

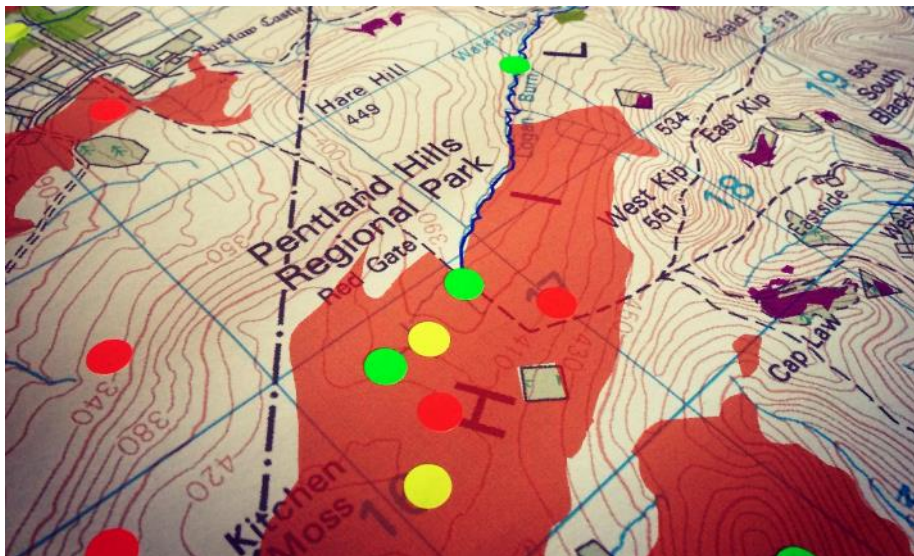


Scottish Natural Heritage
Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdar air fad airson Alba air fad

A project for Scottish
Natural Heritage (SNH)

Applying the ecosystem approach to collaborative land use and management in the Pentland Hills Regional Park



Technical
Annex

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Collingwood Environmental
Planning Limited

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Annex 1: Context for the project

The Pentland Hills Regional Park and its management / governance

Policy context for Regional Parks

The Pentland Hills Regional Park is one of three Regional Parks across Scotland, the other two being the Clyde Muirshiel and Lomond Hills Regional Parks. Local Authorities can designate Regional Parks, with support from Scottish Natural Heritage (SNH), under the Countryside (Scotland) Act 1967 and the Regional Parks (Scotland) Regulations 1981.

Regional Parks are described as *“large areas of attractive countryside which lie close to Scotland’s larger towns and cities, and which are therefore popular for outdoor recreation”* (SNH, 2014). By their nature, they are also likely to contain landscapes and habitats of regional importance supporting a variety of wildlife. A key objective of the Regional Park designation therefore is to provide for the coordinated management of recreation alongside other land uses such as farming, forestry and nature conservation (ibid). All of these issues are prevalent in the Pentlands, particularly in terms of recreational pressure from Edinburgh and other nearby settlements.

Where and what is the Pentland Hills Regional Park?

The Pentland Hills Regional Park (“the Park”) is located to the south of Edinburgh (see Figure A1-1) and was designated in 1986. It is described as *“a living, working landscape offering great opportunities to experience and enjoy the outdoors”* (PHRP, 2016). Implicit to this description are three key uses / functions of the Park: 1) nature and biodiversity – the *“living”* Park; 2) farming and other land based enterprise – the *“working”* park; and 3) recreation – the *“enjoyable and experiential”* Park.

The Park encompasses a range of different land covers and semi-natural habitats though it is predominantly upland in character. The highest point in the Park is Scald Law at 579m. The upland areas of the Park are dominated by acid grassland (3,085ha) and dwarf shrub heath (4,624ha). Better quality arable land (1,970ha) and improved grassland (1,808ha) dominate the low lying peripheral areas at the Park boundary.

In this project we differentiate between productive land and semi-natural habitats. This distinction is important due to the different types of management and also the range of natural environment benefits potentially provided on these different land uses / covers. Productive land is land that has been improved for agricultural purposes (e.g. by cultivation) and includes arable land (for growing crops) and improved grassland / pasture (for grazing livestock). Semi-natural habitats in the Park are introduced at Annex 3 (Table A3-1 in particular).

Coniferous woodland is the other major land cover in the Park (1,150ha), particularly in the south-west. Smaller patches of broadleaved and mixed woodland are present across the Park on lower lying slopes and in the glens that bisect the Park. Much of Edinburgh’s water supply is provided by catchments and reservoirs within the Park: there are abstractions from Loganlee and Glencorse reservoirs; Threipmuir and Harperrig reservoirs provide drought option sources; and there are also a number of private water supplies in the Park.

The management and governance of the Park

Decisions concerning the practical use and management of land in the Park are subject to a range of public and private interests, as explained further below. The role of the Park is to offer support and try and build consensus on shared objectives for the use and management of the Park, recognising that decisions concerning most land in the Park are ultimately within the hands of the landowner / tenant (subject to the constraints of the regulatory regime). The governance of the Park’s input to land use and management planning is provided by three separate groups, which are outlined below.

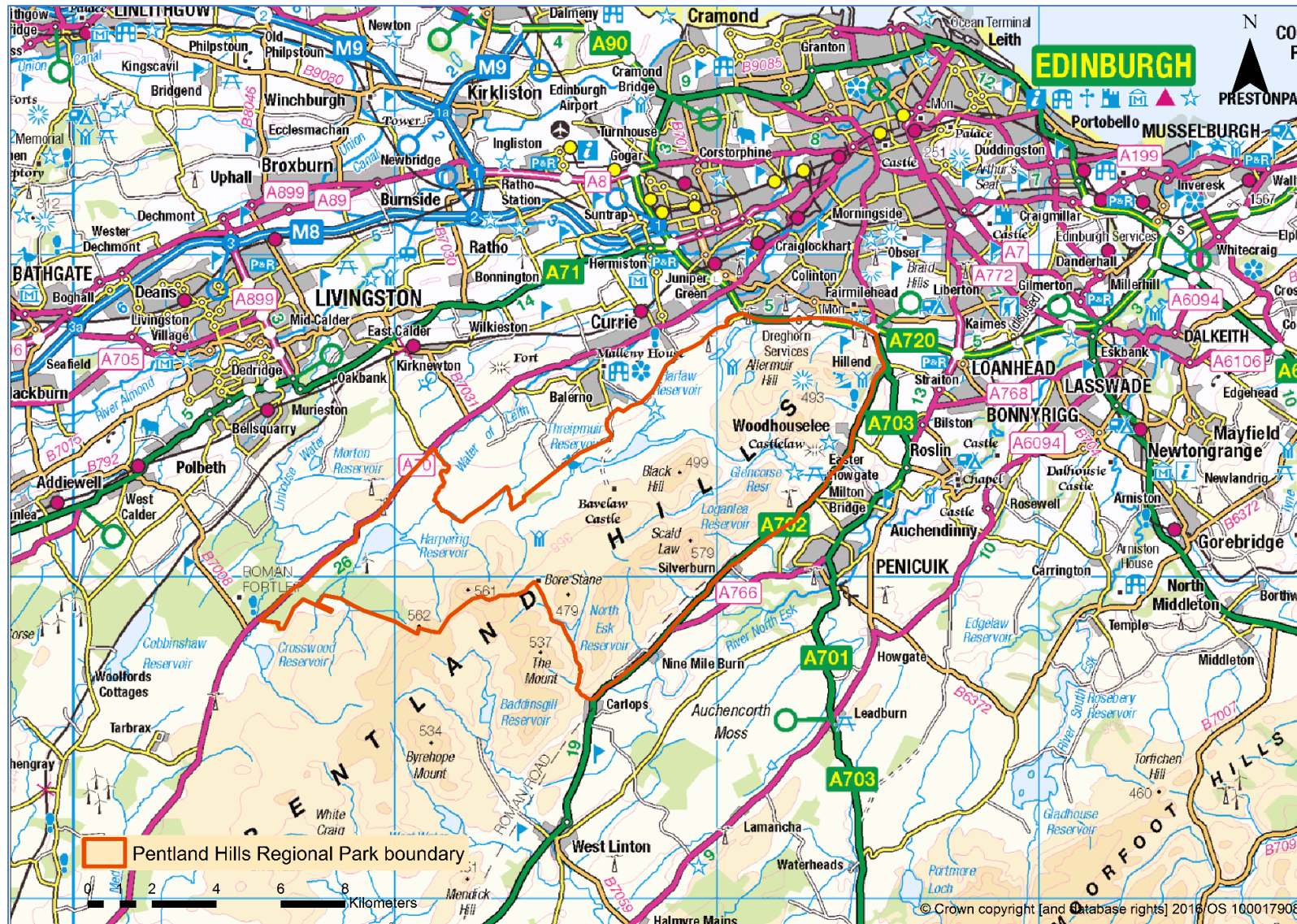


Figure A1-1: Pentland Hills Regional Park (PHRP) and surrounding area

Governance structure of the Pentland Hills Regional Park:

