monetary
Reference		values on the indicator?
PI CD 1	No. of working days/shifts lost due to sickness absence per FTE	no
PI DC 2	% of planning applicants satisfied with the service received	no
PI (Ctx 6)	No. of planning applications received	no
PI DC 1	 % of planning applications by type dealt with in a timely manner: a) major applications determined within 13 weeks; b) minor applications determined within 8 weeks; and c) other applications determined within 	a)no b)no c)no
PI PU2	 8 weeks. % increased understanding of what is special about National Parks for users of "promoting understanding services" 	no
PI PU1	% satisfaction rating for users of 'promoting understanding' services	no
PI PU3	% of Users of 'promoting understanding' services from under- represented groups: Young People [5-24], Minority Ethnic Groups, People with limiting long term illness or disability	no
PI (Cxt 5)	No. of users of 'promoting understanding' services Promoting understanding services are: National Park Centres wholly-owned and/or operated by the NPA the main Authority website, and any sub-sites organised and/or managed by the Authority. walks, talks and events for the public that are organised and/or managed by the Authority; and, All education events, programmes and activities organised and/or managed by the Authority. This includes outreach activities for specific groups	no

Indicator Reference	Indicator Description	Possible to place monetary values on the indicator?
PI (Cxt 4)	Total Length of Footpaths and other Rights of Way	no
PI RM 1	% of the total length of footpaths and other rights of way, that are easy to use by the general public (even though they may not follow the exact definitive line).	no
PIRM2	% of total length of footpaths and other rights of way, that are easy to use by the general public; and follow the exact definitive line.	no
PI RM 3	a)Total No. of volunteer days organised or supported by the NPA b)No. of those days attended by 'under represented' groups: Young people [5-24], Minority ethnic groups, People with limiting long-term illness or disability	a)Yes – see section 7.2 for methodology b)no

11. Next Steps and further areas of research

The process of developing this report has highlighted some key area in which further information gathering and research is needed. One of the key the barriers in quantifying and monetising the benefit of National Park Authorities (NPAs) are the lack of quantified outputs that can be valued. As illustrated in the list of new National Park indicators it is not anticipated that this will change. If monetised benefits are required in the future, a programme of work would be required to determine what the priority areas are for analysis and what output/monitoring and monetary valuation data would be needed for this to be possible.

11.1 National Park Data

It is often costly for NPAs to collect their own data and therefore they often rely on the relevant national agencies to provide them with the data they need. The Data Protection Act means that the legal data holder is often a government department or Agency such as Defra, the Forestry Commission or English Heritage and as such the NPs often find it difficult to access timely data.

Specifically NPAs are responsible for providing sound evidence to support National Park Plans and Local Development Frameworks. However, the data that is conventionally available to Local Authorities is not always available cut to National Park boundaries. Progress has been made with the agencies concerned but there are still some significant areas where data is not available cut to National Parks and where obtaining it can be costly. This includes some socio-economic data, for example, improvements in data from the Census, house prices and earnings data are needed to consider housing affordability. The most recent National Parks Circular specifically calls on data providers to collect, analyse and update data by Park area.

Evidence gathering with regards to SSSIs was limited by time constraints. Further work is needed to gather evidence to show the impact of the NPAs on the condition of SSSIs within the National Parks.

11.2 Monetary values

The WTP values for recreation do not include the health benefits of additional recreation in the natural environment. At present it is not possible to value the health benefits of recreation undertaken in the National Parks. Research is required to

establish a methodology for valuing these benefits and more data on recreational users may be required from the National Parks for this to be possible.

The methodology developed by eftec (and used in section 7.5) could be further refined applied to all NPAs to give a comprehensive view of the benefits from the NPAs spending on recreation, as could the methodology developed for valuing volunteers (section 7.2). Natural England's Ecosystem Service Pilots are looking to map a range of ecosystem services. The pilots include the Lake District National Park, and the two South West National Parks (Dartmoor and Exmoor). These may provide further useful information in future on which to calculate the range of public benefits being provided.

12. Conclusions

The aim of this work was to improve the economic and social research evidence base relating to the English National Park Authorities (NPAs) and provide evidence to help address the following four key questions.

- What are the broad economic, social and environmental benefits associated with NPAs? (section 6).
- What is the added value of NPAs including examination of the costs associated with the NPAs statutory duties and the public benefits provided by NPAs (section 7).
- To what extent does NPA spending reflect Defra/Government priorities and is there any evidence to highlight key areas for reprioritisation to deliver more cost effectively or to achieve enhanced levels of benefits in the future (sections 8).
- Are there any longer term opportunities for alternative funding possibilities for NPAs e.g. payments for ecosystem services, bed tax, entrance fees, source of credits in biodiversity offset banking scheme etc (section 9).

12.1 What are the broad economic, social and environmental benefits associated with NPAs?

Section 6 of the report identified the following benefits of NPAs

- Non Use values⁹²
- Option Values
- Recreation and Tourism
- Health and Wellbeing
- Better informed society
- Regulating services
- Rural development
- The economic impacts of national Park spending on the local economy
- Social inclusion
- Transparency and democracy

12.2 What is the added value of NPAs?

⁹² Although it is very difficult to distinguish non use values for the services/benefits provided by NPAs and the non use value for the National Park designation itself.

Section 7 of the report analysed the added value of the NPAs. When considering the added value of the NPAs it is useful to refer to the reason that NPAs were introduced in 1995. The report that recommended the establishment of NPAs said that 'we believe the balance of advantage clearly lies with organisations of independent status for all parks. We also suggest that the independent authorities should be formally titled NPAs. Our decision was influenced to some degree by evident administrative difficulties and inefficiencies of long standing in some parks, resulting from existing county council procedures'⁹³.

As evident in section 7 the nature of the work of the NPAs means that it is often not possible to place monetary values on the benefits of the NPAs. This is due to: the difficulties in establishing a clear baseline; the fact that monitoring is costly and therefore not always cost effective to implement; the complexity of the work that NPAs carry out both with regards to environmental and social benefits where monitoring additionality can be complex and the subtle impacts that NPAs have that are difficult to quantify, for example their working with local groups to help them access relevant funding streams. In addition it can be argued that with regards to NPAs it may be that the whole is greater than the sum of the parts and therefore using a methodology that segments the work of the NPAs could underestimate their total impact on the National Parks.

The challenges to quantifying and monetising the added value of the NPAs does not mean that they have no impact but just that their impact is difficult to quantify. Where evidence that is amenable to economic analysis is not available, section 7 illustrates the benefits of NPAs with case studies and narratives. For each of the benefits identified and analysed the conclusion and any economic valuation evidence is set out below.

Volunteers – The work of the NPAs with volunteers can provide NPAs with a source of labour and an opportunity to engage with the local community and target groups. Volunteers gain a benefit from volunteering which has been estimated at between £88,831 and £165,229 per year for Dartmoor, £419,915 and £781,056 for the Peak District and £51,888 and £96,513 for Northumberland (there are also possible health benefits which have not been estimated). This is the benefit to the individual volunteer rather than a benefit to the NPA as it is not possible at this time to value the outputs of the activities undertaken. Without the NPAs, volunteering within the National Parks may not be as focused on achieving the National Park objectives.

Conservation: biodiversity and cultural heritage – The NPAs use their own funding as well as the Environmental Stewardship scheme to help achieve the National Park objective to conserve and enhance the beauty, wildlife and cultural

⁹³ National Parks Review Panel (1991) <u>Fit for the Future: report of the National Parks Review Panel</u>, CCP 334, ISBN 0 86170 291 3 Page 97/98

heritage of the National Parks. Valuation of the benefits of NPAs in this area is difficult without evaluating specific projects, however analysis found that:

- The annual value of additional upland SSSIs in favourable condition in the National Parks compared to the region is estimated to be around £9m; however this figure should be treated with caution due to the assumptions that under lie it.
- The trees planted by the NPAs have carbon sequestration value. For example the present value benefit of the carbon sequestered by the 115ha of broadleaf woodland planted over 8 years by Dartmoor NPA is £2.3m.
- The NPAs work with Natural England to help ensure that agri-environment schemes help achieve the National Park purposes and as a result on average there is 10% more land in HLS agreements in the National Parks compared to the regions.
- The NPAs also contribute to the conservation and restoration of cultural heritage, this work has an impact on the local economy as well as the landscapes of the National Park. For example in 2008/9 Dartmoor NPA spent £10,084 repairing 6 traditional buildings, the benefit of this can be estimated as £20,168 to the local economy and £29,244 to the wider local economy.

Tourism – The contribution of the NPAs to the tourism industry in the National Parks is difficult to identify as many tourists would visit the National Parks even without the information and facilities provided by the NPA. The NPAs add value in promoting sustainable tourism and for the less known National Parks they help to promote the Park as a tourist destination (although this could be undertaken by a Tourist Board in their absence although they would not necessarily focus on the needs of the National Park). The work of the NPAs in achieving the first purpose also helps to ensure that individuals want to visit the National Parks, however it is not possible to quantify these impacts. Analysis found that:

- The National Parks receive 75million visitors annually.
- Using visitor centre numbers as an indicator of the number of visitors visiting the National Park as a result of the NPAs it is estimated that visitor spend attributable to Dartmoor NPA may be £9.7m and £7.9m in Northumberland. As Northumberland spends approximately £900,000 on tourism annually this gives a cost benefit ratio of 1:9.

Recreation – The facilities provided by the NPAs such as toilets, car parks, multiuser trails and sign posted and downloadable walks enable individuals to access the National Parks for recreation. Initial scoping analysis illustrates that value transfer can be used to estimate cost benefit ratios for recreational spending based on a number of assumptions/available data.

- Initial scoping analysis for the benefits of NPA recreational activities estimated the benefits to be valued at £3-5m for the Peak District, £0.6-1.1m for Dartmoor and £0.4-0.7 for Northumberland.
- When wider benefits of recreation were considered this increased to £36m for the Peak District, £4.1-4.7m for Dartmoor and £4.4-4.8 for Northumberland.
- When these wider benefits are compared to the total Grant in Aid of the NPAs (which cover spending on all activities not just recreation) an illustrative cost benefit ratio of 1:4 was calculated for all Parks. Further detailed analysis is needed to provide robust estimates.

Education, skills and training – The NPAs provide education to the general public on both the qualities of the National Parks and wider environmental issues however it is not possible to identify the impact of this education. The NPAs also train individuals in skills that are needed to ensure the landscape of the National Parks is maintained but for which there is a shortage of skilled supply, for example dry stone walling. Without the co-ordination and leadership of the NPAs in this area it is unlikely there would be a focus on sustaining these important skills. Although successful schemes have led to employment creation it is not possible to place a monetary value on these benefits.

Planning – Although the speed of planning performance statistics for the NPAs do not always compare favourably with those of the relevant region, the benefit of a cohesive approach to planning in the National Park and focus on community engagement when drawing up planning policy helps ensure the objectives of the National Parks are met. Without the NPAs it is unlikely that such deep participation would take place and there is a risk that there would be a fractured approach to planning across the National Park which may put at risk their special qualities. It is not possible to place a monetary value on these benefits.

Leadership and third party funding – The ability of the NPAs to work with other public sector organisations, business and local communities to overcome collective action problems increases the resources dedicated to achieving the objectives of the National Parks than the Defra grant in aid alone, and more resources dedicated to achieving the objectives of the National Parks than Local Authorities could provide. This is achieved through the ability of the NPAs to lead projects that would not have otherwise been established as well as levering extra funding into the National Parks (for example the Northumberland Area Action Approach has a multiplier of 5.44).

Sustainable communities – Without specific evaluations of the projects undertaken around sustainable communities it is difficult to assign a monetary value to their benefits. Even with specific evaluation information it would not be possible to calculate the value of ensuring a sustainable economy or a more cohesive community. In order for the objectives of the National Parks to be achieved there is a need for sustainable communities with sustainable economies and it is important that Page | 120

the NPAs continue work to ensure that sustainable communities are utilised as a way of achieving the environmental and recreational objectives of the National Parks.

General economic impact - It is not possible to identify the impact of the NPAs on the local economies of the National Parks. Studies currently available tend to estimate the absolute value of the economy in the National Parks rather than the impact of the NPAs for example a study examining the impact of the National Parks in the Yorkshire and Humber region found that businesses in the Parks generated £1.8bn of sales annually, supporting 34,000 jobs and contributing £576m of gross value added (GVA). Although it is clear that the quality of the natural environment has an influence on businesses (especially those reliant on tourism and recreation), because of lack of data it is difficult to assess exactly how much of the GVA could be as a result of the work of the NPA.

Climate Change - The work of the NPAs on the issue of climate change illustrates how the NPAs can use their expertise, local knowledge, partnerships and other skills to tackle new issues on the ground, providing a test bed for new technologies and approaches and helping to educate the public.

Sustainable Development Fund - The evaluation of the Sustainable Development Fund found that 'the SDF programme in the English National Parks continues to fulfil its original objectives. These objectives remain relevant, allowing the SDF to address emerging policy priorities and the needs of communities. The NPAs should build on these achievements. They should seek to maximise the value from the SDF to deliver the purposes of the National Park designation and their socio-economic duty, and to support the priorities of their partner organisations.' In addition the SDF achieves a funding multiplier of 4.3.

Section 7 of this paper illustrates the varied, complex and interconnected nature of the benefits of NPAs and the difficultly in monitoring, quantifying and monetising them. It presents evidence that the local knowledge of NPA members and staff plays an important role in the NPAs maximising the benefits within the National Parks. Analysis of the benefits of NPAs suggests that some benefits would be lost or reduced under the counterfactual of no NPAs and statutory duties transferred to the relevant Local Authorities. However, due to the complex nature of NPAs and the work they do it has not been possible to quantify and monetise many of these benefits.

12.3 To what extent does NPA spending reflect Defra/Government priorities?

The NPAs contribute to a number of government objectives in addition to Defra's. Specifically the Treasury, the Department for Business, Innovation and Skills, the Department of Health, the Department for Culture, Media and Sport, the Department for Education, Department for Communities and Local Government and the Department for Energy and Climate Change.

The NPAs are able to adapt and use their local expertise, knowledge and network to respond to changing government priorities such as climate change

12.4 Are there any longer term opportunities for alternative funding possibilities for NPAs?

Future funding possibilities for NPAs vary for funding from Payments for Ecosystem Services (such as biodiversity offsets, water purification and carbon sequestration), tourist taxes, congestion charges and possible mutualisation for some functions. As the Cairngorms NPA have already established a charitable trust for outdoor access their progress and achievements should be closely followed in order to assess whether this could be an appropriate alternative funding mechanism for the English NPAs.

12.3 Challenges to valuing the benefits of NPAs

As can be seen from section 7 it is often not possible to place monetary values on the benefits of NPAs due to the nature of the work and the lack of quantified outputs.

The situation compared to the counterfactual is also difficult to determine. It has been assumed throughout the paper that without the NPAs the regulatory framework would remain but the statutory responsibilities of the NPAs would be transferred to the relevant Local Authorities. As such it is assumed that the purposes of the National Parks would not be prioritised as highly and therefore the resources focused on achieving National Park objectives would be reduced thus leading to reduced outcomes.

However in reality it is not clear how the absence of NPAs would affect the objectives of the National Parks being met. As demonstrated in section 7 the NPAs increase the levels of benefits they can provide through the involvement of other organisations such as Local Authorities and Natural England. It is therefore very difficult to assess what the benefits of NPAs are over the counterfactual for example without the NPAs volunteers are likely to continue to volunteer (probably within the Park) through environmental or cultural third sector organisations, Natural England would still pay particular attention to Environmental Stewardship schemes within the

Parks and as some Local Authorities already work in Partnership with the NPAs and so their interest in the National Parks may not reduce. Therefore although the benefits of NPAs have been identified it is not possible to robustly analyse the exact impacts that they have.

This paper has highlighted the differences in which the NPAs monitor and measure their expenditure and outputs. If there are certain areas in which it is important to identify, quantify and monetise the benefits of NPAs it may be advisable for the NPAs to consider a consistent monitoring approach beyond the performance indicators already agreed and there may be a need to commission primary economic valuation studies in order to be able to place monetary values on the benefits for example in the area of recreation.

Therefore to conclude it is not possible to provide a full cost benefit analysis on the NPAs due to data and methodological issues, however initial scoping analysis on recreation alone suggests that the NPAs have a positive cost benefit ratio. Other areas such as planning also suggest that NPAs provide additional benefits although it is not possible to quantify and monetise them.

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Annex 1: Definitions of use and non-use values

As can be seen in Diagram B (section 5.2) Total Economic Value is divided into use and non-use values. Use values are divided into direct use, indirect use and option values.

Direct use is where individuals make actual or planned use of National Park services. These can be for consumable goods such as timber or wheat or non-consumptive goods such as recreation. These goods can either be traded on markets (such as wheat) or there may be no formal market for the good (such as recreation).

Indirect use value is where individuals benefit from ecosystem services supported by a resource rather than directly using it. These services include life support functions such as the regulation of the chemical composition of the atmosphere, water regulation, pollution filtering etc. Measuring these values is often significantly more challenging than measuring direct use values. Changes in the quality or quantity of a service being provided are often difficult to measure or poorly understood.