- **The Joint Committee (JC):** The JC is comprised of elected members from the three local authorities intersecting the Park (City of Edinburgh, Midlothian and West Lothian Councils) as well as several non-voting members (Scottish Water, Scottish Natural Heritage, East Lothian Council, NFUS and Scottish Land and Estates). The JC is ultimately responsible for all decisions that are taken within the Park's remit.
- **The Management Group:** An officer level technical group responsible for day-to-day management activities and decisions and advising the JC on key decisions.
- **The Consultative Forum (CF):** A stakeholder group containing a range of interests, uses and users within the Park including farmers, Ministry of Defence (MoD), various recreational interests (e.g. fishing, mountain biking, running, walking, horse riding), wildlife conservation, cultural heritage, economic development (including tourism) and several community councils. The key role of the CF is as a 'sounding board' to the JC and Management Group by providing advice and input on specific issues and decisions.

Land use and management in the Pentlands – conflicts and pressures

As land is a finite resource, conflicts can occur between competing land uses, for example between farming and forestry, or between energy generation and recreation. Some conflicts of interest arise in relation to development opportunities, such as wind farm and hydroelectricity, activity centre, hill-track construction (for agricultural or forestry purposes) etc.

The Pentland Hills also face pressures associated with the growth of the urban area and an increase in anti-social behaviour including late night drinking, wild camping, damage to buildings and vehicles, sheep worrying, fly tipping etc.

Other factors to be considered in the prioritisation of investment and action may include the implications for everyday countryside management issues such as developing and maintaining footpaths, cycle paths, signage and information boards, woodland planting and management, agreeing and managing recreational events (e.g. sports events) etc.

The sustainable land use agenda in Scotland

Scotland's Land Use Strategy

Scotland's land resource is under pressure to deliver a range of benefits; this being one of the main reasons behind the development of Scotland's first Land Use Strategy (LUS) in 2011 (Scottish Government, 2011). The LUS, which was updated in March 2016 (Scottish Government, 2016), provides the overall policy context for the sustainable use and management of land in Scotland.

A key provision of the LUS are its ten principles for sustainable land use (see Table A1-1). These principles cover a broad range of issues concerning the sustainable use and management of land; from climate change (Principle F), landscape change (Principle E) and outdoor recreation / access (Principle H) to the primacy of certain key land uses (Principle C), ecosystem services (Principle D) and the importance of land use / management delivering multiple benefits (Principle A).

The LUS does not provide for any new mechanism of land use delivery. Instead it is reliant on the range of existing land use delivery mechanisms in Scotland taking account of and incorporating the LUS' objectives and principles. These existing "land use delivery mechanisms" range from statutory Town and Country Planning and Forestry and Woodland Strategies (FWS) to River Basin Management Planning (RBMP) and the actions of individual farmers and land managers. An evaluation of the first LUS demonstrated that there is significant capacity within Scotland's existing land use delivery "landscape" to deliver the strategy, without the need for a new land use delivery mechanism (Phillips *et al*, 2014).

Table A1-1: Land Use Strategy objectives and Principles for sustainable land use

Note: The LUS Principle abbreviations in the left-hand column were developed as part of the LUS Delivery Evaluation Project (Phillips *et al*, 2014) to help streamline text in the Final Report. The same abbreviation has been adopted here also.

Abbreviated LUS Principle	Full LUS Principle
LUS Objectives:	
<ul style="list-style-type: none"> • Land based businesses working with nature to contribute more to Scotland’s prosperity • Responsible stewardship of Scotland’s natural resources delivering more benefits to Scotland’s people • Urban and rural communities better connected to the land, with more people enjoying the land and positively influencing land use 	
A. Multiple benefits	A. Opportunities for land use to deliver multiple benefits should be encouraged
B. Regulation	B. Regulation should continue to protect essential public interests whilst placing as light a burden on businesses as is consistent with achieving its purpose. Incentives should be efficient and cost-effective
C. Primary use	C. Where land is highly suitable for a primary use (for example food production, flood management, water catchment management and carbon storage) this value should be recognised in decision-making
D. Ecosystem services	D. Land use decisions should be informed by an understanding of the functioning of the ecosystems which they affect in order to maintain the benefits of the ecosystem services which they provide
E. Landscape change	E. Landscape change should be managed positively and sympathetically, considering the implications of change at a scale appropriate to the landscape in question, given that all Scotland’s landscapes are important to our sense of identity and to our individual and social wellbeing
F. Climate change	F. Land-use decisions should be informed by an understanding of the opportunities and threats brought about by the changing climate . Greenhouse gas emissions associated with land use should be reduced and land should continue to contribute to delivering climate change adaptation and mitigation objectives
G. Vacant and derelict land	G. Where land has ceased to fulfil a useful function because it is derelict or vacant , this represents a significant loss of economic potential and amenity for the community concerned. It should be a priority to examine options for restoring all such land to economic, social or environmentally productive uses
H. Outdoor recreation and access	H. Outdoor recreation opportunities and public access to land should be encouraged, along with the provision of accessible green space close to where people live, given their importance for health and well-being
I. Involving people	I. People should have opportunities to contribute to debates and decisions about land use and management decisions which affect their lives and their future
J. Land use and the daily living link	J. Opportunities to broaden our understanding of the links between land use and daily living should be encouraged

Factors affecting land use delivery in Scotland

Practical land use and management “on the ground” is subject to a range of public and private interests including the regulation of certain activities (e.g. activities in the water environment, renewable energy and other forms of built development, some forestry activities etc) and the influence of the subsidy regime, especially compulsory (Pillar I) and voluntary (Pillar II) measures under the Common Agricultural Policy (CAP). Also, private land management objectives are undoubtedly influenced by the vagaries of macro-economic drivers, especially changing commodity prices on national (Scottish / UK) and international (EU / global) markets (e.g. the price of timber vs dairy products vs energy).

In essence, the “land use strategy” that we see in the PHRP is a dynamic balance of private objectives, regulatory control and uptake of subsidy options. In the absence of comprehensive “stick” (regulation) and “carrot” (subsidy) based mechanisms to regulate and / or incentivise land use, the role of consensus building is vitally important for agreeing and delivering a mutually agreeable, desired land use strategy for the PHRP. This is especially important given the lengthy timescales and finance involved in the realisation of several important land management objectives (e.g. path development and maintenance, forest development, restoration / creation of semi-natural habitat, energy development etc).

Participatory land use planning

Given that regulation and subsidy alone generally does not result in the optimal use of land (see above), there is often a need for participatory land use planning whereby groups of stakeholders come together to build consensus on an agreed land use strategy for the management area.