Option Value is the value that individuals have on the option to use the resource in the future even if they are not current users. These future uses may be either direct or indirect. For example individuals may be willing to pay for continued activities of the National Park Authorities even though they have no specific intention to visit the Park, but they are willing to pay to keep the option open in the future. It can also be with regard to the value of maintaining ecosystems that may have possible uses in the future but that are not yet known.

Non-use values are divided into bequest vales, altruistic values and existence values and are often referred to as passive use values. Non-use values can be challenging to capture as individuals find it difficult to but a price on such values. However the non-use value can be more important than the use value and therefore it is important that they are considered.

Bequest value is where individuals attach value from the fact that the resource will pass onto future generations

Altruistic value is where individuals attach values to the availability of the resource to others in the current generation.

Existence value is derived from the existence of the resource, even though an individual has no actual or planned use for it.

Annex 2: Maps of National Parks and overlaps



Map 1: Less Favoured Areas and National Parks

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Map 2: National Parks, Less Favoured Areas, World Heritage Sites and Areas of Outstanding Natural Beauty



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Map 4: Biodiversity Designations (Ramsar sites, SACs and SPAs) and National Parks





Map 5: Ramsar Sites and National Parks



Map 6: Special Areas of Conservation and National Parks



Map 7: Special Protection Areas and National Parks

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Map 8: National Parks and SSSIs



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Map 9: Moorland and National Parks



Map 10: Forestry and National Parks



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Map 11: National Inventory of Woodland and Trees and National Parks





Map 12: National Parks, AONBs and Scheduled Ancient Monuments

Map 13: Light Pollution and National Parks





Map 14: Settlements of 50,000 and National Parks



Map 15: Settlements of 100,000 and National Parks



Map 16: Settlements of 250,000 and National Parks


Map 17: Urban Land Settlements and National Parks



Map 18: Rights of Way and National Parks

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Annex 3: Case Studies

Case Study 1: 40mph limit

Name of	Introduction of the 40mph limit on Dartmoor	
Scheme		
Aim and	The 40 mph limit for unfenced roads across Dartmoor was first	
Objectives	proposed by the National Park Authority working with Devon County Council as part of the joint Dartmoor Traffic Management Strategy in 1994. The aim was to encourage more careful driving across Dartmoor using gateway signs, backed by zonal speed limits on unfenced moorland roads where there was an animal accident problem. The perception was that speeding was a contributory cause of the animal deaths.	
	Nearly 100 miles of moorland roads now have a 40mph speed limit.	
	 The introduction of the speed limits led to reductions in the average speed of motorists (of 8% from a 50.3mph to 42.4mph) and also reductions in stock losses (about 27% from 105 to 77 according to sample information from graziers.) However speeds have started to increase as time has gone by and animal losses still give cause for concern. This has led to a fresh initiative, led by the National Park Authority with support from the Dartmoor Livestock Protection Society (DLPS) and Devon County Council which seeks to : Collect information on the speeds of vehicles passing through known accident areas using speed activated road signing (speed visors) Raise awareness of the 40mph limit using the signs and enhanced signing at key locations with a view to seeking to reduce speeds on moorland roads at least back to the levels achieved following the initial introduction of the 40mph limit if needed 	
Cost	Three speed visors have been purchased by the DLPS at a total cost of £9000, the last of these in 2008/9. The Authority's costs in 2008/9 were related to the installation of sockets for the visors, the provision of additional signing both attached to the visor installations themselves and in relation to the entrance to a stretch of moorland where speeds are highest and the animal accident problem greatest. The total costs were £900. Other costs were related to management of the speed visors, maintenance of the visors, installation of additional sockets and data capture and distribution. For this there was budget of £500 in	

	2008/9 and a total of 8FTE days of staff time over the year were spent
	on the various aspects of this work.
Benefits	Many and varied. The process has been extremely well received by commoners and the DLPS and widely reported in the press. It has been good for PR but more importantly is a good demonstration of partnership working with the Authority taking a lead role to achieve a common aim. In doing this work in collaboration, there has been no real pressure to resurrect the debate on fencing of moorland roads. Nonetheless speeds have remained too high but raising awareness does seem anecdotally to have led to a reduction in animal accidents in some key locations.
	The data has been used by the police to do some low key enforcement. It has also resulted in the collection of additional 'control' data by the Devon and Cornwall safety partnership which will be used as a basis for considering additional enforcement of the speed limit. The partnership is also planning an event (or events) which will focus on encouragement of safe driving aimed at key users of the moor.
Outcomes/	Ongoing area of work but aspirations will be to reduce speeds across
outputs	the open moor at key locations to 45mph at the 85 th percentileand hopefully a reduction in animal deaths by 15% from levels in 2006. Raising the profile of moorland speeding with the police leading to
	appropriate educational action and enforcement of the 40mph limit by the safety partnership

Case study 2: Crayfish Arks for the Peak District and Derbyshire

Name of	Crayfish Arks for the Peak District and Derbyshire
Scheme	
Aim and	To investigate opportunities for creating off-line isolated 'ark' sites for
Objectives	the long-term persistence of white-clawed crayfish which are severely
	threatened in their natural habitat. To establish one 'ark' site in each
	year of the project (Aug 09-Mar 11). To establish a monitoring regime
	for ark sites.
Cost	2009/10 costs £24,977
	This breaks down as £16,163 grant from Aggregates Levy
	Sustainability Fund, plus £8,814 worth of in-kind contributions.
	2010/11 costs £10,628 - £7,068 grant, £3,560 in-kind.
Benefits	Species conservation
	Cross-boundary working
	Partnership working
	Engagement with minerals/aggregates industry
Outcomes/	• 9 potential 'ark' sites evaluated for potential in the short, medium
outputs	and long term.
	7 potential donor populations evaluated.
	• 2 new ark sites established each with 50-100 crayfish.
	 1 new ark site monitored in year two of the project.
	Site reports produced for site owners detailing crayfish
	conservation opportunities on their site.
	Detailed project report for conservation community.

Name	Linhope Estate Landscape Scale Conservation	
Aim and	The Linhope Estate is a 5,673 hectare upland estate in the	
Objectives	Cheviot Hills in North Northumberland.	
Objectives	 Cheviot Hills in North North North Umberland. Aim: To restore and recreate BAP habitats and conserve the historic environment at a landscape scale using Higher Level Stewardship by facilitating a partnership with the Land Owner, the tenant farmers and Natural England. Objectives: To make the case to Natural England to bring all of the farm tenancies on the Estate into HLS in the same year; To undertake the Farm Environmental Plans required; To set up individual, but linked HLS agreements on each tenanted farm as well as the land managed in hand; To draw up a heath restoration management plan for the whole Estate and obtain funding through HLS for the work; To trial new heath restoration techniques (following research commissioned by NNPA as part of the "Cheviot Futures" climate adaptation project); To draw up an estate-wide bracken control program that will protect historic features and assist the heath restoration program, and; 	
Cost		
Cost	Work on Objective 1 and other early work was carried out in 2008/09. However much of the project has been delivered in 2009/10. 2009/10 costs: This project is ongoing. To date 85 NNPA man days @ \pounds 174/day = \pounds 11,500. Of which approx 25% spent on gaining 'additional benefits' 25% of \pounds 11,500 = \pounds 2,875. The net FEP income to the NNPA associated with these agreements so far is \pounds 4,460. It's not really possible to apportion how much of the FEP achieved the additionality within the agreements. Therefore assume costs of \pounds 2,875 for additionality.	
Benefits	 Restoration of SSSI and BAP habitats including blanket bog which is important for carbon sequestration; Recreation of upland heath; Enhanced habitat for upland waders; 	

Case Study 3: Linhope Estate Landscape Scale Conservation

	Protection of Scheduled Ancient Monuments;
	A brand new Section 17 Heritage Management Agreement
	with English Heritage covering a whole farm. This is a pilot,
	the first in the country to accompany the new 'super
	monument' scheduling being undertaken by EH;
	Improved farm viability.
Outcomes/	• Total value of the agreements to date is £2,052,120. The
outputs	NNPA estimate 25% i.e. £500,000 was due to NNPA
	additionality;
	• Restored 1,300 ha of blanket bog and 900 ha of upland
	heath;
	• Over 200 ha of upland heath will be recreated. This would
	only have been approved by Natural England and got under way with NNPA input;
	• 60 Scheduled Monuments protected. At least 20% due to
	NNPA additionality;
	• New pond and wet woodland will be created only because
	of NNPA input.
	• About 60 ha of new native woodland will be created due to
	NNPA work. (Present value of carbon sequestered by 60ha
	of broadleaf over 50 years = \pounds 1.26m).

Name of	Bonnyrigg Hall HLS Agreement
Scheme	
Aim and Objectives	Bonnyrigg Hall consists of 38.56 hectares of woodland, rough grazing and mire. The owner runs sheep, a herd of Highland Cattle and a number of pigs. In 2006 the owner applied for Environmental Stewardship suggesting options for moorland and woodland management and permissive access to a neighbouring Open Access area.
	Aim: Recognising the strategic position of the site, to develop an 'average' Environmental Stewardship application into one that provides far greater habitat and specifically access value.
	Objectives:
	 Objectives: To use the NNPA's local habitat knowledge to change the 'moorland management' option to one of 'species rich wet grassland fen/mire' (ensuring appropriate management of the habitat); To extend the permissive access to provide specific access to Greenlee Lough NNR; To ensure permissive access contributes to the wider access network in the 'forest of the loughs' area of the Hadrian's Wall corridor (most visited are of NNP); To secure HLS Special Project funding to install a bridge and boardwalk (linking to the existing boardwalk on the NNR); Woodland management (control of invasive species) to protect neighbouring NNR; To provide training for rural skills trainees (TBTS) and NNPA voluntary rangers;
	 To improve upland farm viability (additional income).
Cost	2007-2009 cost: Woodland management work was undertaken
	 between 2007 and 2009 with work on the boardwalk carried out over the winter of 08/09. Cost for the whole project are: Ranger Time: 125 days x £143/day = £17,875 Materials= £14,000 Volunteer Time: 74 days The NNPA received payment from the land owner (from HLS payment) to contribute to the cost of works of: £9,000

Case Study 4: Bonnyrigg Hall HLS Agreement

	over three years.	
	• Net cost to the NNPA of: £22,875	
Benefits		
	 where disturbance is not detrimental to the site. Linking the access network for visitors to the Hadrian's Wall area and allowing them to experience a high quality nature conservation and landscape site. Improving the visitor offer with potential benefits to the local economy; Skills training in access (bridge/boardwalk construction) and woodland management (many trainees go on to operate boundary and access micro-businesses); Increased farm viability by increasing farm income. 	
Outcomes/	Management practices appropriate for the habitat in place;	
outputs	 Control of invasive species, reducing the negative impact on the neighbouring NNR and thus future cost of management on the NNR; 1,800m of additional permissive path linking to a site of interest (the NNR); 1 bridge and 600m of boardwalk (linking to the existing boardwalk on the NNR); Anecdotal evidence of good usage of the route (from local tourist businesses and walk leaders); 10 rural skills trainees gaining training in additional techniques (beyond usual training content); 74 days of skills training for voluntary rangers; The value of the HLS scheme rose from £5,209 to £28,200 increasing farm income from more financially beneficial prescriptions. 	

Case Study 5: National Heritage at Risk Award

Name of	National Heritage at Risk Award
	Nalional Henlage at Nisk Award
Project	
Aim and	Conservation of the cultural heritage of the national park to preserve it
Objectives	for future generations and prevent further deterioration.
	Work on conservation is undertaken with a wide range of stakeholders
	including partner organisations, landowners and managers. There are
	nearly 3,000 listed buildings, more than 450 scheduled monuments,
	109 conservation areas and internationally recognised attractions such
	as Chatsworth House, Haddon Hall and Lyme Park in the national
	park that need caring for, many voices to be listened to and many
	competing interests that need to be reconciled.
Cost	N/A
Benefits	On 9 July 2008, the Authority was the first ever recipient of English
	Heritage's Heritage at Risk Award. English Heritage said 'the Peak
	District National Park Authority has undertaken outstanding work with
	its strategic and often innovative approach to managing historic sites
	and landscapes within its boundary. We believe the Authority should
	be especially commended for its highly effective partnership working.'
Outcomes/	The award is in recognition of the conservation track record of the
outputs	Authority and, in particular, the key role the Authority has played in
	reducing the number of Scheduled Monuments at high risk in the Peak
	District, from 17 in 2001 to just 2 in 2008.

Case study 6: Hadrian's Wall Bus

Name of	Hadrian's Wall Access and Transport Project	
Scheme		
Aim and	From humble beginnings in the 1970s, the Hadrian's Wall Bus	
Objectives	service has been supported continuously by the NNPA (prior to 1998, as the 'National Park & Countryside Department' of Northumberland County Council). In 1998, with support from the NNPA the service received additional funding from the Rural Development Commission which enabled the two small bus operations to become a fully unified cross -county service, managed by a new Hadrian's Wall Bus Partnership (a dedicated group of operators, transport officers from both counties and local community representatives).	
	In 2000, the NNPA worked with the Hadrian Wall Bus Partnership (chairing to coordinate the different interests) to secure funding to continue and upgrade the Bus Service over the next 5 years as well as delivering a number of other sustainable tourism projects. The bid was successful and in 2001, the NNPA became the host for the Hadrian's Wall Access & Transport project. Once positive outcomes were established the project was handed over to the newly created Hadrian's Wall Heritage Ltd in 2006, who have continued to manage and secure further investment to improve the service. Aim: To encourage visitors to, and residents of Northumberland National Park and the surrounding area to use sustainable modes of transport and to increase sustainable access to recreational infrastructure (National Trail and Cycleway).	
	 Objectives: To improve the quality of the newly unified cross-country Bus service (busses and infrastructure); To increase the length and consistency of the operating season; To integrate the service with the Hadrian's Wall National Trail and Cycleway routes (and 'green transfer nodes' where cars can be left); To increase usage of the bus service; To develop the Hadrian's Wall Cycleway. 	
Cost	 2008/09 (and ongoing) cost: NNPA contributes £12,000 p.a. to running the Bus service and other sustainable access projects; NNPA Visitor Development Manager continues to chair the Hadrian's Wall Bus Partnership 	

Benefits	Reducing carbon emissions by use of a less environmentally
	damaging form of transport;
	Social inclusion by providing transport for people with no other
	means of travel;
	Increased tourism and leisure by increasing recreational
	opportunities (opening of Cycleway);
	Increased sustainable access to recreation (allowing linear access
	to the National Trail and Cycleway (returning on the bus).
Outcomes/	The NNPA's direct management of the project between 2000 and
outputs	2006 'pump primed' the service and delivered the following outputs
	and outcomes:
	 Securing funding to purchase a third bus to run out from
	Newcastle, providing a full coast-to-coast service;
	Employing Heritage Guides on the service to interpret the special
	qualities of the area to passengers;
	Bike carriage installed on all buses;
	Profile of the service raised through coordinated marketing activity
	and new bus livery;
	Increased length and consistency of the service through the
	season (extended through October);
	Full integration with other transport operations along Hadrian's
	Wall corridor;
	Increased passenger numbers from 12,795 in 1999 to around
	28,000 in 2005 (38,000 in 2008/09);
	• The opening of the Hadrian's Cycleway in 2005;
	In 2006 the service was awarded 'Best Bus in the Countryside' at
	the National Bus Awards.
L	

Case Study 7: Peak District Cycle Route

Name of	Peak District Cycle Route	
Scheme		
Aim and	To create a cycling route from Bakewell to Buxton, which includes re-	
Objectives	opening four former railways tunnels.	
,	A social marketing campaign to encourage a greater	r take-up of cycling
	and behavioural change that will see more people cy	
Cost		
	QUARTER	CAPITAL
	1. November 2009 – March 2010	
	Prelims/Surveys	£118,000
	Staff costs/Set-up/Promotions/Website	
	2. April 2010 - June 2010	
	Tunnel works/Lighting	£137,000
	Promotions/Workshops/Staff	
	3. July 2010 – September 2010	
	Tunnels/Lighting/Surfacing	£330,000
	Promotions/Surveys/Staff	
	4. October 2010 – December 2010	
	Machine laying/Waterproofing/Surfacing/	£1,050,000
	Woodale/Buxton	
	Promotions/Workshops/Staff	
	5. January 2011 – March 2011	
	Woodale/Buxton/Legals/Landowner	£ 115,000
	Fees/Contingencies	
	Promotions/Workshops/Staff /Contingencies	
	EXPENDITURE SUB-TOTAL	£1,750,000
	EXPENDITURE TOTAL £2,250,000	C
Benefits	To maximise cycling opportunities and promote v	
	District National Park offers to residents and visit	ors
	To improve the health and well being of residents	s and visitors
	Increased tourism	
	 To develop economic opportunities for cycling ar 	nd tourism related
	businesses	
	To increase understanding of the special qualitie	•
	 To improve accessibility by developing access for Delegated Participant 	r all trails between
	Bakewell and Buxton	
	 To promote sustainable transport options instead visitore 	of the car for
	visitors	

	 To enhance the national park's leisure cycling infrastructure to offer a positive leisure experience
	To create cycling links between urban and rural areas
Outcomes/	• Aiming for at least 1,000 people signed up to a behavioural change
outputs	programme to make cycling part of their everyday life.
	 A new cycling route from Bakewell to Buxton
	 To find out the number and percentage of people's cycling habits
	that change as a result of the project

Case Study 8: Next Steps

Name of	NEXT STEPS – a progression from the Peak Park Leisure Walks
Scheme	NEXT STEPS - a progression from the Feak Fark Leisure Walks
Aim and	Next Stane was get up as an extension of the Deals Dark Leisure
	Next Steps was set up as an extension of the Peak Park Leisure
Objectives	Walks (the walks for health in conjunction with PCTs) to encourage
	walkers to progress from the Leisure Walks onto mainstream Ranger
	led Guided Walks. The walks are for people who are referred by a
	health professional and the PDNPA recommend for them suitable
	walks from the Peak District National Park Guided Walks Programme,
	which the participants would otherwise find difficult or impossible to
	attend. It aims to help local residents develop and maintain a healthy
	lifestyle in order to decrease the risk of major health issues. It also
	means that these people access walks already programmed and open
	to everyone, rather than requiring a specially designed and run walk
	prepared for them.
Cost	The cost involved is for the provision of transport. The NPA works
	with partners, Bakewell and Eyam Community Transport. The costs
	are covered by a grant received from the Choosing Health Fund.
	They were allocated £2000 per year for transport provision and have
	successfully bid for grant funding through partners and will receive the
	funding until 2013 when a further application will be submitted.
	There is a cost saving compared to the Leisure Walks programme as
	the referred individuals are accessing mainstream walks rather than
	specially run walks.
Benefits	The walks are led by fully qualified Volunteer Rangers who are also
	first aid trained.
	The walks encourage people to adopt healthier lifestyles and benefit
	participant's mental health and physical fitness. The walkers are all
	referred by health professionals or by self referral where they meet
	qualifying criteria. These walks enable people to maintain their
	independence.
	If transport wasn't provided for these walks, this particular group of
	people would not be able to access these walks using public transport.
	The majority of the group do not have their own transport.
Outcomes/	In 2008/9, 213 walks were completed with an average of 14.2 walkers
outputs	per walk with several walks over subscribed.
	Without the Next Steps Programme there could be an increased cost
	of health provision. The walks enable people to get fit, stay fit and
	maintain independent living in their own communities.

Case study 9: Walks to Wellbeing

Name of	Walks to Wellbeing
Scheme	Waiks to Weilbeing
Aim and	Background: 'Walks to Wellbeing' is a partnership project between
Objectives	Northumberland National Park Authority and North Country Leisure. The project builds on the success of the Walking the Way to Health Initiative, now known as Walking for Health (WfH) and is sponsored by Natural England. It is a 3 year programme of free, short (2-4 miles) walks within the inspiring landscape of Northumberland National Park. Aim: 'Walks to Wellbeing' aims to improve the health and wellbeing of
	individuals with physical and mental health problems (that have been through the WfH programme). It aims to progress their wellbeing through a more advanced walking programme centred on the special qualities of the Northumberland National Park (supported longer walks in a more challenging environment).
	Objectives: To provide an exit/progression route for participants of WfH allowing individuals to maintain and improve health and wellIbeing beyond short, urban fringe walks.To remove barriers to access to the wider countryside for individuals with poor health.To develop the skills and knowledge of volunteers.
Cost	Total direct project costs: £16,761 (over 3 years)
	£5,000 input from NNPA's Sustainable Development Fund;
	 11,761 Sport England's Community Investment Fund.
	 Engagement Policy Officer time to co-ordinate (10 days per annum at £184/day = £1,840)
Benefits	Raised levels of wellbeing for local people;
	Social inclusion and cohesion;
	Individual progression encouraged by building confidence in what
	the wider countryside has to offer;
	Sign-posting participants to other outdoor activities and venues.
Outcomes/	Outputs (Year 1): 15 walks delivered, 22 volunteers trained and
outputs	developed, 254 participants (target of 225)
	Outcomes:
	Improved levels of health and wellbeing for participants;
	Improved skills for volunteers;
	• Raised awareness of the National Park, its special qualities, and its
	opportunities as a venue for improving health;
	 Freeing up places for more participants at entry level (WfH) allowing greater access to this health initiative;

Reduction in carbon footprint by use of shared transport;
Visitor spend in teashops at start and end of walks (routes
designed to secure this outcome).

Case study 10: MICCI – Moorlands as Indicators of Climate Change Initiative

Name of	MICCI – Moorlands as Indicators of Climate Change Initiative
Scheme	moon moonands as indicators of Chimate Change Initiative
Aim and	MICCI was a project designed for schools and young people to
Objectives	investigate the inter-relationship between the moorland landscape, people and climate change. The innovative project aimed to raise awareness in young people about the links between landscape and climate change and to provide social connections between urban and rural schools with opportunities to share understanding and learning.
	The MICCI project worked with young people through their secondary schools in and around the Peak District National Park with young people conducting experiments to analyse the health of the peat bog. An aim of the project was that majority of young people would come from the surrounding urban communities in major conurbations adjacent to the national park. Schools in areas with high levels of deprivation were encouraged to participate.
	A further aim was to support schools to actively and positively engage with their local communities about the project, celebrating the contribution that the young people made to understanding the future management needs of England's protected landscapes, and the role moorlands play in mitigating climate change.
Cost	Project costs were funded by a grant of £2,000 from the Economic and Social Research Council (ESRC).
Benefits	MICCI worked with young people and engaged them in the global issue of climate change growing their understanding of the value of the landscapes on their doorstep. They developed knowledge of the moorland landscapes of upland Britain and their role in acting as carbon stores' keeping carbon out of the atmosphere and reducing the rate of global warming.
	It also gave the young people who took part the opportunity to look at the effects of human activity on the environment and apply their scientific thinking outside of the classroom.
	The young people involved in MICCI also benefited from working alongside "real scientists" to collaboratively develop an evaluation framework and collate and analyse results from their moorland visits.

Outcomes/	MICCI project worked with 385 young people from 13 schools from
outputs	both rural and urban areas to provide learning opportunities directly linked to climate change and the environmental health of some of England's most protected areas. 60 young people also attended a celebration event to share their research findings and experiences
	 with each other. The young people collected primary data from the moorlands, carried out experiments and applied their results to authentic real-life scenarios - this led to collaboration with other students from schools from areas they would not previously have had the opportunity to work with. The data collected from the young people's experiments fed into research conducted by both Durham University and the University of Manchester as well as supporting the work of the Moors for the Future
	project.

Case study 11: St Bartholomew's School John Muir Award

Name of	St Bartholomew's School John Muir Award (Longnor, Staffordshire)
Scheme	
Scheme Aim and Objectives	 To promote a deeper understanding of the Peak District National Park and its special qualities amongst young people and residents; To accredit the children's contribution to the community space with the John Muir 'Conserver' Award; To create a wildlife conservation garden and community outdoor learning area; To engage children and the local community in the development of a community facility; To build skills and confidence in terms of project management within the community
	 within the community; To work in partnership with local businesses, voluntary sector organisations and resident groups.
Cost	The ranger service provided 'in-kind' support to the project through staff time to an approximate cost of £1650* for Area Ranger's time and access to the Park's volunteers who carried out a lot of the more challenging development works including footpath construction and bench installation. The John Muir Award element of the project was also coordinated by the ranger service, again in the form of staff time to an approximate cost of £550* for Area Ranger's Time. * Based on a cost of £110 / day
Benefits	 Accreditation - The children and staff each received their 'Conserver' John Muir Award, the top level award available (10 accreditations in total) Community Contact - The ranger service made 'in-roads' into a community, which had been difficult to access. Relationships were developed with land-owners whose children attended the school. Community Development - Ultimately the project provided the community of Longnor with a facility that provides both a natural place for local residents and an extra point of interest for visitors. Community Cohesion - A steering group was initiated to ensure that the local community was fully represented. In the past friction has existed between the school and the local community, this project sought to unite the community and encouraged better communication between all parties (8 steering group members).

	 Partnership Development - The ranger service developed and/or compounded relationships with a range of other organisations including Staffordshire Wildlife Trust, Staffordshire Youth Service, RETHINK, V and United Utilities.
Outcomes/o	 Funding Provision - £10,000 was won in cash funding, but the
utputs	value can be doubled to around £20,000 when donation in kind is
	taken into consideration.
	Wider Engagement
	- Partners engaged: 7
	 Number of young people engaged: 40
	 Number of adults engaged: 30

Case Study 12: Moors for the Future Partnership

Name of Scheme	Moors for the Future Partnership – Peak District National Park and South Pennines SPA
Aim and Objectives	Moors for the Future Vision - 'To secure the legacy of 8,000years of moorland life'
	Aim : to be a major point of focus for capital investment projects within the Peak District Moorland areas. It will be governed by its funding partners who will also be the main clients of the project. The Project staff team will offer a project management and fund raising service to its clients, managing change and implementing improvement projects to benefit the conservation of moorland landscapes. The Peak District National Park Authority provides the legal entity for the partnership and employs the staff team.
	 Principal Objectives 2007 - 2012 Objective One - To raise awareness and engender a sense of social ownership and responsibility, for the moorland landscape. Objective Two - To restore and conserve important recreational and natural moorland resources. Objective Three.To develop expertise about how to protect and provide a vehicle for, sustainable management of moorlands into the future
	Pressures and Conservation Needs: The pressures that arise from trying to balance conservation, recreation and managing the moorland economy have long been recognised. Since 1979, the Peak District National Park Authority and a range of partners have worked with user groups and landowners to try and achieve such a balance. Much research has been undertaken to investigate problems caused by soil erosion, investigating the best techniques to restore vegetation and protect wildlife. Additionally, a number of important land-use schemes have been drawn up and instigated. For example, promoting more traditional and conservation-minded farming practices, restoring the quality of the Pennine Way, and the development of access and recreation management plans.
	Over the last twenty years much has been achieved. However, the pressures have continued to grow. Since 2002 a partnership of moorland interests with the support, origionally, of the Heritage Lottery

Cost	Fund, have employed a project team to carry forward an ambitious programme of conservation, education and research projects to protect the Peak District Moorlands for future generations. The Partnership has been very successful in achieving an ambitious scheme of works laid down in the strategic management plan. Costs for MFF Partnership in 08/09 (i.e. core costs to employ staff and administer the team) were £178,000. These core costs are supplied by partners and about 80% is related to Defra associated funds. In addition project costs for 08/09 were £380,000. Projects are all self funding from grants and direct partner funding.
	Individual projects: Yorkshire Water Conservation work, Peat Compendium, Hydrology, NERC Student, RELU, Ecosystem Services of Peat, Fire Risk Mapping, Science Meets the Eye, Fires Seminar Series, Restoration Manual, Natural England Conservation projects, Carbon flux, Sphagnum propagation Project, National Trust conservation projects. Again approximately 80% to 90% of these funds are rooted in Defra funds (during 07 to 09 MFF had no major grant project running and was surviving on small grant projects and partner funded work)
	VFM on Defra's input requires some untangling as funds from Natural England, Environment Agency and others are rooted in Defra funding but here are 2 examples (beyond the smaller works of the partnership) of the multiplying effect of Defra's initial input.
	1. The Moors for the Future Partnership HLF Landscape Partnership Project 2002 – 2007 Total budget of£ 4.7m £3m from HLF and £1.7m from partner funding. Approximately £700k of the partner input was from non Defra sources (water companies, National Trust, ERDF, Sheffield CC) the other £1m was from Defra associated sources (PDNPA + NE) so a 3:1 gearing on Defra funding.
	2. The MoorLIFE project 2010 – 2015 - Total budget of £5.5m (subject to exchange rate with EU)

	MoorLI	
	htp://ec.europa.eu/environment/life/publications/lifepubl	emplations/documents/natcompliation08.pdf Inside PDNP 497 Ha approximately £4.5 million Outside PDNP 358 Ha approximately £1.2 million United Utilities £504k Yorkshire Water £415k Natural England £208k National Trust £209k Environment Agency £88k
	The PDNPA are also contributing £35k funding is approximately £330K to proc	duce a project of £5.5m.
Benefits	 Biodiversity has been a primary driver for all of the partnerships works resulting in placing the associated SSSI's (the worst upland SSSI's in the country) from unfavourable condition into recovering condition. The Peak District moorlands provide various significant ecosystems services: Carbon protection, Water management (The Peak District moorlands collect and release approximately 45 million litres of drinking water a year), Economic Recreation and health (Sixteen million people live within sixty minutes drive of the National Park and each year over twenty two million day visits are made. Between 5 & 8 million of these come for a long walk, often in the high moorland area), Conservation and Communities. Ecosystem services approach has now also become a major driver and here are 2 examples of additional benefits in this area. Drinking water Quality – the Woodhead area of the Moorlife project is currently producing 38,000 cubic metres of sediment per year from 	

	reconvoire below the site. Within 2 years of initial treatment of these
	reservoirs below the site. Within 2 years of initial treatment of these
	areas 75% of this sediment loss will be prevented.
	2. Carbon Security – the worst eroded areas of the Peak District
	Moorlands are producing up to 500 tonnes per year of carbon through
	a variety of erosion pathways, (Rowson J.G., Evans M.G., Worrall F.,
	& Bonn A. (in review) Carbon fluxes from restored peatlands – the
	carbon benefit of revegetation). Within 2 years of initial treatment this
	carbon loss is reduced by 75% with restoration work in gully areas
	turning many of these gullies from a major source to a significant sink.
	Moors for the Future has regenerated approximately 5 square
	Kilometers of this severely eroded ground avoiding the loss of up to
	2,500 tonnes of carbon per year from these areas.
Outcomes/	The partnership is delivering a number of outputs which benefit the
outputs	partners and the conservation of the Perak District moorlands. The
	main output however has to be the huge leverage of funds and project
	management ability which is attracting £10m to £13m of investment
	into the conservation of the Peak District and South Pennine
	moorlands over the next 5 years (the MoorLIFE project above is one
	of several projects about to start). This is a testament to both
	partnership working and putting a very strong project focussed team
	together. It is replicated in other similar project focused schemes in the
	North over the moorland landscape – Pennine Prospects, Yorkshire
	Peat Partnership, Peatscapes and Moors for the Future will be
	delivering £25m of moorland conservation work over the next 5 years.
	с , , , , , , , , , , , , , , , , , , ,
	Within all of these projects can be found excellent VFM for Defra
	particularly when these are within the supporting infrastructure of a
	National Park Authority or other arrangement which then allows the
	project team to concentrate on the core conservation work.

Case Study 13: Eastern Moors Partnership Lease

	Factor Marco De transfir La con
Name of	Eastern Moors Partnership Lease
Scheme	
Aim and	To hand over day to day land management of the Authority's largest
Objectives	landholding to organisations with similar values; to bring additional
	investment to build on our achievement of National Park objectives.
Cost	The only costs have been staff time and a valuation report (£3,000).
	The whole process has taken 4 years but the DV cost fell in
	2008/09. The cost benefits are that the Authority will save around
	£40,000p.a. on its budget for the Estate.
Benefits	Additional investment – both in terms of focus of increased staffing
	resource and financial: directly from the partner organisations and
	from their external grant fundraising. It is anticipated that this will
	improve performance through their production of a new estate
	management plan, with significant public engagement to detail how
	they will protect and enhance all special qualities of the estate and
	deliver a wide range of benefits. Particular benefits anticipated are
	greater promoting of understanding to the public, engagement of
	target audiences and demonstrating best practice in conservation
	and recreation site management.
Outcomes/	Better conserved moorland heath and blanket bog habitats over
outputs	6,000acres of SSSI which should reach favourable condition
	within approximately 10 years, rather than within 20 years with
	current resources.
	Greater engagement of local communities and the visiting public
	in taking a greater "ownership of the Estate". Actively
	demonstrating good practice, influencing national policy on the
	management of the British Uplands.
	 Improved access with more bridleways and events/guided walks
	for visitors.
	• There may be a slight increase in the number of visitors by an
	estimated 25,000 per year.
L	

Case study 14: Peak District Fire Operations Group

Name of	Pook District Fire Operations Croup
	Peak District Fire Operations Group
Scheme	
Aim and	To reduce the number of wildfires within the Peak District National
Objectives	Park.
Cost	There are minimal 'opportunity' costs as the administrative functions such as updating of Fire Plans and provision of FOG Secretariat are carried out by the existing Field Services Administration Team. It is thought to represent approximately 80 hours per year which would equate to approximately £750.
Benefits	 Significant reduction in Carbon loss from moorland areas caused through wildfires Protection of key SAC and SSSI sites in the moorland areas of the National Park. Fewer areas damaged by wildfires Increased understanding and awareness of the causes and necessary responses to wildfires Improved public recognition and understanding of the problem of wildfires More effective fire fighting approach within the Peak District National Park
Outcomes/	A specific piece of research is currently being carried out by the
outputs	University of Manchester to calculate the cost saving to the public purse made by the FOG initiative

Case study 15: National Park Management Plans

Name of	Development of the National Park Management Plan – setting the
Scheme	strategic vision for the National Park
Aim and	To ensure that all those involved in the National Park in some way
Objectives	(i.e. all stakeholders) work together to achieve National Park
	purposes through sustainable development
	• To provide a long term vision for the NP through an overarching
	strategic document central to the future of the National Park and
	key to managing competing demands on the National Park
	To provide a coherent and integrated framework for all other NP
	strategies and action plans and guide the work of the NPA
Cost	Cost of development - staff time (monitoring performance of 2006-11
	plan)
Benefits	Framework for achievement of NP purposes and basis for monitoring
	progress, sets the approach to working in partnership and the
	framework for ourselves and stakeholders
	The NPMP has provided the strategic context to obtain funding for
	large scale partnership projects such as Moors for the Future, Live
	and Work Rural, Peak Connections and the Cycling Project
	It has a key role in promoting the significance of the NP with other
	local partners who have competing demands
Outcomes/	The effectiveness of the NPMP is monitored by an Annual Monitoring
outputs	Report and periodically through a State of the Park Report. An
	external critical friend role is provided to the ongoing delivery and
	development by an external monitoring group, with representatives
	from key statutory, community and economic sectors.
	Activity in the NP is aligned to contribute to NPMP outcomes through a
	range of relevant strategies and action plans. The NPMP provides the
	high-level policy context for the NPA's statutory planning policy role.