Often there won't be a strong regulatory driver for the land uses agreed upon and they may currently¹ provide no or little revenue (e.g. natural flood management, peatland restoration). However, there may well be subsidy available to cover initial costs and ongoing maintenance (e.g. tree planting and subsequent management as part of the SRDP / Forestry Grant Scheme) and many of the ecosystem services concerned are provided by more marginal, less productive land.

There are many examples in Scotland of this type of participatory land use planning approach helping to identify shared objectives and consensus on a desired land use strategy. Key examples include: 1) “Local Focus Area” planning undertaken as part of the Regional Land Use Framework Pilot in Aberdeenshire (e.g. Byg *et al*, 2014); 2) the Tweed Forum²; 3) the Carse of Stirling ecosystems approach demonstration project (LUC and STAR, 2014); and 4) the sub-regional planning undertaken as part of the Dumfries and Galloway Forestry and Woodland Strategy (Dumfries and Galloway Council, 2014).

A key tool that is often used in participatory land use planning projects is “participatory mapping”. This maps specific features of interest which could have positive or negative connotations; e.g. areas of environmental blight (litter, dog fouling etc), ecosystem services, community assets, frequently used paths / routes etc. A range of different techniques are available for participatory mapping (Brown, 2005) including the use of “sticky dots” to mark-up specific locations (Raymond *et al*, 2009) and questioning about the features, benefits etc provided by specific sites (Plieninger *et al*, 2013).

A range of different participatory mapping techniques were used as part of the Pentland Hills project though the focus was on the use of “sticky dots” to map the location of specific natural environment benefits.

The ecosystems approach and ecosystem services

What is the ecosystems approach?

As part of the Pentland Hills project, we were asked to adopt an “ecosystems approach”. The ecosystems approach has been described as a holistic and inclusive strategy for looking after the natural environment (SNH, 2016). In essence, it means working with nature to provide a healthy natural environment for both people and nature.

There are three core principles behind the ecosystems approach: 1) involving people; 2) taking account of the services that ecosystems provide; and 3) taking account of how ecosystems work (ibid). Set out in further detail at Box A1-1 below, these principles are a more aggregated version of

¹ Payment for Ecosystem Services (PES) type schemes are currently being considered at various levels (EU / UK / Scottish Government). This could potentially be facilitated through post-2020 CAP reforms.

² <http://tweedforum.org/>

the 12 “Malawi Principles” which provided the original foundation for the ecosystems approach as part of the Convention on Biological Diversity (CBD) (CBD Secretariat, 1998).

Box A1-1: Key principles of the ecosystems approach (source: SNH, 2016)

1. **Involving people:** especially those who benefit from ecosystem services and those who manage them. This means valuing people’s knowledge, helping people to participate, increasing collaboration and giving people greater ownership and responsibility. Public participation should go beyond consultation to become real involvement in decision-making.
2. **Taking account of the services that ecosystems provide:** such as provisioning (food, fuel and water), regulating (flooding and climate regulation) and cultural services (recreation, culture and quality of life) that ecosystems provide for people.
3. **Taking account of how ecosystems work:** by recognising that ecosystems are dynamic and cut across the land and sea, which implies a need to consider the broad scale as well as the local; and the long-term as well as the immediate. And by making best use of available information, embracing adaptive management principles wherever possible and trying to sustain nature’s multiple benefits.

The nature of the ecosystems approach and its principles is such that it aligns well with land use planning and participatory land use planning in particular. The consideration of land use and management at a suitable scale (ideally whole catchments or whole landscapes, such as the Pentland Hills) facilitates assessment of the benefits (services) that ecosystems provide and the functioning of those ecosystems (e.g. the “connectedness” of the landscape for species, the way in which the water cycle works). Crucially, participatory land use planning provides an ideal mechanism to involve people in decisions affecting the use and management of ecosystems.

What are ecosystem services?

“Ecosystem services” is the term often used in science and policy to describe natural environment benefits, the latter being the term that we have used throughout this project. Ecosystem services are the advantages or benefits that a healthy natural environment provides to people (de Groot *et al*, 2002; MA, 2005; UKNEA, 2011). They are the “outputs” of healthy, well-functioning ecosystems.

Definitions of the ecosystem services considered as part of this project (i.e. at the May 2016 Consultative Forum workshop) and discussed in this Technical Annex and the main Consultative Forum Report are provided at Table A1-2 below.

Table A1-2: Definitions of the ecosystem services considered in this project

Ecosystem service	Definition	Additional information
Cultural services: the non-material benefits obtained from ecosystems		
Experiencing nature	Sites and places where you can look at, enjoy or use plants, animals and / or the landscape.	N/A
Recreation / physically using nature	Sites and places used for recreational activities (e.g. walking, running, cycling, dog walking, horse riding, picnics, gathering wild foods, fishing etc). Sites could also be used commercially as part of (eco)tourism businesses and for organised events.	People often choose where to spend their leisure time based in part on the characteristics of the landscape in a particular area.
Spiritual and religious values	Sites of spiritual, religious or other forms of exceptional personal meaning.	Many religions (and other types of belief system) attach spiritual and religious values to landscapes, habitats and species as well as aspects of cultural heritage and traditions (e.g. architecture, national symbols, art, folklore).
Educational	Sites that provide an opportunity	The natural environment can provide a basis for

Ecosystem service	Definition	Additional information
values	for people (including school children, university students, interest groups and members of the public) to widen their knowledge about the natural environment.	formal and informal education.
Aesthetic values and inspiration	Sites of particular beauty or that afford particularly spectacular views.	Many people find beauty and inspiration in various aspects of landscapes, habitats etc.
Provisioning services: The products obtained from ecosystems		
Freshwater	Provision of clean water for human consumption (including use in agriculture and the production / manufacture of food and drink).	Freshwater can be sourced from inland waterbodies, groundwater, rainwater, wells / springs and burns for household, industrial and agricultural use.
Food – farmed	The vast range of food products derived from the commercial farming of plants and animals.	Crops are cultivated plants harvested by people for human or animal consumption as food. Livestock are animals raised for domestic or commercial consumption or use.
Food – game and wild collected food	Edible plant and animal species that are gathered or captured in the wild.	Game species are those species of wild animals, birds or fish that are hunted for food and / or sport. Wild collected food in this context is edible plants and fungi that has had no management to increase its production.
Timber and other wood products	Trees that are harvested from natural forest ecosystems and plantations.	Timber from harvested trees has a range of uses and can be made into a range of products (e.g. construction, furniture, paper etc).
Energy – biomass	Biological materials (biomass) that serve as sources of energy (by burning).	N/A
Energy – wind	Energy obtained by harnessing the wind with windmills or wind turbines.	In land terms, wind energy requires sites that are suitable for the domestic or commercial exploitation of wind energy. Sites must have an adequate wind resource, access to markets / grid connections and development / construction / operational costs that are proportional to the benefits (i.e. any subsidy + the price paid for the electricity generated).
Regulating services: The benefits obtained from the regulation of ecosystem processes		
Climate regulation	The storage of carbon by the natural environment (e.g. in trees and peat soils).	Ecosystems help to regulate global climate via the carbon cycle (sequestering or emitting carbon).
Flood regulation	The retention, storage and slow release of floodwater by the landscape.	The timing and magnitude of runoff and flooding is strongly influenced by land cover. Land covers that are hydraulically ‘rougher’ will store more floodwater. Draining bogs for forestry and overgrazing can reduce the landscape’s capacity to store water.
Water purification	The filtering out of pollutants by the natural environment.	Many aspects of ecosystems and their processes help to regulate water quality – e.g. plants and microbes help to absorb nutrients in runoff that would otherwise enter watercourses. This clean water contributes to other benefits including drinking water provision (reservoirs, private supplies), fisheries and recreation (swimming, canoeing etc).

Ecosystem service	Definition	Additional information
Erosion control	The retention and stabilisation of soils by vegetation helping to prevent soil erosion, landslides and sedimentation of watercourses.	In the absence of human activity most of the UK's land surface would be characterised by full vegetation cover. Vegetation plays an important role in soil retention and prevention of landslides by providing structural integrity to soils.