Case study 16: Princetown Village Centre

Neme of	Dringstown Village Contro
Name of	Princetown Village Centre
Scheme Aim and	The Drippetown Village Centre (DVC) is a community lad project
	The Princetown Village Centre (PVC) is a community led project
Objectives	primarily intended to address issues felt by the residents of the remote
	rural settlement of Princetown and the outlying areas of the Dartmoor
	Forest parish. Princetown had been without the benefits of a true
	community building since the demolition of the town hall 20 years ago.
	The new multi-use Village Centre not only provides a focus for the
	community but also provides a new community hall, sports changing
	rooms, meeting room, catering kitchen, IT centre as well as purpose
	built accommodation for the children's centre, public library and
Ocat	doctors surgery.
Cost	The building was completed in April 2009 with capital costs of
	£1.5million. DNPA contributed £5,000 to the capital costs and also
	supported the work of High Moorland Community Action (HMCA), the
	Community Development Trust, responsible for the building, with
	\pounds 2,500 in revenue support in 2008/09. However, more significantly
	was the staff time contribution in particular; a member of staff was one
	of the small management team responsible for overseeing the build,
	working closely with the project manager. This level of support was
	particularly important for a small community, lacking in confidence and
Descrite	with little professional skills available through its volunteer base.
Benefits	Creating community sense of place, improved community cohesion,
	increased and improved access to health services, improved child
	care facilities, improved IT and library provision, improved access to
	skills and learning, improved access to sport and activities for all age
	ranges, provide platform for external agencies including benefits
	agency & job centre, provide revenue source/income for Development
	Trust and arts/performance/conference/wedding venue for external
Outermert	organisations bringing in business
Outcomes/	Projected outcome/outputs post April 2009
outputs	Creation /retention of 4 part-time posts (approx £40,000 in total)
	Income generated through room hires etc. £32,000 in first year rising
	to £40,000 in second.
	A marketing study undertaken in 2005 in support of the project
	A marketing study undertaken in 2005 in support of the project estimated that <i>'that a one percent increase in the number of visitor</i>
	customers in Princetown who are attracted to the village by PVC will
	give an estimated increase of \pounds 7,813 spent in retail establishments. A
	20% increase in visitor customers attracted to the village by PVC

leads to a projected increase in expenditure of £156,264'. Quantified Information on visitor numbers and social indicators is not currently available. A number of other linked initiatives have also taken place in Princetown over the last 3 years, including the development of the Creativity Centre along with training initiatives, financial advice, employment, business & skills advice, and the expected improvement in socio economic indicators is likely to be due to this integrated approach.

Nome of	Duchy Square Contro for Croativity
Name of	Duchy Square Centre for Creativity
Project	The development of a coefficience of the formation for the second s
Aim and	The development of a crafts based centre to enhance and regenerate
Objectives	the physical environment and economic base of the centre of
	Princetown. This project demonstrates an innovative approach to
	regeneration, achieved through the commitment of a strong local
	authority/community partnership.
	Originally the inspired vision of a group of local crafts people, the
	project was developed by the local development trust, High Moorlands
	Community Action with the support of a number of local organisations
	including the DNPA, DCC, the Duchy of Cornwall and Plymouth
	College of Art. In the later stages, due to issues around state aid &
	funding, the project was taken forward by Devon County Council.
	DNPA's involvement was fundamental in getting the project off the
	ground, offering funding and support for the feasibility study carried
	out at the inception of the project and continuing to offer support
	throughout, sitting on the management board at the request of HMCA.
	The project redeveloped a derelict site in the heart of the Princetown
	Conservation Area to provide a purpose built centre for the creative
	sector. The building houses 17 small studio workshops and offices for
	new and emerging artists, a shop & gallery space for exhibitions and a
	teaching studio. It offers advice and support for new creative
	businesses and also promotes work from emerging local craft makers
	and artists.
	The aim of the project is to regenerate the area by supporting local
	businesses across several key sectors, including creative industries,
	farming, food and tourism. It also provides a major tourist attraction,
	giving local creative practitioners an outlet to promote and sell their
	work, helping to boost the local economy.
Cost	In 2008/09 DNPA offered £5,000 towards the £40k costs of the
	external landscaping elements of the development to ensure a high
	quality scheme was achieved for this important focal area at the heart
	of the Princetown Conservation area.
	The £2million capital funding for the main building was secured from
	the South West Regional Development Agency, Government Office
	South West, Devon County Council and The Duchy of Cornwall.
Benefits	Environmental Enhancement of the heart of the conservation area.
	The development site had been lying vacant with a poorly extended

	derelict building in situ creating a degraded and unwelcoming entrance to the settlement.
	Social - helping to bring the heart back to the community –recent community projects include community banner making, Christmas carol concerts, youth work amongst others.
	Economic – creation of a quality visitor attraction to encourage longer staying and higher spending visitors to Princetown complementing the existing commercial, mainly food based activity in the settlement.
	Developing and supporting the emerging creative sector within the region to enable it to secure a prominent position within the market place.
	Enhanced visitor experience increasing understanding and appreciation of Dartmoor's and the environments special qualities.
	"Wonderful display, lovely building". "A wonderful series of spaces, stimulating work within". "What a lovely place, we will definitely come again". "An asset to Dartmoor". "Enjoyed spending the time looking, and talking to creative people".
	"Wonderful gallery - what a joy". "Inspirational!".
	"This building has brought a new sense of freshness to Princetown".
Outcomes/ outputs	 £2m construction project 12 workshops/studios for artists bringing 7 new artists to the centre of Princetown
	 exhibition Gallery hosting National, regional & local exhibitions shop showcasing quality local crafts & arts and enhancing visitor experience
	 training opportunities for community, visitors and the creative sector
	 creation of new jobs for centre staff creation of new arts trail linking & promoting 12 arts venues throughout the area.
	http://www.duchysquare.org/

Name of Dartmoor Hill Farm Project Scheme Aim and A joint NPA/Duchy of Cornwall funded project to help Dartmoor **Objectives** Farmers remain economical viable and sustainable - delivering management to maintain and enhance the natural and cultural heritage. The aim is to improve farm competitiveness through efficient use of resources, improved animal health and better returns. The successful existing projects will still be managed by the Hill Farm Project. 2008/09 Project Core Costs to year end £25,000 NPA/Duchy of Cost Cornwall. As from 2009/10 RDPE funding secured for F-T Project Manager and part-time assistant. **Benefits** Maintaining and increasing the viability of farming in the uplands. Encouraging farmers to work together to reap the benefits of economies of scale. Sharing of knowledge, and plan their future sustainable business. Provision of skills training and retention of moorland skills. Indirect benefits are maintaining and enhancing what is now termed as 'public benefits'. This includes the biodiversity and historic environment, water quality, carbon storage, access to the landscape by the public, enjoyment and health and the opportunity to enjoy the landscape (tourism and recreation). **Outcomes/** Dartmoor Farmers Assoc/Ltd now employs ³/₄ people. Created a outputs limited company with increased membership of 42. The HFP has facilitated training for the Directors of the newly formed Limited Company (6). Output – has generated extra sales from farmers to local outlets at a premium rate (aim 10%). 2009/10 DFA have submitted RDPE bid worth £200k. The newly formed Dartmoor Partnership has a member ship of 545 (this was 230 before the formation of this Partnership). A further £20,000 funding from SDF has been drawn down for operational needs. Partnerships are ongoing and it was recognised as an exemplar of Best Practice in bringing tourism and farmers together. As a result helping to ensure sustainable and viable successful 545 businesses on Dartmoor. Moorskills – ground breaking apprenticeships that train local skills on Dartmoor farms. Eleven farmers are involved in actively training 8 youngsters on apprenticeship schemes. The scheme has provided 3 new part time posts in support of the scheme. The posts have been taken up within the farming community. Training is provided both at

Case study 18: Dartmoor Hill Farm Project

college and on Dartmoor for the bespoke elements of training. Four apprentices have completed NVQ level 2 and are going forward to study at the next level, (Project costs in excess of £120k pa with funding via RDPE to Duchy College for 'academic training/tuition/accreditation' and farmer contributions of circa £60-80k to cover the costs of wages for the apprentices. Other funders are NPA, Duchy of Cornwall.) Fire Plan - Project has developed a Fire Plan for the Forest of Dartmoor ESA agreement area. The plan helps protect an asset worth circa £5m in terms of ESA agreement. The Fire Plan template is now being rolled out to all the other commons on Dartmoor. South West Mule Group - Supported development of Mule Group led by local farmers. Led to two extra sales per annum via local livestock market with added value to local economy. Increased value of £5 per head per mule has been generated, plus the benefits of 35 farmers working collaboratively. Added potential benefits this year – holding an open day to attract buyers from around the south of England. Produced Strategic Action Plan for RDA element of the project, and have started achieving outputs – training six farmers in business planning. Funding worth £370k from 2009-2012. This has indirectly led to three projects being submitted and successfully getting through to the second stage of the RDA application procedure. The three projects being adding further value to meat produce, incinerator for dead stock and Dartmoor Pony Heritage Trust project. Further potential projects covering resource management are in the pipeline which will achieve outputs under the climate change agenda .Farmers workshops and focus groups are in the planning stages and will aim to meet outputs for Knowledge Transfer. Further potential projects will be identified, developed with the farmers and hopefully funding secured. Projects will be under five identified themes. Supported various events and instigated training needs were identified. This provided farmers with bespoke events. Included in this list is first aid (15 participants). Production of regular newsletters to 360 farmers, keeping them up to date with project initiatives. Partnership working with Natural England in promotion of UELS and roll out in spring 2010. Attending events, SWUF, SWUFT, NFU uplands, SWFFP meetings, and seminars to ensure that the HFP remains in the front line in supporting farmers on Dartmoor. In addition giving active support for other related projects which benefit those in the National Park e.g. Letter of support for the Rural Community Broadband Project.

Case Study 19: The Dartmoor Partnership

Name of	Dartmoor Partnership
Scheme	
Aim and	The Dartmoor Partnership was formed in April 2008 with the aim of
Objectives	establishing a tourism and trade organization for Dartmoor (ATTP);
Objectives	acting as a representative for local people and local businesses; a
	champion of Dartmoor as a tourist destination;
	work collaboratively with the Dartmoor Farmers Association (DFA) to
	raise the profile of Dartmoor as a quality destination and as a quality
	provider of local produce; create a single 'Dartmoor' brand and co-
	ordinate strategies.
Cost	The Dartmoor Partnership received £80,000 funding in April 2008 from
CUSI	RDA, this allowed
	 The employment of a full-time professional manager;
	Branding work to be undertaken Complete everbaul of web and printed material
	Complete overhaul of web and printed material
	 Partnership member training sessions (cookery, photography, web
	management, marketing etc)
	 Funding has also come from DSDF over a period of years
	amounting to £40k and DNPA has provided annual core funding of
Benefits	£5k plus officer time
Denenits	 Unified brand created for Dartmoor - selling the link between landscape, food and farming
	landscape, food and farming
	 Rural technology provision – seminars, specific training and Dertmoor so uk featuring increased functionality, and facilitating
	Dartmoor.co.uk featuring increased functionality and facilitating on-line booking for members
	 Funding opportunities explored - £120,000 secured over 3 years Comprehensive economic monitoring (visitor stay and spand)
	 Comprehensive economic monitoring (visitor stay and spend) commissioned
	 Sustainability – a local award established (managed by DNPA) called Dartmoor First
	 Increased community interaction - (Local food and Dartmoor Showcase days to promote local produce and attractions.)
	 Showcase days to promote local produce and attractions) Increased business interaction – 2 X Dartmoor on your Doorstep
	 Increased business interaction – 2 X Dartmoor on your Doorstep events
Outcomes/	The Dartmoor Partnership has over 550 members and tourism on
outputs	Dartmoor is worth over £100m a year to the local economy and
	supports nearly 2000 full-time jobs. (STEAM 2008)
	The Dartmoor brand is now used by all Dartmoor Partnership
	members and on a variety of publications and publicity material.
L	l



dartmoor.co.uk

Dartmoor Partnership Events included Dartmoor on Your Doorstep, Photography Days, Showcase Day, Local food festival, Familiarisation Visits, Business Workshops and Network Events.
Case study 20: Greater Dartmoor Local Enterprise Action Fund (LEAF)

Name of	Greater Dartmoor Local Enterprise Action Fund (LEAF)							
Scheme								
Aim and	The Greater Dartmoor Local Enterprise Action Fund is one of a							
Objectives	number of projects across the country that access funds under the							
,, ,	Local Action for Rural Communities strand of the Rural Development							
	Programme for England. Greater Dartmoor covers the whole of the							
	national park and the surrounding area and over 25% of the							
	population of the LEAF area (129,000) live within the national park.							
	The area is characterised by depressed economic productivity, a							
	poorly diversified and low value-added business stock, low wages and							
	specific skill shortages. It has poor transport infrastructure and							
	widespread deprivation in terms of access to services. Nonetheless							
	the landscape, heritage and social capital of the area offer a shared							
	asset base that provides an opportunity to drive sustainable economic							
	development. It seeks to improve the area's economic performance by							
	providing aid to projects which help to							
	Create and grow businesses							
	Deliver innovative service provision							
	Maximise the potential of the environment as an economic asset							
	The National Park Authority has played a key role in getting the							
	Greater Dartmoor programme off the ground. It was a core partner in							
	putting the successful bid together and chairs the Local Action Group							
	(LAG) which adjudicates on the submitted projects. The total budget							
	for the Greater Dartmoor programme up to 2013 is £1.8million and the							
	LAG offered its first grants in March 2009, the first Local Action							
	programme in the south west to do so.							
Cost	The Authority contributed £7250 towards the costs of consultants in							
	2007/8 to help put together the expression of interest and full							
	submission and has promised £3000 per year over the six years from							
	2008/9 until 2013/14 towards the costs of running the programme							
Benefits	Projects fulfilling the objectives of the fund will be assisted and up to							
	October 2009, a total of £595,000 of funding had been offered to 17							
	projects. This is being matched with funding from other sources and							
	the total project value is £1.5million. Among the projects that have							
	been offered assistance that are specific to Dartmoor are :							
	The development of broadband services to North Dartmoor							
	Preparatory work for the renovation of an old school building into a							
	community resource							
	Marketing the Drake's trail							

	 Other projects operating across the Greater Dartmoor including the national park include : Creating a network of food and drink sector businesses Facilitating site visits to help businesses take up renewable energy options The sustainability of projects in economic social and environment terms is central to the programme and each project must have a satisfactory environmental assessment before grant aid is offered.
Outcomes/	Over the life of the programme, it is expected that at least 25% will
outputs	benefit Dartmoor directly with other areas adjacent to the national park
	but in many instances benefitting the national park indirectly
	accounting for the other benefits. The following outputs for the
	programme have been identified :
	80 businesses supported
	• 50 businesses benefitting from 2 new tourism actions supported
	with an investment of £50K
	 25 businesses involved in green tourism initiatives
	 150 workers benefitting from skills training
	30 workers gaining formal qualifications
	35 communities benefitting from multi- purpose facility
	development
	 10 communities developing equal opportunities policies
	 15 community facilities developing environmental plans
	20 community groups benefitting from support
	10 businesses benefitting from renewable energy installations
	5 community facilities benefitting from renewable energy
	installations
	5 heritage/cultural/natural environment interventions
	It is already apparent that some of these measures will be exceeded
	 10 businesses benefitting from renewable energy installations 5 community facilities benefitting from renewable energy installations 5 heritage/cultural/natural environment interventions

Case study 21: Cheviot Futures

Name of Project	Cheviot Futures : A Climate Change Adaption Programme delivered by a multi-agency Steering Group led by the Environment Agency including representatives from the local farming community, Country Land & Business Association, Tweed Forum, Northumberland Wildlife Trust, RSPB, Northumberland Strategic Partnership, Defence Estates, Natural England, Forestry Commission, and NNPA. The NNPA is the lead partner in delivering the upland elements of the work.
Aim and Objectives	Aim: The programme of work will deliver a series of demonstration projects addressing impacts from increased flooding, increased runoff carrying soil and pollutants, drought and reduced river flows, wildfire, riverside erosion, storm damage, wind erosion, extreme temperatures, combinations of weather impacting on grouse, sheep and salmon. As well as threats, the project also explores opportunities presented by a changing climate.
Cost	Initial funding for the project is from the Environment Agency Local Levy and Water Resources Revenue funds. These are seen as supporting the start up costs of the project, with other sources, including funding from Northumberland Uplands Leader and Natural England's Higher Level Stewardship Scheme supporting specific elements. In 2008/09 an initial £10k was transferred from the EA to the NNPA for interpretive works at Ingram Visitor Centre. A further £100k has since been passed to the NNPA from the EA to fund a variety of measures including practical works, research and interpretation. The NNPA has so far provided in-kind support to Cheviot Futures in terms of Officer time and is now looking at formalising this arrangement to take forward the work in 2010/11. £45k of funding from Northumberland Uplands Leader was secured in 2009/10 to match fund the partnership to fund interpretive work including website development, leaflets, practical walking trails for schools, etc.
Benefits	The greatest benefits so far have been in raising awareness amongst farmers, landowners and the local community of climate change and more importantly the potential impacts and need for adaptation measures. Visitors to the area including school children and young people have been involved in this process. Detailed research and analysis of the potential impacts of climate change on land management practices, the local community and environment have been followed up with more research into the direct impacts of increased flooding in the area. The extensive local knowledge of the NNPA and its officers combined with the close working relationship the Authority has with the local community and land managers, has enabled much greater progress with what at times are controversial issues. The NNPA has effectively acted as a broker between the local Page I 183

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	community and the other agencies and this has made it possible to realise practical projects such as riverbank restoration and the development of landscape scale agri-environmental schemes. All of the above has made it possible to most effectively utilise funding from national agencies but at a local level.
Outcomes/ outputs	 Research: "Climate Proofing the Cheviot Hills Scoping Study" and subsequent vision and 20 point action plan; Social and economic impact study of the September 2008 floods; Detailed condition Survey of Moorland in the National Park
	 Awareness and Education: Climate change interpretation at the Ingram National Park Centre; Cheviot Futures website and leaflets produced; Creation of an on farm education trail and outdoor classroom (outside of NNP boundary)
	 Training: Multi-agency training on wildfire management; Arable irrigation techniques – fact finding visits for farmers between Northumberland and East Anglia
	 Adaption Techniques on the ground: Flooding - Innovative in-river and riverbank protection measures implemented utilising local sustainable timber and gravel rather than quarried and transported 'rock armour'. This is the first time this approach has been used in an 'upland mobile river system'. A 500m section using the trial technique cost £45k compared to a 500m section using the conventional method upstream that cost £250k. The NNPA's Ingram centre is the building at highest risk in the area of the trial so the NNPA is able to lead by example when promoting new techniques to local communities; Fire – Multi-purpose wildlife/wildfire pond to be created via HLS agreement at a strategic location identified by the project; Erosion/Flooding – Moorland restoration plan (grip blocking) identified by the project and to be delivered via HLS agreement; Erosion – Sustainable Estate Tracks Plan to rationalise the number of tracks and ensure low impact of tracks on habitats (erosion, etc) balanced with needs to deliver estate business and public access; Erosion/Drought – Windbreaks and arable field management techniques such as planting cash crops on field margins to prevent erosion and creation of wildlife/irrigation ponds for times of drought
	 Outcomes: Better understanding of climate change and the need for adaption by farmers, landowners, and communities;

Annex 4: Dartmoor National Park

Volunteers

Only 2009/10 data available – extrapolated to end of year and assume the same for 2008/9.

Table 26: Example of types of work carried out by volunteers on volunteer days and activities for quarter 1 of 2009/10

GROUP	TIME	5-	25-	65	total	total	total	Ethnic	Disability	TASK
	(days)	24	65	+	TIME	5-24	65+		2	
Archaeology					112	0	0		50	Various tasks
										during quarter
Individual volunteers	0.5		6		3	0	0			Meeting to
										discuss willow
										tit survey
Prince's Trust Group	10	9			90	90	0			Walling,
										drainage
										work, building
										steps
Individual volunteers	1		3		3	0	0			Building
										boardwalk,
										path repairs
Church Group, Newton	1	4	10		14	4	0			Litter pick
Abbot										Shapley
Totals quarter 1	12.5	13	19	0	222	94	0	0	50	

Education

Table 27: Number and types of participants in educational activity
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No. & type of participants on Education Service events:	Annual total number of events 08/09	Annual Total Participants 08/09
Primary	71	2254
Secondary	38	1074
AVCE	5	72
A level	11	252
HE	11	202
Adult learning	1	10
Youth organisations	2	74
Special Needs	8	67
Foreign	62	2874
Conservation groups	0	0
Outreach	10	315
TOTAL	219	7194

Type of Education Service events 08/09	Number of events
Walks –	148
River	12
General Introduction	84
Geology/geography	27
Settlement	4
Recreation and tourism	2
Work of the Authority	10
Habitats	12
Archaeology	2
Mapwork	0
Contrasting locations	4
Literary tour/myths and legends/art	6
Environmental Science	1
Health	0
Activity	11
Classroom session	10
Talk/Slide show	12
Site Visit	8
Conservation work	20
Project work	9
Other	2
TOTAL	236

Table 28: Types and number of educational events

Table29: Ranger guided walk information

Guided walks Quantitative							
indicators	Annual Tota	1					
Type of	No of Participants Ave						
participant	events	•					
Adult	352	1900	5.4				
Child	12	165	13.4				
Free	11	160	14.6				
Bus	56	24	0.4				
Outreach							
	No of	Participants	Ave				
Duration	events						
up to 3	324	1074	3.3				
hours							
3-5 hours	97	388	4				
5 hours+	98	759	8.5				
The finance	Annual total						
bit							
Income +	12297						
EGDT	-						
Expenditure	14572						
Profit/loss	-2275						
Event type	Annual Tota	1	Γ_				
	No of	Participants	Ave				
Dist	events	054	10.7				
Private	15	251	16.7				
Guide Hire	7	400					
Private	7	103	14.7				
Uppacott							
bookings		4.45					
Talks/Slide	6	145	24				
Shows Cruise ship			0				
	0	0	1 1 1				

Annex 5: Northumberland National Park

Agri-environment

The last data providing income from all forms of agri-environment scheme dates to June 2007 and shows annual income of £2.34m (£1.48m from CSS; £466k from combined ELS/HLS, and; £396k from combined OELS/HLS)⁹⁴.

Table 30: Comparison of areas covered by Agri-environment schemes within the Park and the region⁹⁵

Agri Environment Schemes (As at 15th Nov 2	009)				
Agri-Environment Scheme	NNP	NE (all)	NE (excluding NNP)	England (all)	England (excluding NNP)
Entry Level Stewardship (HA)	19,846	258,942	239,096		4,068,113
Organic Entry Level Stewardship (HA)	1,071	17,503	16,431	282,381	281,310
Higher Level Stewardship (HA)	29,612	109,389	79,776	770,651	741,039
Total Area In Stewardship	50,529	385,833	335,304	5,140,992	5,090,462
Entry Level Stewardship (£)	£3,514,438	£37,399,170	£33,884,732	£605,393,197	£601,878,759
Organic Entry Level Stewardship (£)	£422,850	£7,602,175	£7,179,326	£112,943,095	£112,520,245
Higher Level Stewardship (£)	£18,027,957	£83,545,933	£65,517,976	£812,862,142	£794,834,185
Total	£21,965,245	£128,547,278	£106,582,034	£1,531,198,434	£1,509,233,190

Information as of November 2009 shows that the percentage of the National Park in HLS as a proportion of the total area in Environmental Stewardship is 59%, compared to 24% for the rest of the North East region, and 15% nationally. Whilst much of the target area for HLS falls within the Park, this suggests that the NNPA is particularly successful at identifying and negotiating HLS agreements.

⁹⁴Values are derived from farm income. Some farms have land in several levels of the Environmental Stewardship Scheme (e.g. OELS and HLS) and the NNPA do not currently have access to data to determine the <u>annual income</u> value attributed to each level of the scheme.

⁹⁵The updated areas in Environmental Stewardship between the April and November 2009 datasets (As of January 2010 the area of NNP in HLS has increased further to 37,972 ha).

Agri-environment schemes - Northumberland National Park (M	arch/April 2009	9)		
			Farmed Area of	Total Area of Par
			Park (ha)	(ha
			91,559	104,700
			a(616 II	
	No.	Area of Scheme		as % of total Par
Scheme Type	Schemes	(ha)	area of Park	area
CSS	112	33,083	36.13%	31.60%
HLS (inc. Organic)	36	20,107	21.96%	19.20%
WES	8	865	0.94%	0.83%
Total in 'higher' targeted schemes	156	54,055	59.04%	51.63%
ELS	157	21,517	23.50%	20.55%
OELS	12	761	0.83%	0.73%
Total in 'lower' schemes	169	22,278	24.33%	21.28%
Total in all forms of agr-environment scheme	325	76,333	83.37%	72.91%
WGS (land may also be in an agri-environment scheme)	249	8,192	8.95%	7.82%
Total in all forms of agr-environment scheme (inc. WGS)	574	-	-	
<u>Key:</u>				
Countryside Stewardship Scheme	CSS			
Wildlife Enhancement Scheme	WES			
Environmental Stewardship (levels within:)				
Higher Level Stewardship	HLS			
Entry Level Stewardship	ELS			
Organic Entry Level Stewardship	OELS			
Woodland Grant Scheme	WGS			

Table 31: Land covered and value of agri-environment schemes in the NNPA⁹⁶

Over the life of the agreements (in place as of Nov. 2009) £22m will be invested in the National Park (£18m via HLS over 10 years) to support natural and historic environment outcomes and sustain rural communities. This equates to annual income from Environmental Stewardship schemes of approximately £2.6m, but excludes income from the Countryside Stewardship Scheme.

60,825 ha of the National Park area (104,700 ha) is within the HLS target area. As of November 2009, the area of the National Park in HLS was 29,612 ha, but of this 8,149 ha was outside the HLS target area. Therefore 28% of the area in HLS agreements within the Park is outside of the HLS target area. The high percentage outside of the target area is partly because these farms have come out of Countryside Stewardship before farms within the target area however the point is that without the NNPA's specific knowledge and ability to develop (outcome focused) scheme applications, important areas outside of the target area may not have

⁹⁶ NNPA was unable to gain 2008/09 <u>annual income</u> data from Natural England for the Park. The table below shows areas of schemes as of March/April 2009. Due to the different timescales between the datasets for income and area, the datasets do not directly correlate. For example, we know that the area in HLS increased from circa 10,000ha in 2007/08 to 20,000ha in 2008/09 (from 10% to 22% of the farmed area). Therefore the increased area in HLS is not reflected in the annual income figures presented for June 2007.

qualified for the HLS scheme.



Sheep Dip Project

The Sheep Dip Projects provides advice and financial support to farmers and land managers within catchment areas who agree to carryout improvements to sheep dipping facilities assessed as being of higher risk, thereby reducing the risk of pollution to watercourses.

Although the Environment Agency (EA) were financing the project, Catchment Sensitive Farming project officers did not have the necessary capacity or close working relationships with farmers in the area that were needed to further the project. Only because the NNPA agreed to provide staff time to manage the project was it able to go ahead. This entailed organising vets to do animal health plans, arranging farm risk assessments and coordinating delivery of the improvement plans.

The project has been successful in the Till Catchment (£34k EA funding) covering an area of 283 square Km. Three sheep dip facilities were upgraded in a National Project and a further 11 improvements are in progress in the Tweed catchment. A total of 32 farms had risk assessments and individual animal health plans prepared for them and 20 farmers attended seminars designed to help raise awareness of the problems caused by sheep dip pollution. The overall outcome is that added protection has been delivered to 10 rivers and burns.

Because of the excellent working relationships that the NNPA has with farmers in the area, the EA see the NNPA as the ideal partner to help deliver projects like these. As such the EA is providing a further £20k to extend the project into the Coquet and Aln catchments where the NNPA expect to see similar results in terms of outputs and outcomes.

Action Area Approach

The charts below show the breakdown for the four Action Area funds for 2009/10 giving an indication of the types of projects that the funds support (4 x £25,000 annually from the Authority's core budget to support small grant applications).



Cheviot and Glendale (Budget vs. Spend 2009/10)

Upper Coquetdale (Budget vs. Spend 2009/10)





North Tyne and Redesdale (Budget vs. Spend 2009/10)





The Authority's Action Area funds help establish and run local community and business initiatives that would otherwise not happen or would be significantly reduced in scope. Beyond providing funding the Authority's Action Area approach also builds community knowledge and capacity by sharing specialist advice. Some examples of Action Area projects are highlighted below:

Fly Fishing Educational Project, Northumbrian Fly Fishing – Northumbrian Fly Fishing were a new start up business at the time the Authority adopted its Action Area Approach. The principle aim of the business is to promote fly fishing which is an economically important recreational activity in the North of Northumberland National Park. The Authority provided funding to purchase resources to be used at public events (£200 for leaflets and £1,500 for a unique portable casting pool) which has increased public interest and is particularly popular with children.

Additional grant support (£780) was given in 2009 to develop the educational offer of Northumbrian Fly Fishing. A project has been developed - 'Salmon in the Classroom' - which allows local school children to learn about the life cycle of the salmon and the fresh water river environment, by watching young salmon develop through the life cycle before being released back into the wild. This project has proven to be extremely popular and a great way for the children to learn about such an important habitat of the National Park.

Action Area funding has helped this business to promote the ecology of an important local river, fly fishing as an economic activity and the National Park as a place to visit. The business has reached a wide range of audiences at local, regional and national countryside and agricultural shows and to local schools and visiting interest groups.

The outcomes from the Authority's Action Area funding has helped a new local business establish itself and thereafter to promote the special qualities of the National Park on our behalf.

The 'College in the Park' concept

The purpose of the 'College in the Park' is "to deliver a portfolio of training, work experience and development opportunities focused on the special qualities of Northumberland National Park to facilitate growth in the Green Economy in a rural setting."

The development of skills and expertise is a key economic driver. At the same time the Government is aiming to increase the number of young people participating in apprenticeship programmes in areas that have been recognised in need of economic growth. Based on a model initiated by Derbyshire County Council, the proposed 'College in the Park' will see the National Park act as a training hub which will connect opportunities, need and facilitation. The concept is based on the principle that development of skills and expertise in a rural area is a key economic driver and can significantly benefit the environmental and built heritage, especially in the National Park. Northumberland National Park Authority, and its key partners, will, together, facilitate the 'College in the Park', with the National Park Authority as Leader Partner.

Hadrian's Wall Bus

A 2009 survey of 136 bus passengers identified the following reasons for using the service (*extract below from: HWHL 2009 Bus Survey Results*).

There was a 100% response rate for this question. As with the previous two questions multiple answers were provided. The highest response rate came from 76 people who stated that they were using the service as it was "Convenient for activities". The second highest selection was for those who "Don't have a car available" on the day. These suggests that bus passengers are pre planning their trips without their cars suggesting a modal shift in behaviour, and that there is a new market emerging for the HWC bus for those visitors without cars. Additionally it wasn't surprising that 44 people chose "Enables me to do linear walks" however this was closely followed by 43 passengers who stated that it was the "Only way of getting out". These findings support and meet management objectives to reduce the amount of cars brought into the area by tourists. Figure 5 details the patterns of frequency.



The results show that the bus service supports visitor access and enjoyment to the National Park (visitors who may otherwise have travelled by car) and that it also provides access for people who "don't own a car / have one available" or where the bus is the "only way of getting out".

Annex 6: Peak District

Biodiversity

Diagram D: Changes in the numbers of key breeding birds in the South Pennines SPA between 1990 and 2004-05



Species	Number of		% change	%	Difference
	breeding pairs		in whole	change	between
			SPA	in SPA	PDNP and
				within	whole SPA
				PDNP	
	1990	2004-05			
Golden plover	720	720	0	-4	-4%
Lapwing	159	286	80	115	+35%
Redshank	45	26	-42	-33	+9%
Curlew	773	1010	31	75	+44%
Snipe	203	235	16	141	+125%
Dunlin	147	100	-32	-26	+6%
Common sandpiper	29	62	114	100	-14%
Short-eared owl	22	33	50	50	0
Wheatear	166	75	-55	-59	-4%
Whinchat	107	127	19	64	+45%
Ring ouzel	128	104	-19	-15	+4%
Twite	417	66	-84	-92	-8%

Table 32: Bird species in National Park and SPA

Negative figures in last column show that the species fared poorer within the NP than in the SPA as a whole. Positive figures show that the species fared better within the NP than in the SPA as a whole.

- 7 species fared better within the NP, of which 4 showed >10% difference (35-125%).
- 4 species fared worse within the NP, of which only 1 showed >10% difference (14%).
- 1 species fared the same within/outside the NP.