Valuing ecosystem services

It is possible to value ecosystem services in monetary terms whereby different techniques are used to assign a monetary value to services. However, this can be highly contentious as some people believe it is impossible or inappropriate to put a price on nature. For example, monetisation can lead to the commodification of nature (Robertson, 2006; McAfee, 2015), it favours provisioning services which are readily traded as commodities (Turnhout *et al*, 2013) and there is concern that valuation renders the intrinsic value of nature open to substitution (Fisher and Brown, 2014).

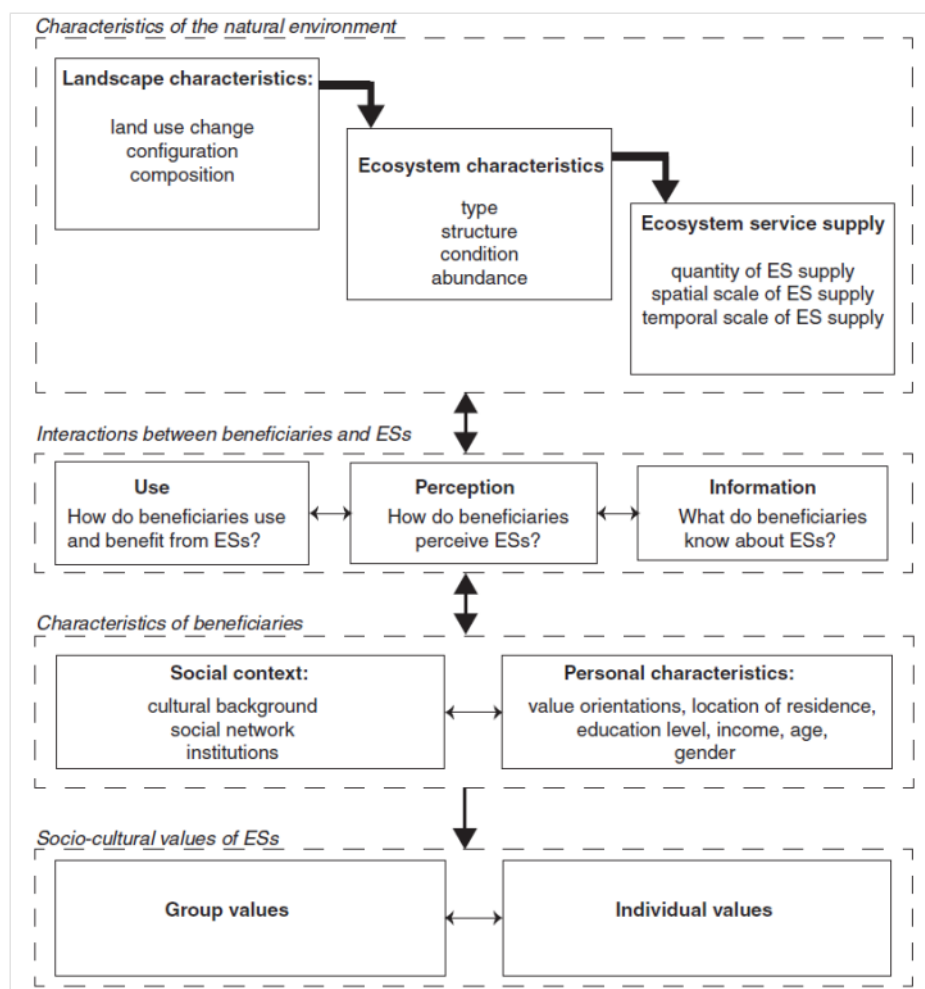


Figure A1-1: Determinants of socio-cultural value of ecosystem services (Scholte *et al*, 2015)

Within the May CF workshop and subsequent analysis, we used aspects of a socio-cultural values framework (Scholte *et al*, 2015) as a means of assessing and understanding the potential value and importance of the ecosystem services mapped by Forum Members. We focussed on three key determinants of socio-cultural value: 1) landscape characteristics; 2) who the beneficiaries are; and 3) how the benefits are used. The full socio-cultural values framework from Scholte *et al* (*ibid*) is shown on Figure A1-1 above.

Annex 2: Mapping natural environment benefits provided by the Park

Hotspot analysis of individual ecosystem service categories

A “hotspot” analysis was undertaken to identify where groups of individual natural environment benefits mapped by Forum Members cluster together. This analysis was undertaken for benefits identified within each ecosystem service category (cultural, provisioning and regulating) as well as for all benefits together (combined analysis).

The results of the analysis for individual ecosystem service categories are shown on Figures A2-1, A2-2 and A2-3 below. An analysis of the type and number of benefits provided at each of the hotspots is outlined in Table A2-1 below. The combined analysis is shown at Diagram 4 in the main report.

The hotspot analysis was undertaken in ArcGIS using the “kernel density” tool available as part of the spatial analyst extension³. The tool’s default settings were used (in terms of cell size etc). The 1km buffer on the park boundary was used as the processing extent (this buffer has been used in all other analyses undertaken). The statistical analysis used equal intervals on the basis of five classes. The numbering in the key on Figures A2-1, A2-2 and A2-3 below indicate the number of benefits (as mapped by Forum Members) present in a cell; the higher the number of benefits, the more “dense” the provision of benefits in that cell and the darker the colour shown on the map.

Combined hotspot analysis across all ecosystem service categories

As well as the individual “hotspot” analyses described above and shown on the figures below, a combined analysis was undertaken using the mapped benefits data from each individual ecosystem service category. The output of this analysis is a map that shows natural environment benefit hotspots for all ecosystem services. The results of this analysis are discussed in the main Consultative Forum Report and shown at Diagram 4. An analysis of the type and number of benefits provided at each of these combined hotspots is outlined in Table A2-1 below.

Table A2-1: Natural environment benefit hotspots – comparison of ecosystem service categories

Note: bold red highlighted text in the hotspots identified through the combined analysis indicates where one category of ecosystem services is dominant.

Category	Hotspots identified	Type and approximate number of benefits identified at hotspot
All service categories	1. Threipmuir Reservoir and Red Moss	Cultural services (14): recreation (6); experiencing nature (5); and educational values (3). Provisioning services (8): freshwater (4); wild food (3); and timber and other wood products (1). Regulating services (9): flood regulation (7); and climate regulation (2).
	2. The area of upland, glens and reservoirs around Glencorse Reservoir / Bell’s Hill / Carnethy Hill	Cultural services (7): recreation (2); aesthetic values and inspiration (2); spiritual and religious values (2); and experiencing nature (1). Provisioning services (4): freshwater (2); farmed food (1); and wild food (1). Regulating services (21): water purification (11); climate regulation (5); and erosion control (5).
	3. Upland area at Capelaw Hill and	Cultural services (7): recreation (4); aesthetic values and inspiration (1); spiritual and religious values (1); and experiencing nature (1).

³ ArcGIS Pro Kernel Density guidance: <http://pro.arcgis.com/en/pro-app/tool-reference/spatial-analyst/kernel-density.htm>

Category	Hotspots identified	Type and approximate number of benefits identified at hotspot
	Caerketton Hill including Bonaly Reservoir	Provisioning services (1): freshwater (1). Regulating services (9): flood regulation (1); climate regulation (4); and erosion control (4).
	4. Upland area at Kitchen Moss and the headwaters of the Logan Burn	Cultural services (2): recreation (1); and aesthetic values and inspiration (1). Provisioning services (2): freshwater (1); and farmed food (1). Regulating services (6): water purification (2); climate regulation (2); and flood regulation (2).
	5. Harperrig Reservoir	Cultural services (5): recreation (1); educational values (1); and experiencing nature (3). Provisioning services (1): freshwater (1). Regulating services (2): flood regulation (2).
Cultural services	1. Threipmuir Reservoir	Recreation (6); experiencing nature (5); and educational values (3).
	2. Harperrig Reservoir	Experiencing nature (3); recreation (1); and educational values (1).
	3. Upland area around Capelaw Hill and Allermuir Hill	Recreation (4); experiencing nature (1); spiritual and religious values (1); and aesthetic values and inspiration (1).
	4. Upland area linking Flotterstone Inn and West Kip	Recreation (6); experiencing nature (2); spiritual and religious values (1); aesthetic values and inspiration (4); and educational values (1).
Provisioning services	1. Threipmuir Reservoir	Freshwater (3); wild food (3); energy – biomass (1); and timber and other wood products (1).
Regulating services	1. Red Moss SWT Reserve	Flood regulation (3); water purification (2); and climate regulation (1).
	2. Upland area between Kitchen Moss and Spittal Hill	Water purification (5); flood regulation (4); and climate regulation (4).
	3. Glen between Threipmuir and Glencorse Reservoirs	Water purification (5); climate regulation (4); and erosion control (2).