Annex 7: Methodology for estimating the Value for Money of National Park Authority Recreational Expenditure

As part of the development of its 'Value Transfer Guidelines' Defra commissioned a case study to provide an assessment of the benefits of visitor services provided by the Peak District National Park Authority⁹⁷. The aim was to provide an initial scoping assessment of the value for money of the provision of visitor amenities using of value transfer and further sensitivity analysis. This case study was to illustrate how value transfer can be used and was conducted with data that was available at the time. It therefore makes a number of simplifying assumptions and therefore the case study data should be viewed as illustrative and used with caution. This work does however help to show how value transfer can be used and how NPAs could value the benefits of their recreational expenditure, although further information and evidence would be needed in order to provide a robust estimation.

Value transfer is the process by which existing economic valuation evidence is used in a new policy appraisal context. In this case, the aim is to estimate the monetary value of the benefits in relation to assessing the 'value for money' of expenditure by National Park Authorities.

The process of value transfer involves several steps, guidelines for which have been published by Defra⁹⁸. Sensitivity analysis is performed on goods and services that cannot be valued due to lack of appropriate indicators or data. The following information is for the Peak District National Park Authority.

Peak District National Park Authority

Step 1: Establish the policy good decision- context

The focus of this case study is the provision of visitor amenities and establishing the 'Value for Money' (VfM) of the expenditure by the National Parks Authorities. The assessment of VfM, following HM Treasury Green Book⁹⁹ guidance in this case is limited to the question of whether benefits outweigh costs in terms of expenditure by National Park Authorities. There are further issues beyond this assessment as to

⁹⁷ 'Valuing Environmental Impacts: Practical Guidelines for the Use of Value Transfer in Policy and Project and Policy Appraisal' Case Study 6 – Estimating Value for Money of National Park Expenditure' Eftec February 2010.

⁹⁸ http://www.defra.gov.uk/environment/natural/ecosystems-services/valuing-ecosystem-services/

whether maximum VfM is being obtained from expenditure and as well as accounting for questions such as quality, cost, resource use and fitness for purpose and timeliness of activities and distribution of benefits. This assessment is therefore limited in scope to a basic economic efficiency question.

The study assesses the implications of a reduction in Central Government funding, estimating the loss of benefit if the level of a given service is reduced and or if the service is withdrawn completely by the NPA.

The Peak District National Park Authority (PDNPA) received central Government funding of approximately £8m in the period 2008-9 and was augmented by income from trading operations and other funding sources by approximately £5.8m. Expenditure on activities concerned with 'recreation management and transport' was approximately £2.5m and expenditure on actions concerning 'understanding the National Park' was approximately £3m.

Step 2: Define the policy good and affected population

The policy good with respect to estimating the value for money of National Park expenditure can be considered to range from visitor services, assets owned by the PDNPA and activities supported by external funding agreement. The case study focuses on the provision of visitor services which includes visitor centres, ranger services and cycle network provision. These services both relate to market and nonmarket goods (recreation amenity and activities) and associated direct and indirect use values. The majority of the Park's visitors come for the day by car from the surrounding areas. Some will benefit by directly consuming visitor services (e.g. visiting a visitor centre, cycle hire) while other services may be consumed more passively with less realisation that a service is being provided (e.g. walking on a maintained footpath).

The affected population for the policy good in general is the visitor population to the Park who consume the services of the PDNPA. In 1996 the estimated number of visitor days for the Peak District was approximately 20 million. The subset of the visitor population who directly consume services of the PDNPA is estimated from the limited data available (detailed in Step 3). The estimated number of visitors to visitor centres (approximately 450,000 per year), using cycle hire and guided walks (approximately 35,000 combined in 2008) are available. Outside this subset of the visitor population the experience of all visitors is likely to benefit to some extent from the activities of the PDNPA.

Step 3: Define and quantify the change in the provision of the policy good

The basic premise of the study is that a reduction in Government funding to the PDNPA will necessitate a reduction in expenditure on visitor services which is a 'narrow' focus and does not consider the current efficiency of allocation of PDNPA resources.

A qualitative assessment assumes the reduction in visitor resources will likely be a mix of a reduction in quality, quantity and/or access and the consequential effects on visitors' experience; i.e. a reduction in consumer welfare. The case study assesses the potential effects in Table 36.

Overall Table 33 suggests a wide range of potential marginal changes in visitor services, some of which are very tangible (e.g. no ranger guided walks) and others less so (e.g. effect of reduced expenditure on trails and paths). A number of services are jointly provided such as maintenance of footpaths and trails and visitor centres so although the reduction in expenditure by the DNPA may not lead to a withdrawal of the service, the quality is assumed to be affected.

Service	Potential implications of reduction in expenditure on service	Potential implications of cessation of service
Visitor Centres	Likely to be a quality change: reduced information and awareness exhibitions, reduced opening or availability of services.	Potential for total loss of service. Other authorities do provide visitor information.
	PDNPA is not the only authority that operates information centres.	
Cycle hire	As a market good the costs of cycle hire facilities are likely to be met by revenues from the service (and hence unlikely to be subject to a cut in provision).	Substitute private hire sites are available so hire facilities will be available within the Park; however if there is a reduced availability of hire facilities this may translate to a reduction in
	In the case of reduced operation this is likely to be a quality and quantity change: e.g. fewer and older cycles available for hire which may translate to a reduction in the number of 'cycle visits' to the Park.	the number of 'cycle visits' to the Park.

Table 33: Potential implications of reduced expenditure for visitor services provided by the Peak District National Park Authority

Potential implications of reduction in expenditure on service	Potential implications of cessation of service
An alternative is to raise prices if expenditure is cut.	
Likely to be a quality change: reduced expenditure on the management of trails could lead to a lower standard of maintenance over time.	Access likely to remain but a quality change is probable: potential for trails to deteriorate (e.g. paths and surfaces).
PDNPA is not the only authority that manages trails etc.	PDNPA is not the only authority that manages trails etc.
Likely to be a quality change: reduced availability of rangers to support visitors, reduced conservation activities with consequential effects on recreation, biodiversity and landscape quality.	Potential for total loss of service.
Likely to be a quantity change: fewer individuals taking part in guided walks. Quality of service could also be affected; e.g. by 'crowding' of remaining walks.	Total loss of service – no guided walk visits.
Likely to be a quantity change: fewer individuals taking part in activities – reduction in number of volunteer days.	Total loss of service – no volunteer days.
Likely to be a quantity change: reduced contact with local schools and a reduction in environmental learning activities.	Total loss of service – no education activities.
Likely to be a quality change: reduced expenditure on the management of trails could lead to a lower standard of maintenance over time.	Potential for total loss of basic facilities (e.g. information boards, toilets). Parking likely to still be available if access is not restricted.
	reduction in expenditure on service An alternative is to raise prices if expenditure is cut. Likely to be a quality change: reduced expenditure on the management of trails could lead to a lower standard of maintenance over time. PDNPA is not the only authority that manages trails etc. Likely to be a quality change: reduced availability of rangers to support visitors, reduced conservation activities with consequential effects on recreation, biodiversity and landscape quality. Likely to be a quantity change: fewer individuals taking part in guided walks. Quality of service could also be affected; e.g. by 'crowding' of remaining walks. Likely to be a quantity change: fewer individuals taking part in activities – reduction in number of volunteer days. Likely to be a quantity change: reduced contact with local schools and a reduction in environmental learning activities.

Source: Eftec

A quantitative assessment uses the Peak District Visitor Survey conducted during 2004-5. The use of PDNPA services are primarily provided by PDNPA (2008) as shown in Table 34 below.

Service	Indicator	Visitor estimate
Visitor Centres	Number of visitors to	2005/06: 455,389 (no. of visitors)
	visitor centres for which	2006/07: 425,000 (no. of visitors)
	PDNPA contributes 50%	2007/08: 465,746 (no. of visitors)
	or more of operating	
	costs ^a	
Cycle hire	Number of users of	2007/08: 34,830 (no. of visitors)
	PDNPA recreational	(combined cycle hire, guided
	facilities ^a	walks, campsites)
Footpaths, cycle	No data	No data
paths, trails, etc.		
Ranger service	No data	No data
Ranger guided walks	Number of guided walks	2007/08: 288 (no. of walks and
	and events	events)
	Number of participants	2007/08: 2,587 (no. of visitors)
Volunteer activities	Number of users of	2007/08: 2,555 (a) (no. of days)
	volunteer opportunities	2007/08: 7,662 (b) (no. of days)
	provided by PDNPA	
	through:	
	a) Peak Park	
	Conservation Volunteers	
	b) Part-time rangers	
Education activities	Number of users of	2007/08: 498,039 (a) (no. of
	PDNPA provided learning	visitors)
	opportunities through:	2007/08: 13,929 (b) (no. of
	a) information, b) face to	visitors)
	face	2007/08: 2,555 (c) (no. of
	c) participation and	visitors)
	engagement	
Car parks, toilet	No data	No data
facilities, litter		
removal, information		
boards		

Notes: ^a Reported by PDNPA (2008) as 'visitors' (no information is available on whether there are multiple visits by a visitor. Source: Eftec

Given the available data and information, it is not possible to predict how visitor estimates in Table 34 might change with reduced expenditure on services that result in marginal changes in the quantity, quality or access to the service. The most readily accessible case is that of a complete withdrawal of a service (e.g. no ranger guided walks). However, in some cases a complete withdrawal does not necessarily imply that the visitors to the park may not be able to undertake a specific activity (e.g. cycle hire).

Step 4: Identify and select monetary valuation evidence

There are no existing studies that explicitly estimate the value of 'added value' of visitor-based services provided by National Parks Authorities or similar. Available evidence is largely drawn from economic valuation literature focussing on non-market benefits of recreational activities, a substantial amount of which relates to forest recreation. The available studies, do, however permit for an initial scoping level assessment for estimating the benefits of visitor services provided by PDNPA.

Step 5: Transfer evidence and estimate monetary value of policy good

The process of matching evidence from the available surveys to the potential change in visitor services which result from reduced expenditure by PDNPA is not straightforward as the available economic value estimates correspond to a variety of marginal changes, value of specific facilities in situ and more general value of visits to sites:

Visitor centres: available studies indicate that relatively low values per visit are associated with facilities such as visitor centres (around £2-4 per visit). Christie et al. (2000) strictly focus on improvements to largely basic facilities but do include within this a formal visitor centre. Broadly evidence of this type can be applied to assess the implications of a cessation of this service.

Cycle hire: Christie et al. (2006) report values for cycling in the context of forest recreation, which provides a proxy for the benefits of cycling activities in the Peak District National Park. This suggests around £15 per visitor per trip. Market data is also available in relation to the costs of cycle hire with prices ranging between $\pounds 8 - 30$ for a full day depending on the specification¹⁰⁰. In the absence of valuation estimates (e.g. consumer surplus estimates), prices for hire provide an estimate of the minimum value by visitors on the basis that the benefit from the activity is at least equal to the cost of the activity.

¹⁰⁰ See for example: <u>http://www.peakdistrict.gov.uk/index/visiting/cycle/cycle-prices.htm</u> (for PDNPA hire facilities) and <u>http://www.visitpeakdistrict.com/activities/cycling.aspx</u> (for other operators).

Footpaths, cycle paths, trails etc.: Available evidence indicates that local resident populations value improvements and maintenance of paths etc. Based on Christie et al. 2000 these values are in the range $\pounds 2 - 5$ per household per year (for improvements in the Grampian region, based on a sample of households in that area). No studies are available in relation to visitors to outdoor recreation sites.

Ranger service: No studies directly assess the value of benefits provided by ranger services, although some inferences can be made from studies that focus on the conservation of recreation, biodiversity and landscape benefits of National Park and/or upland areas. Most of these studies are from the 1990s, and values vary depending on the sample population (i.e. visitors versus households in general).

Ranger guided walks: No studies directly assess the value of guided walks in National Parks, although more generally studies suggest that values in the range £8 – 15 per visitor per trip are likely to be appropriate based on walking and nature walking activities (e.g. Christie et al., 2006).

Volunteer activities: No studies directly assess the value of volunteer activities in National Parks, but some inferences can be made based on a broad assessment of the opportunity cost of volunteer time. For example the opportunity cost of leisure time is often equated to the marginal wage rate. The average weekly wage in the UK is in the region of £450, with the average weekly working hours around 31. This suggests an average hourly wage rate of £15. Assuming 1 volunteer day comprises of 8 hours in total this provides an estimate of £120 per volunteer day¹⁰¹.

Education activities: there is limited evidence in relation to the value of education activities. Values reported in Table 4 are similar to those for visitor centres ($\pounds 2 - 4$ per visit).

Car parks etc.: Reported values for basic visitor facilities are similar to those for visitor centres, footpaths and trails etc. and education visits as detailed above ($\pounds 2 - 9$ per visit). Market data is also available in relation to parking fees charged by PDNPA with a cost of up to $\pounds 3.50$ for a full days parking for cars and minibuses¹⁰².

Taking the above, available evidence suggests that fairly modest, but still positive, unit values are associated with visitor services provided by PDNPA. The available

¹⁰¹ Note that these calculations are largely illustrative. Data is sourced from Office of National Statistics (ONS) labour market statistics: <u>http://www.statistics.gov.uk</u> In reality the opportunity cost of volunteering will differ according to factors such as age, employment status, education, skills and experience, etc. Calculations based on the UK average wage may also be inappropriate if activities undertaken by volunteers are better reflected by wage rates in specific sectors (e.g. agriculture, forestry and general land management). It should also be noted that these figures differ from those used in the 'Volunteers' section of this paper as it was felt that this the data used in this calculation would likely be an overestimate.

¹⁰² See: <u>http://www.peakdistrict.gov.uk/index/visiting/parking.htm</u>

evidence however is indicative of a scoping level assessment providing a broad indication of potential values, rather than precise estimates.

Step 6: Aggregate value of policy good

Estimating the aggregate value of the visitor services provided by the PDNPA is limited to the available data and valuation evidence. The aggregate benefits are calculated on the basis of withdrawal of service (in contrast to the implications of a reduction in expenditure).

The key calculations are illustrated in Table 35 which has the underlying assumptions of a simplified analysis of complete withdrawal in contrast to and incorporation of the possible situation of gradual withdrawal, availability of substitute services and multiple benefits from some visitor services (e.g. rangers may contribute to the overall visitor experience through maintenance of biodiversity, landscape, culture and heritage).

Service	Loss of service – indicator and visitor estimate	Unit value for loss of service	Estimated loss of annual value	Notes
Visitor centres	Number of visitors to visitor centres: Approx. 450,000 per year	£2 – 4 per visit (assume 1 visitor equals 1 visit)	£0.9m – 1.8m	Visitor estimate based on Table 2 – assume centres that PDNPA contributes 50% or more of funding are closed.
Cycle hire	Number of users cycle hire: Approx. 30,000 per year	£15 per visit (willingness to pay estimate) \sim £10 – 15 per visit (hire cost) Suggests a small consumer surplus in region of £0 – 5 per visit	No loss – market good with available substitutes	Alternative cycle hire facilities are available that charge a similar price, implying that it is likely that visitors will be able hire cycles from alternative operators with minimal impact on consumer surplus.
Footpaths, cycle paths, trails, etc.	No data (Require estimate of	£2 – 5 per household per year	Not estimated	Valuation evidence relates to resident population, not visitors. Estimated

Table 35: Aggregate estimates of value of loss of visitor services

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Service	Loss of service – indicator and visitor estimate	Unit value for loss of service	Estimated loss of annual value	Notes
	number of users of footpaths etc. per year)			loss of annual value is addressed via sensitivity analysis – see Step 7.
Ranger service	No data (Require indicator that links visitor experience to actions of ranger service)	-	Not estimated	Insufficient information and data to estimate loss of value, but potential value of service is addressed via sensitivity analysis – see Step 7.
Ranger guided walks	Number of participants (visitors) in guided walks Approx. 2,500 per year	£8 – 15 per visit (assume 1 visitor equals 1 visit)	£0.02m - £0.04m	Visitor estimate based on Table 2.
Volunteer activities	Number of volunteer days (conservation volunteers and part-time rangers) Approx. 10,000 days per year	£120 per volunteer day	£1.2m	Based on Table 2 and estimate of opportunity cost of volunteer days.
Education activities	Number of learning opportunities provided for visitors Approx. 500,000 per year	£2 – 4 per visit (assume 1 visitor equals 1 visit)	£1.0m - £2.0m	Based on Table 2. There is potential for overlap with the estimate of visits to visitor centres if data is recorded such that this equates to a 'learning opportunity'.
Car parks, toilet facilities, litter removal, information boards	No data	£2 - 4 per visit (willingness to pay estimate) ~£3 -4 per visit (cost of parking where charged)	Not estimated	Loss of facilities likely to result in loss of consumer surplus (since not all car parks have charges) but available evidence suggests

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Service	Loss of service – indicator and visitor estimate	Unit value for loss of service	Estimated loss of annual value	Notes
		Suggests minimal consumer surplus		this could be marginal in unit terms. Lack of visitor count data precludes aggregate estimate. Potential value of service is addressed via sensitivity analysis – see Step 7.

Source: Eftec

Overall the reported aggregate estimates of loss of annual benefits to visitors from withdrawal of services amounts to approximately £3-5m in total. This benefit of visitor services provided by the PDNPA in the range of £3-5m is only a partial assessment of the value of visitor services and does not account for the benefits from the provision of basic visitor facilities, activities such as maintenance of footpaths and trails. The number of visitors that are likely to benefit from these excluded aspects could be substantial, implying that even relatively small unit values could result in aggregate benefits; hence the £3-5m range should be interpreted as a conservative estimate of the total value but an over-estimate of the activities actually valued.