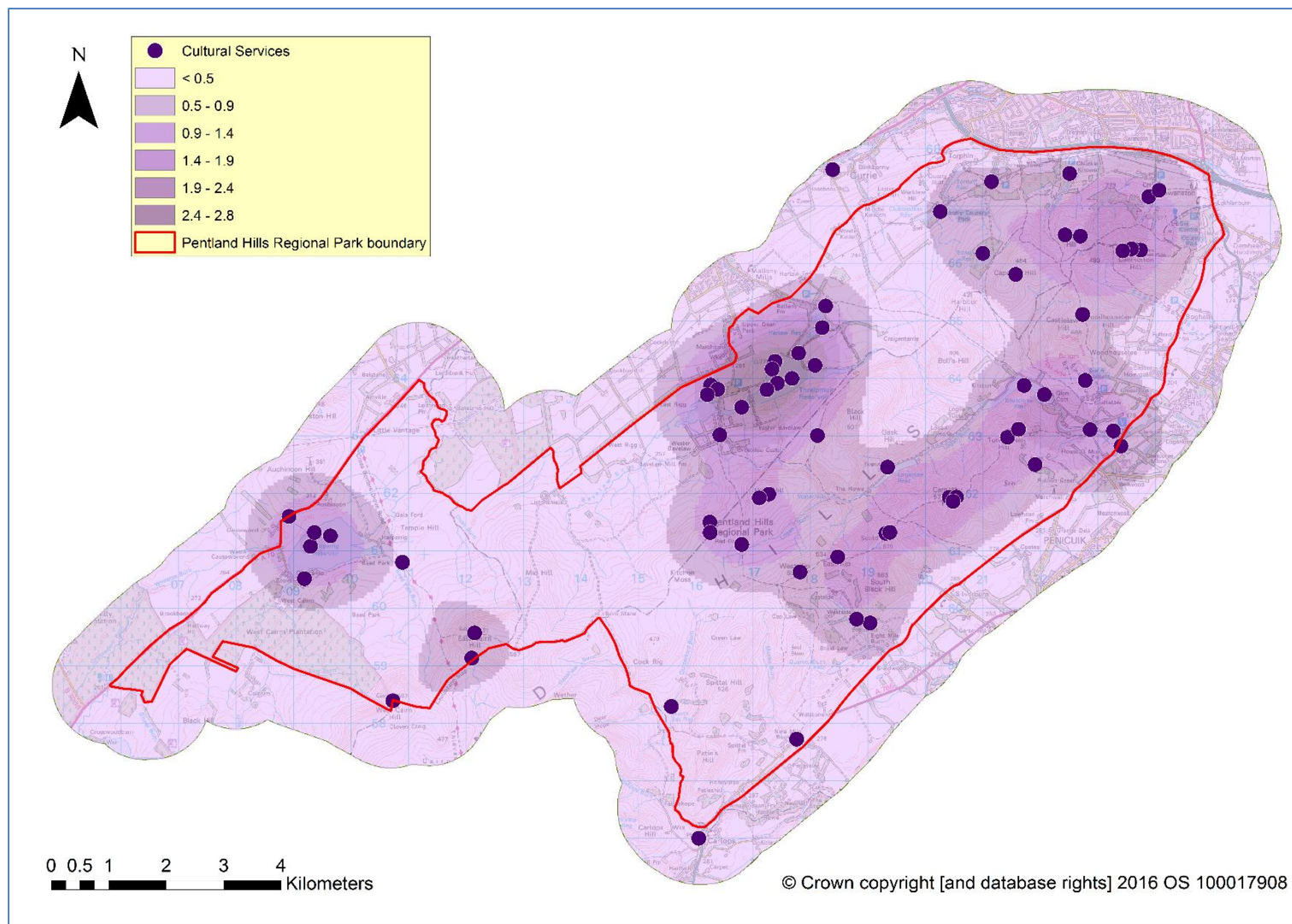


Figure A2-1: Hotspot analysis of cultural service related natural environment benefits mapped by Forum Members (Note: dots on the map above show the location of the benefits mapped by Forum Members at the May 2016 workshop. The methodology adopted in the hotspot analysis is described on p.11 above)