Step 7: Conduct sensitivity analysis

Sensitivity analysis provides an opportunity to provide an account for the value of visitor services that are not calculated in Table 35. There are further supporting assumptions that provide an indication of the likely magnitude of benefits.

Footpaths, cycle paths, trails etc.: the 2005 visitor survey indicates that a substantial proportion of visitors undertake a walking activity in the Park. Taking this as being representative of all visitors then a ballpark estimate would be that around 50% of visitor days include a recreational walk of some kind (either up to 2 miles or 2 - 10 miles – as described in the 2005 visitor survey). Although somewhat dated, as reported above the number of visitor days to the park is around 20 million day per year. Valuation evidence (Step 4) suggests that households are willing to pay in the region $\pounds 2 - 5$ per year to maintain footpaths. From this basis and taking a conservative estimate (for example assuming only 5% of visitor walking days are on maintained footpaths) (and crudely equating households to visitors and accounting

for average household size) it is possible to estimate benefits to visitors from maintaining footpaths etc in the region of $\pounds 1$ million per year¹⁰³. Although the assumptions are relatively arbitrary this calculation demonstrates that the level of benefit derived from this service is likely to be at least in the same order of magnitude as most of the others estimated in Table 35, and potentially higher.

Ranger service: to some extent benefits from this service may overlap with other service aspects; for example providing information for visitors and work to maintain footpaths etc. In addition though this service contributes to PDNPA's conservation work in the Park and, in general, much of the public have a preference for preservation for Natural Parks, biodiversity, landscape and cultural heritage, as evidenced by relevant if somewhat dated studies reported in Table 34. On this basis it is reasonable to assume that the conservation activities of PDNPA (which also include advice to farmers, including participation in Environmental Stewardship schemes) will generate some value to households across the country. As emphasised elsewhere in the Value Transfer Guidelines this value will not be uniform across households, depending on factors such as location and distance from the Peak District, use or expected use of the Park, the availability of substitutes and socio-economic characteristics. However a modest set of assumptions, for example focussing on the 'regional' population (approximately 20 million people live within an hour's drive of the Park¹⁰⁴) and taking a 'low' per unit value for the conservation of the Park (for example £1 per person per year) implies an aggregate benefit of £20 million (this is very much an illustrative estimate and should be regarded with caution). A proportion of this value can be attributed to the activities undertaken by PDNPA; however it is not possible to estimate how much.

Car parks etc.: basic facilities provided by PDNPA typically support much of the recreation activities undertaken by visitors to the Park, particularly given that most visits to the Park are car-based (85% of all visits based on 2005 visitor survey). Illustrative calculations similar to those for footpaths etc. set out above could be undertaken. For example 85% of estimated visitor days is 17 million day visits per year by car. Average group size from the 2005 survey was 3.25, which on a rough approximation gives approximately 5.2 million car visits per year. Assuming 1 car visit equals one household and willingness to pay per visiting household of £2 per

¹⁰³ For example: 50% of visitor days including a walking activity gives 10 million visitor days. Five per cent of 10 million is 500,000 visitor days using maintained footpaths. Equating a visitor day to a visitor and dividing willingness to pay per household by an approximate average household size of 2 people, gives willingness to pay of $\pounds 1 - 3.50$ per visitor for maintaining footpaths. Aggregating by estimated visitors (500,000) gives a range of $\pounds 0.5 - 1.3$ million per year. ¹⁰⁴ A key point here is the availability of substitutes. Results from the 2005 visitor survey offer some

¹⁰⁴ A key point here is the availability of substitutes. Results from the 2005 visitor survey offer some insight where a 'skew' was found with respect to day visitor originating from the East Midlands. Potentially this could be explained by substitute availability. Residents to the north west of the Peak District also have the Lake District relatively close, for residents to the north east there is also the Yorkshire Dales and Moors, whilst for those to the south west there are also northern parts of Wales, for those from the south east (the East Midlands region) there are no substitutes comparable to Peak District.

visit for basic facilities gives an annual benefit value of £10.4 million per year. Again the assumptions are somewhat subjective but the point is to highlight the potential order of magnitude.

Step 8: Reporting

This case study provides an assessment of the benefits generated by visitor services provided by the PDNPA, with a view to determining the 'value for money' of expenditure by the Authority. The analysis focuses on the subset of services provided by the PDNPA that are more commonly subject to value transfer type analysis and is an initial scoping stage assessment only.

Assessing value for money is conducted using the broad categories of PDNPA expenditure which are not perfectly aligned to visitor services. The visitor services are funded from 'conservation of the natural environment' (£3.8m). 'recreation management and transport' (£2.5m of which £0.8m is stated to relate to 'ranger estates and volunteers) and 'understanding the National Park (approximately £3m). This totals expenditure of £9.3m which is not solely Central Government funding but also income from trading operations (£2.5m) and other sources.

In estimating the benefits of visitor services, from step 6 it is estimated that visitor services provided by PDNPA generate benefits to visitors of at least £3-5m per year. This is a conservative estimate and summing up the benefits for different visitor services reported in steps 6 and 7 can give a value of up to approximately £36m per year. Assessing the 'value for money' compared to Central government funding this gives a ratio of costs to benefits of 4:1. There are significant caveats to this calculation but this 'result' indicates the expenditure does represent 'value for money' based on a basic cost-benefit and economic efficiency definition of VfM.

The case study draws on a variety of data and highlights gaps and uncertainties in applying valuation to the complex set of visitor services provided by the PDNPA. A fuller and more detailed assessment of VfM of NPA expenditure should be carried out for the purposes of policy decision-making. The focus on tangible visitor and recreation based services requires robust visitor counts and profiles. Further there is the opportunity for primary evaluation surveys to focus on outcomes that arise from NPA activities which would provide further progress in assessing the value for money of NPA expenditure. The services provided by NPA expenditure also contribute to achieving other public policy goals such as those related to health and equity, which are not formally quantified in a 'value for money' or cost benefit calculation.

Estimating the value for money of National Parks: further case studies

Based on the case study above presented by Eftec, a similar exercise was conducted for Dartmoor National Park and Northumberland National Park. In both cases, the source of the evidence on the policy good is similar, but not exactly the same as that for the PDNPA. The policy good and context differs slightly as the provision of services differs between each National Park Authority (steps 1-2). The unit values that are identified and transferred (Steps 3-5) are identical but the resulting aggregate values differ. Here, the policy good and populations are briefly described for each National Park and steps 6-8 are detailed to provide differing assessments of value for money' for each National Park considered.

Dartmoor National Park

Step 1: Establish the policy good decision-context

The Dartmoor National Park Authority (DNPA) received central Government funding of approximately £4.5m in the period 2008-9 and was augmented by income from trading operations and other funding sources by approximately £958,000. Expenditure on activities concerned with 'recreation management and transport' was approximately £464,000 and expenditure on actions concerning 'understanding the National Park' was approximately £768,000 of which approximately £12,300 was on ranger guided walks.

Step 2: Define the policy good and affected population

The policy good with respect to estimating the value for money of National Park expenditure can be considered to range from visitor services, assets owned by the DNPA and activities supported by external funding agreement. The case study focuses on the provision of visitor services which includes visitor centres and ranger services. These services both relate to market and non-market goods (recreation amenity and activities) and associated direct and indirect use values. The majority of the Park's visitors come for the day by car from the surrounding areas. Some will benefit by directly consuming visitor service (e.g. visiting a visitor centre) while other services may be consumed more passively with less realisation that a service is being provided (e.g. walking on a maintained footpath).

The affected population for the policy good in general is the visitor population to the Park who consume the services of the DNPA. In 2007/8 the estimated number of visitor days was approximately 2.8 million. The subset of the visitor population who

directly consumer service of the DNPA is estimated from the limited data available (detailed in Step 3). The estimated number of visitors to visitor centres (approximately 220,000 in 2007/8) and guided walks (approximately 2,200 in 2008) are available. Outside this subset of the visitor population the experience of all visitors is likely to benefit to some extent from the activities of the DNPA.

Step 3: Define and quantify the change in the provision of the policy good

Information provided by Dartmoor National Park is provided in Table 36.

Service	Indicator	Visitor estimate
Visitor	Number of visitors to visitor	2007/08: 220,00 (no. of visitors)
Centres	centres	2008/09: 206,533
Footpaths,	No data	No data
cycle paths,		
trails, etc.		
Ranger	No data	No data
service		
Ranger	Number of guided walks and	2008/09: 431 - 519 (no. of walks
guided walks	events	and events)
		2008/09: 2,200(no. of visitors)
	Number of participants	
Volunteer	Number of users of volunteer	2008/9: 1142 volunteer days
activities	opportunities provided by DNPA	
Education	Number of users of DNPA	2008/09: 219 events
activities	provided learning opportunities	2008/09: 7194 participants
Car parks,	Toilet facilities: 6	No data
toilet facilities,	Car parks: 300	
litter removal,	Litter collected: 80 tonnes	
information	approx	
boards		

Table 36: Estimates of DNPA visitor services users (DNPA, 2007/8/9)

Steps 4-5: As in previous case study.

Step 6: Aggregate value of policy good

Estimating the aggregate value of the visitor services provided by the DNPA is limited to the available data and valuation evidence. The aggregate benefits are calculated on the basis of withdrawal of service (in contrast to the implications of a reduction in expenditure). The key calculations are illustrated in Table 37 which has the underlying assumptions of a simplified analysis of complete withdrawal in contrast to and incorporation of the possible situation of gradual withdrawal, availability of substitute services and multiple benefits from some visitor service (e.g. rangers may contribute to the overall visitor experience through maintenance of biodiversity, landscape, culture and heritage).

Service	Loss of service – indicator and visitor estimate	Unit value for loss of service	Estimated loss of annual value	Notes
Visitor centres	Number of visitors to visitor centres: Approx. 220,000 per year	£2 – 4 per visit (assume 1 visitor equals 1 visit)	£440,00 – £880,00	Visitor estimate based on Table 4 – assume all centres that DNPA operate are closed
Footpaths, cycle paths, trails, etc.	No data (Require estimate of number of users of footpaths etc. per year)	£2 – 5 per household per year	Not estimated	Valuation evidence relates to resident population, not visitors. Estimated loss of annual value is addressed via sensitivity analysis – see Step 7.
Ranger service	No data (Require indicator that links visitor experience to actions of ranger service)	-	Not estimated	Insufficient information and data to estimate loss of value, but potential value of service is addressed via sensitivity analysis – see Step 7.
Ranger guided walks	Number of participants (visitors) in guided walks Approx. 2,200 per year	£8 – 15 per visit (assume 1 visitor equals 1 visit)	£17,700- £33,300	Visitor estimate based on Table 4
Volunteer activities	Number of volunteer days (conservation volunteers and part-time rangers)	£120 per volunteer day	£132,000	Based on Table 4 and estimate of opportunity cost of volunteer days.

Service	Loss of service – indicator and visitor estimate	Unit value for loss of service	Estimated loss of annual value	Notes
	Approx. 1,100 days per year			
Education activities	Number of learning opportunities provided for visitors Approx. 7,000 per year	£2 – 4 per visit (assume 1 visitor equals 1 visit)	£14,000 - £28,000	Based on Table 3. There is potential for overlap with the estimate of visits to visitor centres if data is recorded such that this equates to a 'learning opportunity'.
Car parks, toilet facilities, litter removal, information boards	No data	£2 - 4 per visit (willingness to pay estimate) ~£3 -4 per visit (cost of parking where charged) Suggests minimal consumer surplus	Not estimated	Loss of facilities likely to result in loss of consumer surplus (since not all car parks have charges) but available evidence suggests this could be marginal in unit terms. Lack of visitor count data precludes aggregate estimate. Potential value of service is addressed via sensitivity analysis – see Step 7.

Overall the reported aggregate estimates of loss of annual benefits to visitors from withdrawal of services amounts to approximately $\pounds 604,000 - 1,073,000$ in total. This benefit of visitor services provided by the DNPA in the range of $\pounds 604,000$ to $\pounds 1,073,000$ is only a partial assessment of the value of visitor services and does not account for the benefits from the provision of basic visitor facilities, activities such as maintenance of footpaths and trails. The number of visitors that are likely to benefit from these excluded aspects could be substantial, implying that even relatively small unit values could result in aggregate benefits; hence the $\pounds 604,000 - \pounds 1,073,000$ range should be interpreted as a conservative estimate.
Step 7: Conduct sensitivity analysis

Sensitivity analysis provides an opportunity to provide an account for the value of visitor services that are not calculated in Table 37. There are further supporting assumptions that provide an indication of the likely magnitude of benefits.

Footpaths, cycle paths, trails etc.: the 2005 visitor survey for the PDNPA indicates that a substantial proportion of visitors undertake a walking activity in the Park. Taking this as being representative of all visitors then a ballpark estimate would be that around 50% of visitor days include a recreational walk of some kind (either up to 2 miles or 2 - 10 miles – as described in the 2005 visitor survey). The reported above the number of visitor days to the Dartmoor National Park is around 2.8 million days per year. Valuation evidence (Step 4) suggests that households are willing to pay in the region £2 – 5 per year to maintain footpaths. From this basis and taking a conservative estimate (for example assuming only 5% of visitor walking days are on maintained footpaths) (and crudely equating households to visitors and accounting for average household size) it is possible to estimate benefits to visitors from maintaining footpaths etc in the range of £70,000-245,000 per year¹⁰⁵. Although the assumptions are relatively arbitrary this calculation demonstrates that the level of benefit derived from this service is likely to be at least in the same order of magnitude as most of the others estimated in Table 6, and potentially higher.

Ranger service: to some extent benefits from this service may overlap with other service aspects; for example providing information for visitors and work to maintain footpaths etc. In addition though this service contributes to DNPA's conservation work in the Park and, in general, much of the public have a preference for preservation for Natural Parks, biodiversity, landscape and cultural heritage, as evidenced by relevant if somewhat dated studies reported in Table 37. On this basis it is reasonable to assume that the conservation activities of DNPA (which also include advice to farmers, including participation in Environmental Stewardship schemes) will generate some value to households across the country. As emphasised elsewhere in the Value Transfer Guidelines this value will not be uniform across households, depending on factors such as location and distance from Dartmoor, use or expected use of the Park, the availability of substitutes and socioeconomic characteristics. However a modest set of assumptions, for example focussing on the 'regional' population (approximately 2 million people live within an hour's drive of the Park¹⁰⁶) and taking a 'low' per unit value for the conservation of the Park (for example £1 per person per year) implies an aggregate benefit of £2m (this figure is illustrative and should be used with caution). A proportion of this value

¹⁰⁵ For example: 50% of visitor days including a walking activity gives 1.4 million visitor days. Five per cent of 1.4 million is 70,000 visitor days using maintained footpaths. Equating a visitor day to a visitor and dividing willingness to pay per household by an approximate average household size of 2 people, gives willingness to pay of $\pounds 1 - 3.50$ per visitor for maintaining footpaths. Aggregating by estimated visitors (70,000) gives a range of $\pounds 70,000 - 245,000$ per year.

¹⁰⁶ A key point here is the availability of substitutes for which we do not have further information.

can be attributed to the activities undertaken by DNPA; however it is not possible to determine the proportion.

Car parks etc.: basic facilities provided by DNPA typically support much of the recreation activities undertaken by visitors to the Park, particularly if we make similar assumptions to the visitor characteristics to PDNP for which most visits to the Park are car-based (85% of all visits based on 2005 PDNPA visitor survey). Illustrative calculations similar to those for footpaths etc. set out above could be undertaken. For example 85% of estimated visitor days is 2.38 million day visits per year by car. Assuming average group size from the PDNPA 2005 survey of 3.25 is similar, on a rough approximation gives approximately 730,000 car visits per year. Assuming 1 car visit equals one household and willingness to pay per visiting household of £2 per visit for basic facilities gives an annual benefit value of £1.46 million per year. Again the assumptions are somewhat subjective, particularly given the assumption of similar visitor characteristics between Dartmoor NP and the Peak District NP but the point is to highlight the potential order of magnitude.

Step 8: Reporting

This case study provides an assessment of the benefits generated by visitor services provided by the DNPA, with a view to determining the 'value for money' of expenditure by the Authority. The analysis focuses on the subset of services provided by the DNPA that are more commonly subject to value transfer type analysis and is an initial scoping stage assessment only.

Assessing value for money is conducted using the broad categories of DNPA expenditure which are not perfectly aligned to visitor services. The visitor services are funded from 'recreation management and transport' which was approximately £464,000 and expenditure on actions concerning 'understanding the National Park' was approximately £768,000 of which approximately £12,300 was on ranger guided walks. This totals expenditure of £1,232,000 which is not solely Central Government funding but also income from trading operations and other sources. The central Government segment accounts for £1.1m approximately.