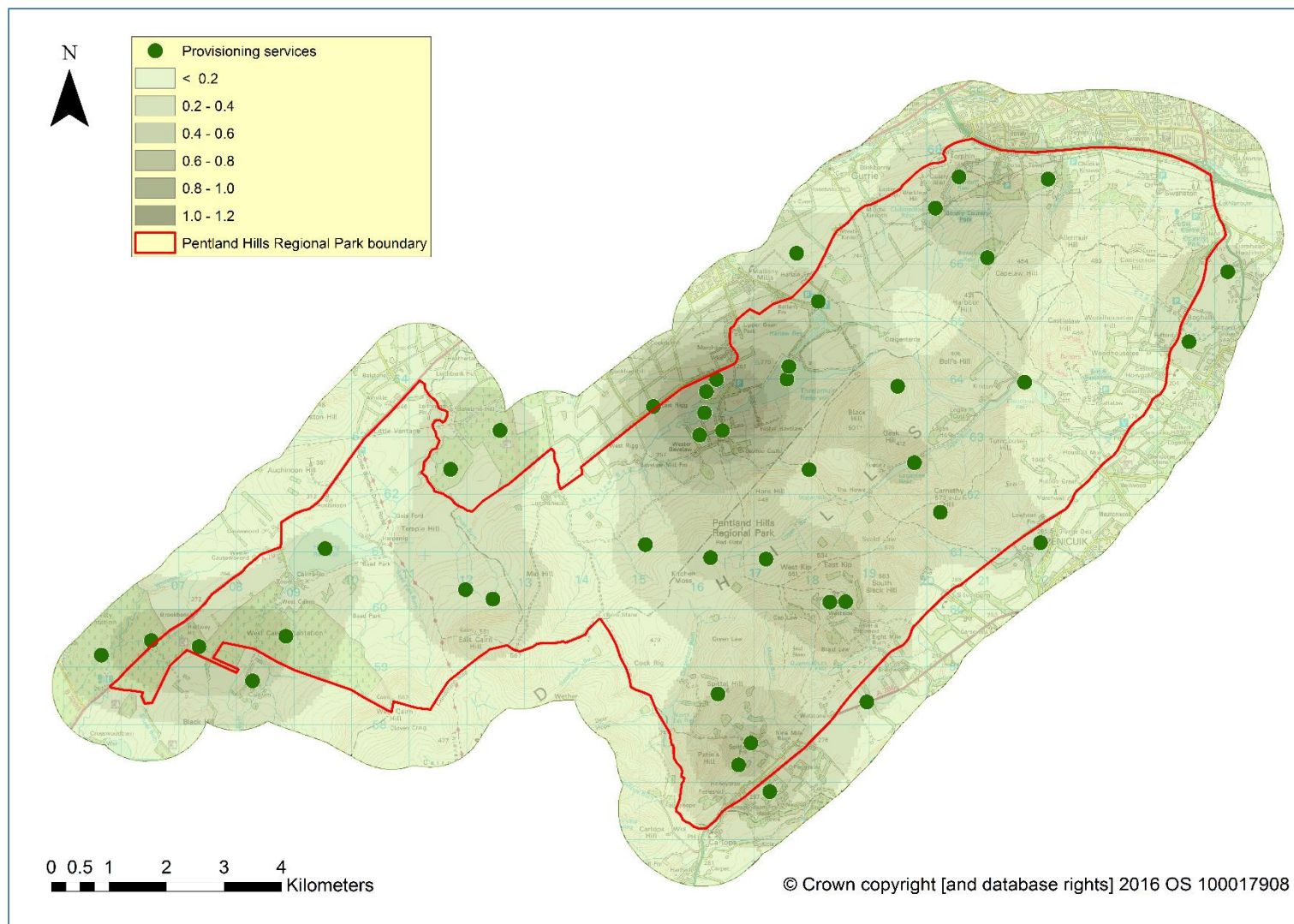


Figure A2-2: Hotspot analysis of provisioning service related natural environment benefits mapped by Forum Members (Note: dots on the map above show the location of the benefits mapped by Forum Members at the May 2016 workshop. The methodology adopted in the hotspot analysis is described on p.11 above)

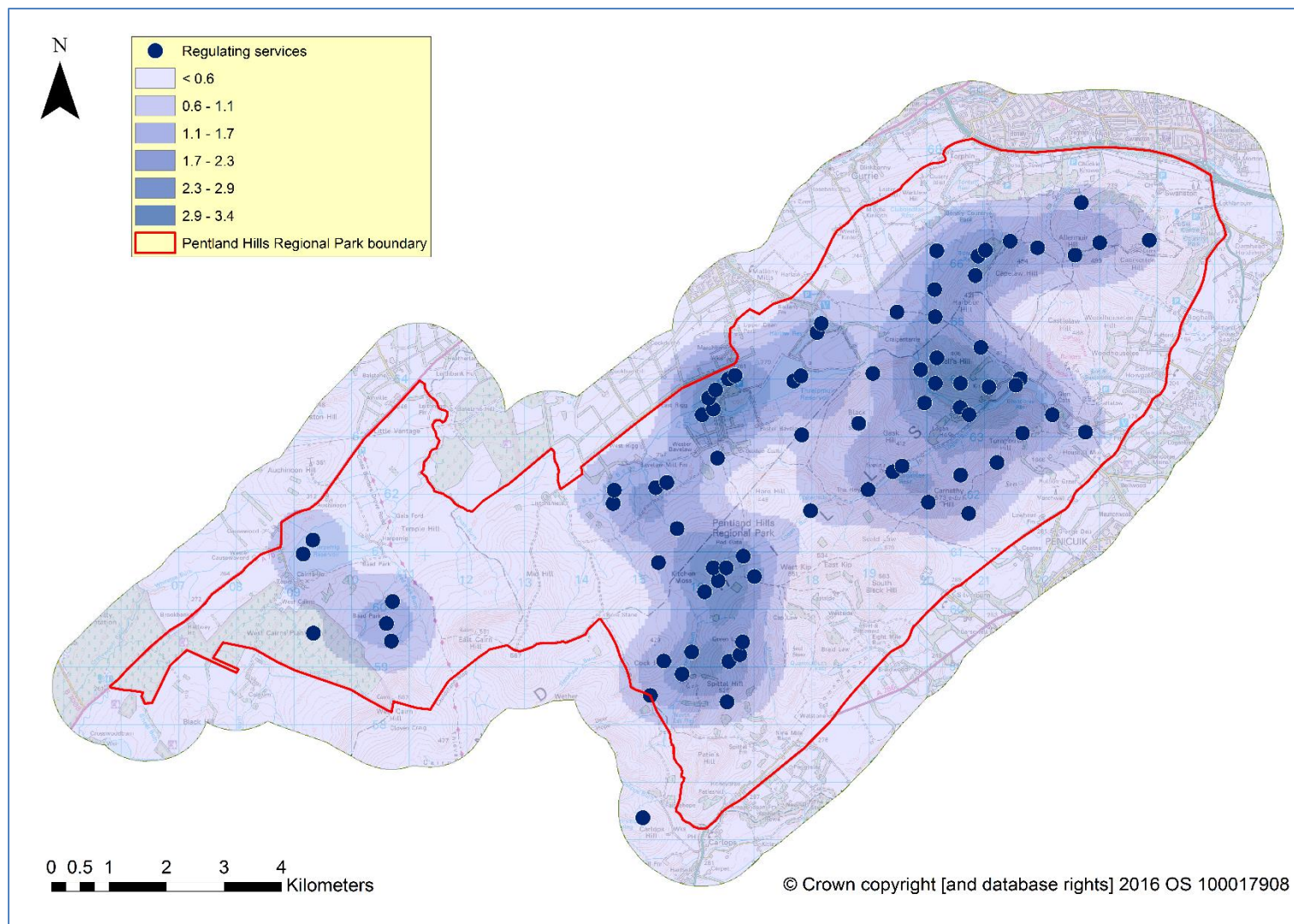


Figure A2-3: Hotspot analysis of regulating service related natural environment benefits mapped by Forum Members (Note: dots on the map above show the location of the benefits mapped by Forum Members at the May 2016 workshop. The methodology adopted in the hotspot analysis is described on p.11 above)

Annex 3: Valuing the natural environment benefits in the Park

The influence of landscape characteristics



The workshop considered a number of different determinants *or* factors that can affect the “socio-cultural value” of the natural environment benefits provided by the Park. Further information on the framework used for socio-cultural values (Scholte *et al*, 2015) is provided at Annex 1 above.

One such determinant of socio-cultural value was the specific characteristics of landscape in the Park. Within this, we considered the different features that make up a landscape and their relationship with one another; e.g. in terms of where they are positioned across the landscape. Landscape features in this sense could include different types of semi-natural habitat and land use.




Other characteristics of landscapes that may be important include the diversity or uniqueness of features. For example, a landscape comprising just one habitat or land use may provide less benefits than a more diverse one.

Part of our analysis of landscape characteristics considered spatial relationships between the natural environment benefits mapped by Forum Members and different types of semi-natural habitat. This analysis was undertaken using existing (2007) land cover data⁴ for the habitats and new mapped data from the workshop for the benefits. Definitions of the habitats considered in this analysis and the area of land they occupy in the Park is listed at Table A3-1 below. The habitat typology is based on different types of broad habitat from the UK Biodiversity Action Plan (BAP) (JNCC, 2015). Maps depicting the results of this analysis are shown at Diagrams A3-1, A3-2 and A3-3 below.