In estimating the benefits of visitor services, from step 6 it is estimated that visitor services provided by DNPA generate benefits to visitors of at least \pounds 604,000- \pounds 1,073,000 per year. This is a conservative estimate and taking into account the assessment of services not covered in this estimate – as addressed in Step 7 – it is likely that 'total benefits' are in excess of the level of funding received from Central Government. Summing up the benefits for different visitor services reported in steps 6 and 7 can give a value of up to approximately \pounds 4.1-4.7m per year. Assessing the 'value for money', compared to Central government funding this gives a ratio of costs to benefits of the range of 4:1. There are significant caveats to this calculation but

this 'result' indicates the expenditure does represent 'value for money' based on a basic cost-benefit and economic efficiency definition of VfM.

The case study draws ion a variety of data and highlights gaps and uncertainties in applying valuation to the complex set of visitor services provided by the DNPA. A fuller and more detailed assessment of VfM of NPA expenditure should be carried out for the purposes of policy decision-making. The focus on tangible visitor and recreation based services requires robust visitor counts and profiles. Further there is the opportunity for primary evaluation surveys to focus on outcomes that arise from NPA activities which would provide further progress in assessing the value for money of NPA expenditure. The services provided by NPA expenditure also contribute to achieving other public policy goals such as those related to health and equity, which are not formally quantified in a 'value for money' or cost benefit calculation.

Northumberland National Park

Step 1: Establish the policy good decision-context

The Northumberland National Park Authority (NNPA) received Central Government funding of approximately £3.1m in the period 2008-9 and was augmented by income from trading operations and other funding sources by approximately £1m. Expenditure on activities concerned with 'Tourism' was approximately £1.15m of which £912,000 is from funding sources and £239,000 is from income sources. Expenditure on actions concerning 'Health/Education' was approximately £193,000 and expenditure on 'conserving the natural environment' was approximately £113,000. The amount spent on ranger guided walks is not broken out, but there are a substantial number of activities under this heading and the amount spent on ranger guided walks is likely to be small. Northumberland also supported some commercial walking enterprises too.

Step 2: Define the policy good and affected population

The policy good with respect to estimating the value for money of National Park expenditure can be considered to range from visitor services, assets owned by the NNPA and activities supported by external funding agreement. The case study focuses on the provision of visitor services which includes visitor centres and ranger services. These services both relate to market and non-market goods (recreation amenity and activities) and associated direct and indirect use values. The majority of the Park's visitors come for the day by car from the surrounding areas. Some will benefit by directly consuming visitor service (e.g. visiting a visitor centre) while other services may be consumed more passively with less realisation that a service is being provided (e.g. walking on a maintained footpath).

The affected population for the policy good in general is the visitor population to the Park who consume the services of the NNPA. In 2008/9 the estimated number of visitor days was approximately 2.35 million. The subset of the visitor population who directly consumer service of the NNPA is estimated from the limited data available (detailed in Step 3). The estimated number of visitors to visitor centres (approximately 129,000 in 2007/8) and guided walks (approximately 308 in 2008/9) are available. Outside this subset of the visitor population the experience of all visitors is likely to benefit to some extent from the activities of the NNPA.

Step 3: Define and quantify the change in the provision of the policy good

Information provided by Northumberland National Park is provided table 38:

Service	Indicator	Visitor estimate
Visitor	Number of visitors to visitor	2007/08: 129,000 (no. of visitors)
Centres	centres	2008/09: 118,000
Footpaths,	No data	No data
cycle paths,		
trails, etc.		
Ranger	No data	No data
service		
Ranger	Number of guided walks and	2008/09: 33 (no. of walks and
guided walks	events	events)
	Number of participants	2007/08: 308(no. of visitors)
Volunteer	Number of users of volunteer	2008/9: 1,200 volunteer days
activities	opportunities provided by NNPA	
Education	Number of users of NNPA	2008/09: 175 events
activities	provided learning opportunities	2008/09: 5,500 participants
Car parks,	Toilet facilities: 7	No data
toilet facilities,	Car parks: 32	
litter removal,	Litter collected: no details	
information		
boards		

Table 38: Estimates of NNPA visitor services users (NNPA, 2007/8/9)

Steps 4-5: as in previous case study.

Step 6: Aggregate value of policy good

Estimating the aggregate value of the visitor services provided by the NNPA is limited to the available data and valuation evidence. The aggregate benefits are calculated on the basis of withdrawal of service (in contrast to the implications of a reduction in expenditure).

The key calculations are illustrated in Table 39 which has the underlying assumptions of a simplified analysis of complete withdrawal in contrast to and incorporation of the possible situation of gradual withdrawal, availability of substitute services and multiple benefits from some visitor service (e.g. rangers may contribute to the overall visitor experience through maintenance of biodiversity, landscape, culture and heritage).

Service	Loss of service – indicator and visitor estimate	Unit value for loss of service	Estimated loss of annual value	Notes
Visitor centres	Number of visitors to visitor centres: Approx. 129,000 per year	£2 – 4 per visit (assume 1 visitor equals 1 visit)	£258,000 - £516,000	Visitor estimate based on Table 6 – assume all centres that NNPA operate are closed
Footpaths, cycle paths, trails, etc.	No data (Require estimate of number of users of footpaths etc. per year)	£2 – 5 per household per year	Not estimated	Valuation evidence relates to resident population, not visitors. Estimated loss of annual value is addressed via sensitivity analysis – see Step 7.
Ranger service	No data (Require indicator that links visitor experience to actions of ranger service)	-	Not estimated	Insufficient information and data to estimate loss of value, but potential value of service is addressed via sensitivity analysis – see Step 7.
Ranger guided walks	Number of participants (visitors) in guided walks Approx. 308 per	£8 – 15 per visit (assume 1 visitor equals 1 visit)	£2,400- £4,600	Visitor estimate based on Table 6

Table 39: Aggregate estimates of value of loss of visitor services

Service	Loss of service – indicator and visitor estimate	Unit value for loss of service	Estimated loss of annual value	Notes
Volunteer activities	year Number of volunteer days (conservation volunteers and part-time rangers) Approx. 1,200 days per year	£120 per volunteer day	£144,000	Based on Table 6 and estimate of opportunity cost of volunteer days.
Education activities	Number of learning opportunities provided for visitors Approx. 5,500 per year	£2 – 4 per visit (assume 1 visitor equals 1 visit)	£11,000 - £22,000	Based on Table 6. There is potential for overlap with the estimate of visits to visitor centres if data is recorded such that this equates to a 'learning opportunity'.
Car parks, toilet facilities, litter removal, information boards	No data	£2 - 4 per visit (willingness to pay estimate) ~£3 -4 per visit (cost of parking where charged) Suggests minimal consumer surplus	Not estimated	Loss of facilities likely to result in loss of consumer surplus (since not all car parks have charges) but available evidence suggests this could be marginal in unit terms. Lack of visitor count data precludes aggregate estimate. Potential value of service is addressed via sensitivity analysis – see Step 7.

Overall the reported aggregate estimates of loss of annual benefits to visitors from withdrawal of services amounts to approximately £415,000-687,000 in total. This benefit of visitor services provided by the NNPA in the range of £415,000-687,000 is only a partial assessment of the value of visitor services and does not account for the benefits from the provision of basic visitor facilities, activities such as maintenance of footpaths and trails. The number of visitors that are likely to benefit from these excluded aspects could be substantial, implying that even relatively small

unit values could result in aggregate benefits; hence the £415,000-687,000 range should be interpreted as a conservative estimate.

Step 7: Conduct sensitivity analysis

Sensitivity analysis provides an opportunity to provide an account for the value of visitor services that are not calculated in Table 39. There are further supporting assumptions that provide an indication of the likely magnitude of benefits.

Footpaths, cycle paths, trails etc.: the 2007 visitor survey for the NNPA indicates that a substantial proportion of visitors undertake a walking activity in the Park (49%). Taking this as being representative of all visitors then a ballpark estimate would be that around 50% of visitor days include a recreational walk of some kind (either short walk or long walk – as described in the 2007 visitor survey). The reported above number of visitor days to the Northumberland National Park is around 2.35 million days per year. Valuation evidence (Step 4) suggests that households are willing to pay in the region $\pounds 2 - 5$ per year to maintain footpaths. From this basis and taking a conservative estimate (for example assuming only 5% of visitor walking days are on maintained footpaths) (and crudely equating households to visitors and accounting for average household size) it is possible to estimate benefits to visitors from maintaining footpaths etc in the range of $\pounds 70,000-245,000$ per year¹⁰⁷. Although the assumptions are relatively arbitrary this calculation demonstrates that the level of benefit derived from this service is likely to be at least in the same order of magnitude as most of the others estimated in Table 39, and potentially higher.

Ranger service: to some extent benefits from this service may overlap with other service aspects; for example providing information for visitors and work to maintain footpaths etc. In addition though this service contributes to NNPA's conservation work in the Park and, in general, much of the public have a preference for preservation for Natural Parks, biodiversity, landscape and cultural heritage, as evidenced by relevant if somewhat dated studies reported in Table 38. On this basis it is reasonable to assume that the conservation activities of NNPA (which also include advice to farmers, including participation in Environmental Stewardship schemes) will generate some value to households across the country. As emphasised elsewhere in the Value Transfer Guidelines this value will not be uniform across households, depending on factors such as location and distance from Northumberland, use or expected use of the Park, the availability of substitutes and socio-economic characteristics. Residents outside of England are not included in this

¹⁰⁷ For example: 50% of visitor days including a walking activity gives 1.17 million visitor days. Five per cent of 1.17 million is 59,000 visitor days using maintained footpaths. Equating a visitor day to a visitor and dividing willingness to pay per household by an approximate average household size of 2 people, gives willingness to pay of $\pounds 1 - 3.50$ per visitor for maintaining footpaths. Aggregating by estimated visitors (59,000) gives a range of $\pounds 59,000 - 205,000$ per year.

analysis. However a modest set of assumptions, for example focussing on the 'regional' population (approximately 2.7 million people live within an hour's drive of the Park¹⁰⁸) and taking a 'low' per unit value for the conservation of the Park (for example £1 per person per year) implies an aggregate benefit of £2.7m (although this should be seen as illustrative and used with caution). A proportion of this value can be attributed to the activities undertaken by NNPA; however it is not possible to determine the exact proportion attributable to NNPA.

Car parks etc.: basic facilities provided by NNPA typically support much of the recreation activities undertaken by visitors to the Park, according to the 2007 NNPA visitor survey. If we make similar assumptions to the visitor characteristics to the survey for which most visits to the Park are car-based (82% of all visits based on 2007 NNPA visitor survey). Illustrative calculations similar to those for footpaths etc. set out above could be undertaken. For example 82% of estimated visitor days is 1.93 million day visits per year by car. Assuming average group size from the PDNPA 2005 survey of 3.25 is similar (not enough detail on NNPA 2007 survey), on a rough approximation gives approximately 593,000 car visits per year. Assuming 1 car visit equals one household and willingness to pay per visiting household of £2 per visit for basic facilities gives an annual benefit value of £1.18 million per year. Again the assumptions are somewhat subjective, particularly given the assumption of similar visitor characteristics between Northumberland NP and the Peak District NP but the point is to highlight the potential order of magnitude.

Step 8: Reporting

This case study provides an assessment of the benefits generated by visitor services provided by the NNPA, with a view to determining the 'value for money' of expenditure by the Authority. The analysis focuses on the subset of services provided by the NNPA that are more commonly subject to value transfer type analysis and is an initial scoping stage assessment only.

Assessing value for money is conducted using the broad categories of NNPA expenditure which are not perfectly aligned to visitor services. The visitor services are funded from 'recreation sites and facilities' which was approximately £100,000 and visitor centre funding was approximately £180,000, of which approximately £105,000 was from Central Government funding. Expenditure on actions concerning 'Audience engagement' was approximately £125,000 of which approximately. This totals expenditure of £405,000 which is not solely Central Government funding but also income from trading operations and other sources.

¹⁰⁸ Assuming 45 miles is one hour drive and 2.5 people per household. A key point here is the availability of substitutes for which we do not have further information.

In estimating the benefits of visitor services, from step 6 it is estimated that visitor services provided by NNPA generate benefits to visitors of at least £415,000-687,000 per year. This is a conservative estimate and taking into account the assessment of services not covered in this estimate – as addressed in Step 7 – it is likely that 'total benefits' are in excess of the level of funding received from Central Government. Summing up the benefits for different visitor services reported in steps 6 and 7 can give a value of up to approximately £4.4-4.8m per year. Assessing the 'value for money', compared to Central government funding this gives a ratio of costs to benefits of the range of 4:1 if we consider the total central Government spend on tourism, conserving the natural environment and health/education of approximately £1.1m. There are significant caveats to this calculation but this 'result' indicates the expenditure does represent 'value for money' based on a basic cost-benefit and economic efficiency definition of VfM.

The case study draws ion a variety of data and highlights gaps and uncertainties in applying valuation to the complex set of visitor services provided by the NNPA. A fuller and more detailed assessment of VfM of NPA expenditure should be carried out for the purposes of policy decision-making. The focus on tangible visitor and recreation based services requires robust visitor counts and profiles. Further there is the opportunity for primary evaluation surveys to focus on outcomes that arise from NPA activities which would provide further progress in assessing the value for money of NPA expenditure. The services provided by NPA expenditure also contribute to achieving other public policy goals such as those related to health and equity, which are not formally quantified in a 'value for money' or cost benefit calculation.

Summary

The case studies of the National Park Authorities of the Peak District, Dartmoor and Northumberland have provided an initial scoping assessment of the value for money of NPA spend on visitor amenities and services. In considering the wider range of services provided by the NPAs, the process does appear to produce net benefits. Difference in the range and strategies of services provided does not seem to have led to a significant difference in the outcome for the ratio of benefits to costs, and in all three cases the wider estimate of benefits to costs ratio (BCR) is in the 4:1 range. The calculation of this figure is subject to significant caveats but the initial scoping assessment would indicate that expenditure by the three NPAs on visitor amenities and services does provide high value for money, as defined as a BCR of over 2:1. The more narrowly defined benefits calculated provide a BCR of around 1:1, with significant variation. Given the benefits are only calculated using use values of only four services, those of visitor centres, ranger guided walks, volunteer services and education activities, the actual benefits estimated are likely to be a small proportion Page | 225

of the total benefits generated. As previously mentioned, a fuller and more detailed VfM exercise should be carried out for the purposes of policy decision-making.

Annex 8: National Parks operation prior to Environment Act 1995

Independent National Park Authorities were established under the 1995 Act. Before their introduction, the Parks operated as follows:

Administered either by county council committees (Dartmoor, Exmoor, Northumberland, North York Moors & Yorkshire Dales) or independent national park boards (Broads [except for contracted services], Lake District & Peak District).

Funded 75% by central Government via National Park Supplementary Grant (NPSG), and 25% by the local county council(s) via a precept.

All planning policy was administered by the county councils since before the inception of National Parks in 1949. However, the introduction of the Local Government Act 1972 delegated planning policy to district councils, with mineral & waste planning policy remaining with the county councils.

In the early 90's, opportunities arose to reconsider the effectiveness of the Parks operation:

Discussions surrounding the Planning and Compensation Bill in 1990 revealed that the majority of National Park Officers said they wanted proper/full planning controls.

National Parks Review Panel published its report 'Fit for the Future' (commonly known as the Edwards' Report) in 1991, which made recommendations regarding various aspects of National Park operation, including governance, democracy, purposes, development control & financial resources. Key recommendations included:

"3.1 The purposes of national parks should be defined in a new National Parks Act as:

- To protect, maintain and enhance the scenic beauty, natural systems and land forms, and the wildlife and cultural heritage of the area;
- To promote the quiet enjoyment and understanding of the area, insofar as it is not in conflict with the primary purpose of conservation."

"3.2 In pursuance of these purposes, the national park authorities should support the appropriate agencies in fostering the social and economic well-being of the communities within the national park, in ways which are compatible with the purposes for which national parks are designated."

"9.1 The Silkin Test should be incorporated in legislation, within a new National Parks Act. Government guidance will be required on its interpretation."

"11.6 National Park Authorities should be responsible for *all* aspects of the development control process. Applications should go direct to national park authorities and be processed and determined solely by them."

"11.19 Special consideration of the needs of national parks should be reflected when government offers advice on planning matters, e.g. in Planning Policy Guidance Notes."

"12.1.1 Independent authorities should be established for all national parks. They should be formally titled National Park Authorities. This should be a key measure in a new National Parks Act."

"18.1.2 The present ratio of approved national park authority expenditure met by central government and local government (75:25) should be maintained. ..."

"18.1.5 The 25 per cent local contribution to national park authority expenditure should be raised by precept on the Local Authorities, which should have an opportunity to comment on the proposed precept. This local contribution should be divided equally between the county councils and district councils."

Government responded to 'Fit for the Future' with a statement on policies for the National Parks. This confirmed, amongst other things, that:

- National Park purposes would be restated to refer expressly to quiet enjoyment and understanding, and conservation of wildlife and cultural heritage. To make clear that conservation overrides public access and enjoyment in cases of conflict, and that Parks have duty to take account of economic and social needs of local communities.
- independent National Park Authorities would be created, rather than local authority committees, though still within the local government framework.
- planning protection in National Parks would be enhanced through the Planning and Compensation Act 1991 and Planning Policy Guidance 7 (now Planning Policy Statement 7). Detailed planning, including a local plan and handling planning applications should be the responsibility of the Park Authority.