Table A3-1: Semi-natural habitats in the Park – definitions and area covered

Habitat	Definition / image	Habitat coverage across the Park	
		Area of habitat (ha)	Percentage of Park (%)
Semi-natural grassland	<p>Various types of semi-natural grassland are found in Scotland though acid grassland is described here. Acid grassland is characterised by vegetation dominated by grasses and herbs on a range of lime-deficient soils that have been derived from acid rocks such as sandstones (JNCC, 2010).</p> 	3085	20.4
Bog	 <p>Various types of bog habitat are found in Scotland though lowland raised bog is described here. These bogs occur on elevated deposits of peat, they are acidic, nutrient poor and poorly drained. As a result, the</p>	189.8	1.3

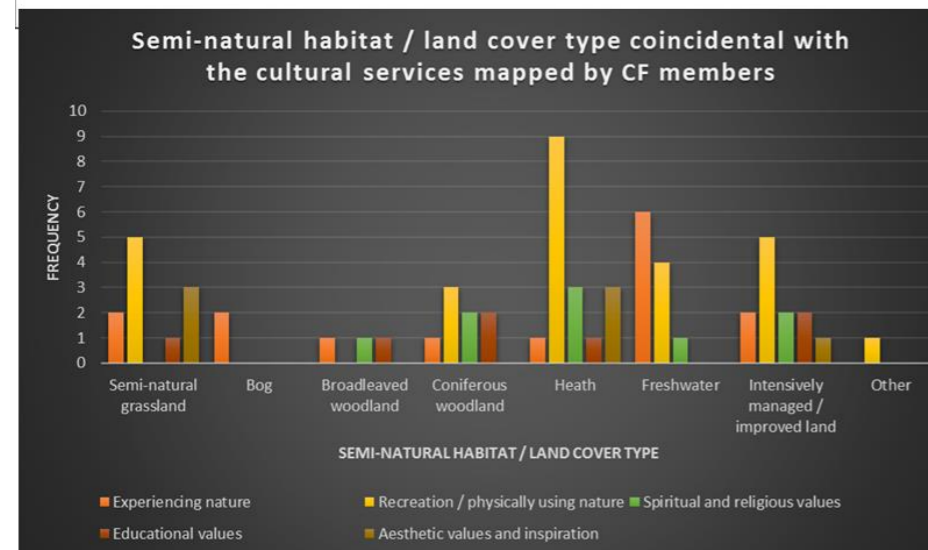
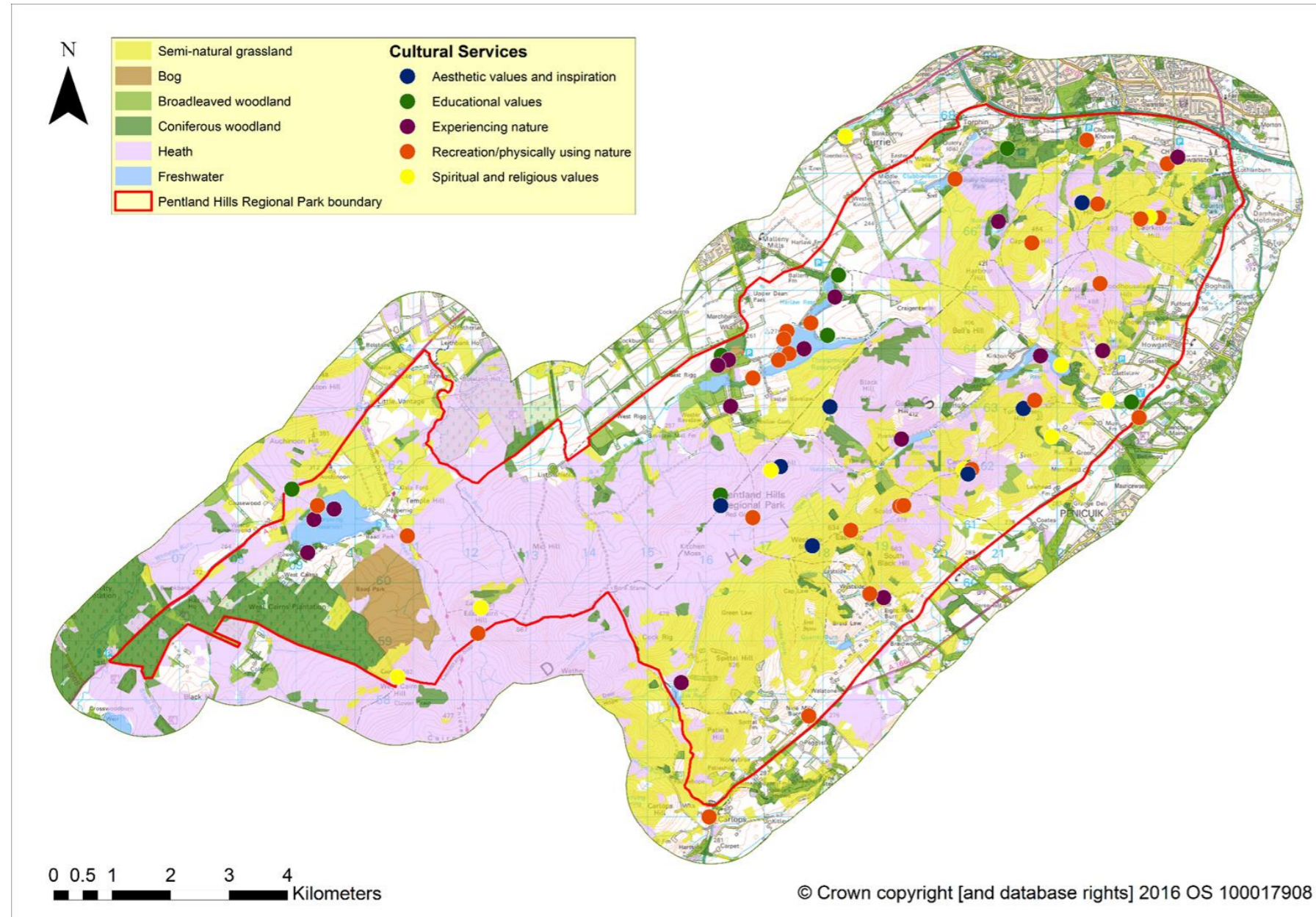
⁴ CEH Land Cover 2007: <http://www.ceh.ac.uk/services/land-cover-map-2007>

Habitat	Definition / image	Habitat coverage across the Park	
		Area of habitat (ha)	Percentage of Park (%)
	decomposition of plant material is greatly inhibited resulting in an accumulation of peat, helping to store carbon (JNCC, 2014). Image source: ALGE (2011)		
Broadleaved woodland	<p>Includes all woodland that is not coniferous. This habitat is widespread in most parts of Scotland and occurs in upland and lowland areas on a range of soil types. It includes a wealth of conservation interest – management for conservation includes maintaining good diversity of species, sizes and ages of trees and encouraging diversity in the species and structure of ground vegetation (Biodiversity Scotland, 2015a). Image source: British Wildlife Wiki (undated)</p> 	776.1	5.1
Coniferous woodland	<p>Encompasses all coniferous woodland except yew. This includes native pine and juniper woodland and all conifer plantations (including non-native species). The habitat is widespread and common in Scotland though most plantations are found in upland areas (Biodiversity Scotland, 2015b). Image source: Trees for Life (2015).</p> 	1150.4	7.6
Heath	<p>Technically referred to as dwarf shrub heaths, these are habitats where dwarf shrubs such as bell heather, blueberry and crowberry are common. This habitat is common across Scotland, particularly in upland areas where it dominates very large areas. Heaths are managed by a combination of burning and grazing. Burning heath in patches (muirburn) is commonly carried out as part of grouse moor management (Biodiversity Scotland, 2015c). Image source: woodlands.co.uk (2014)</p> 	4623.9	30.6
Freshwater	Includes standing open water (lochs, lochans, reservoirs etc) and rivers and streams (including burns and ghylls).	219.2	1.5

Note: Habitat metrics have been derived from the CEH Land Cover Map 2007⁵. Percentage calculations are based on the total area of land falling within the Park boundary **and** the 1km buffer used in the workshop (see the methodology section in Chapter 1).

⁵ CEH Land Cover 2007: <http://www.ceh.ac.uk/services/land-cover-map-2007>

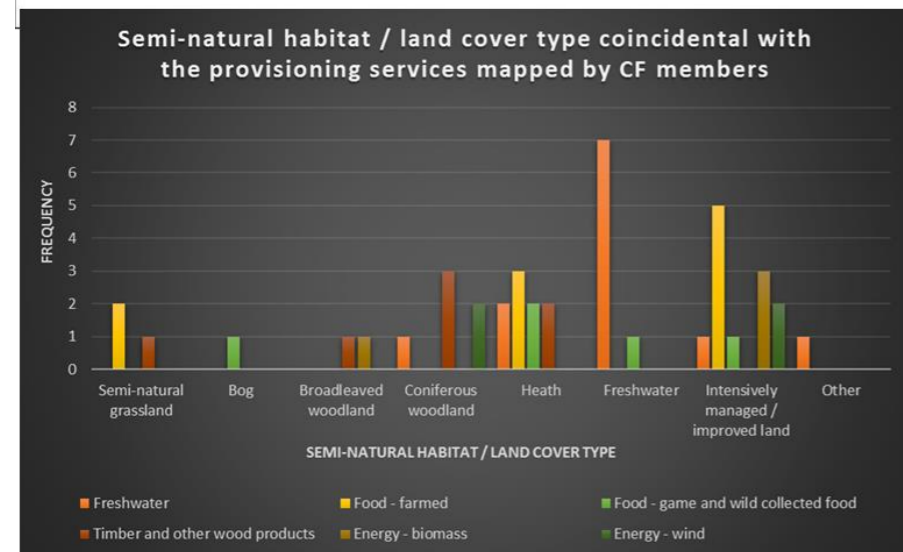
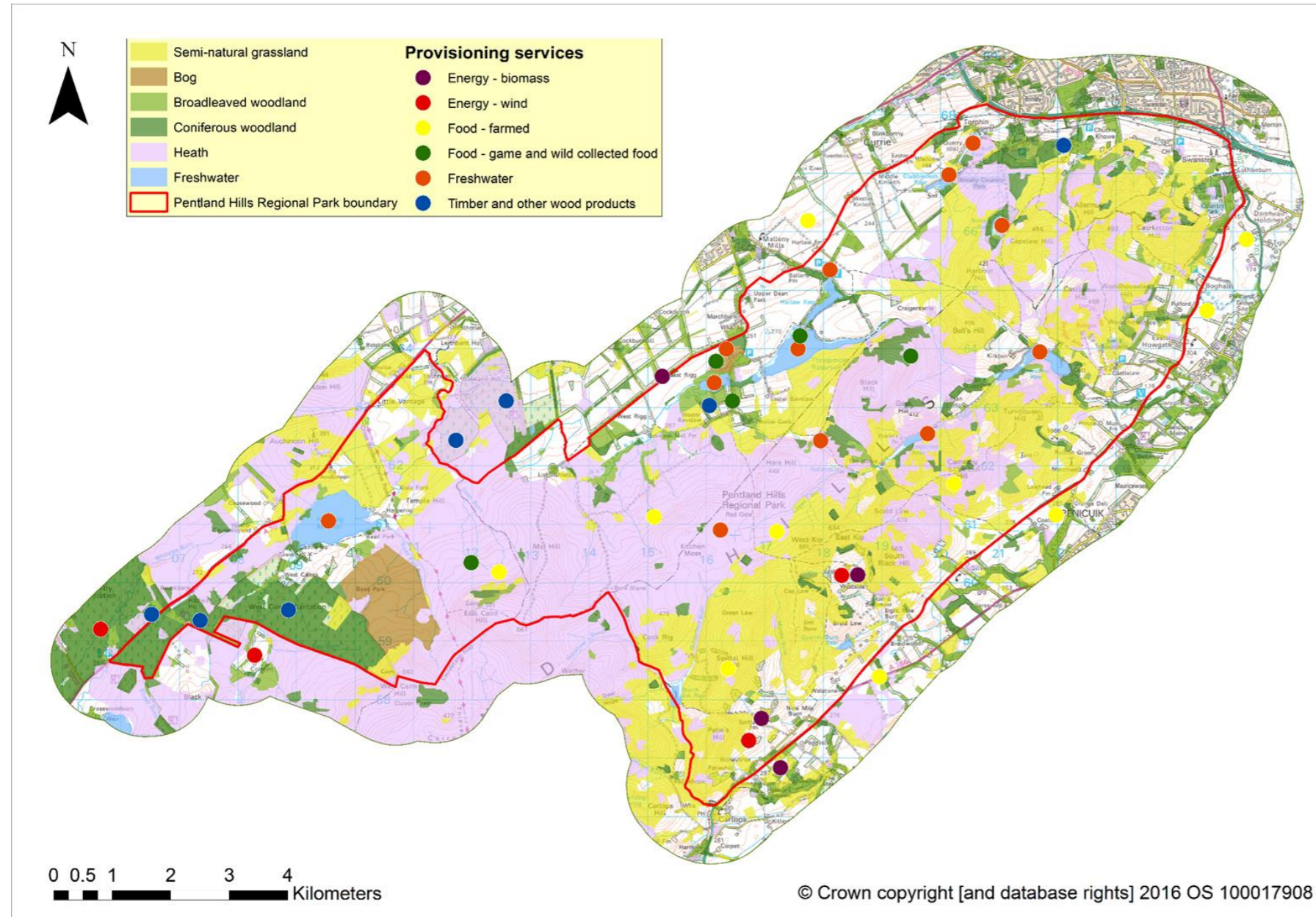
Diagram A3-1: Semi-natural habitats coinciding with natural environment benefits mapped by Forum Members – cultural services



What habitats are potentially important underpinning cultural services?

- **Heath** is the habitat that coincides most with cultural service related benefits mapped by participants (17). Recreation appears to be particularly important on heathland habitats (9).
- **Freshwater** and **semi-natural grassland** are also frequently coincidental with the cultural services mapped by participants (11 benefits each). Again, recreation appears to be an important benefit for both habitats though experiencing nature was the most frequently identified benefit in the case of freshwater (6).
- **Heath** and **semi-natural grassland** are predominantly upland habitats in the Park. Along with waterbodies, uplands were identified as one of the most important areas for cultural services (especially recreation and aesthetic values / inspiration – see Diagram 2.1) so it is unsurprising that heath and semi-natural grassland feature so prominently in the habitats analysis.
- **Intensively managed / improved land** has been identified as frequently coincidental with cultural benefits (12). One possible reason for this is that most of the recreational ‘hubs’ in the Park (bus stops, car parks etc) are located in low-lying areas so Park users will need to travel through these more intensively managed areas to access sites / paths in the upland areas.

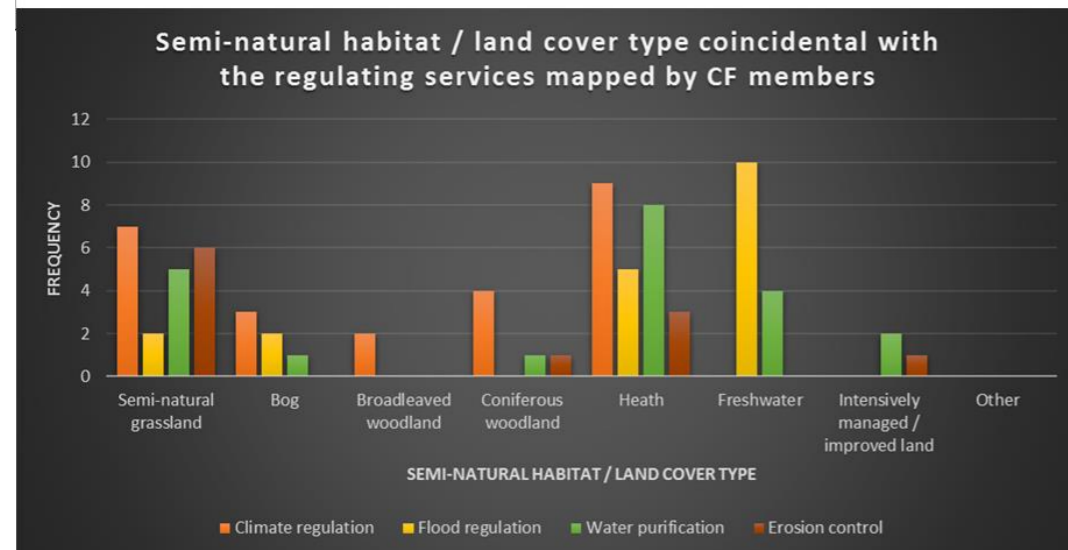
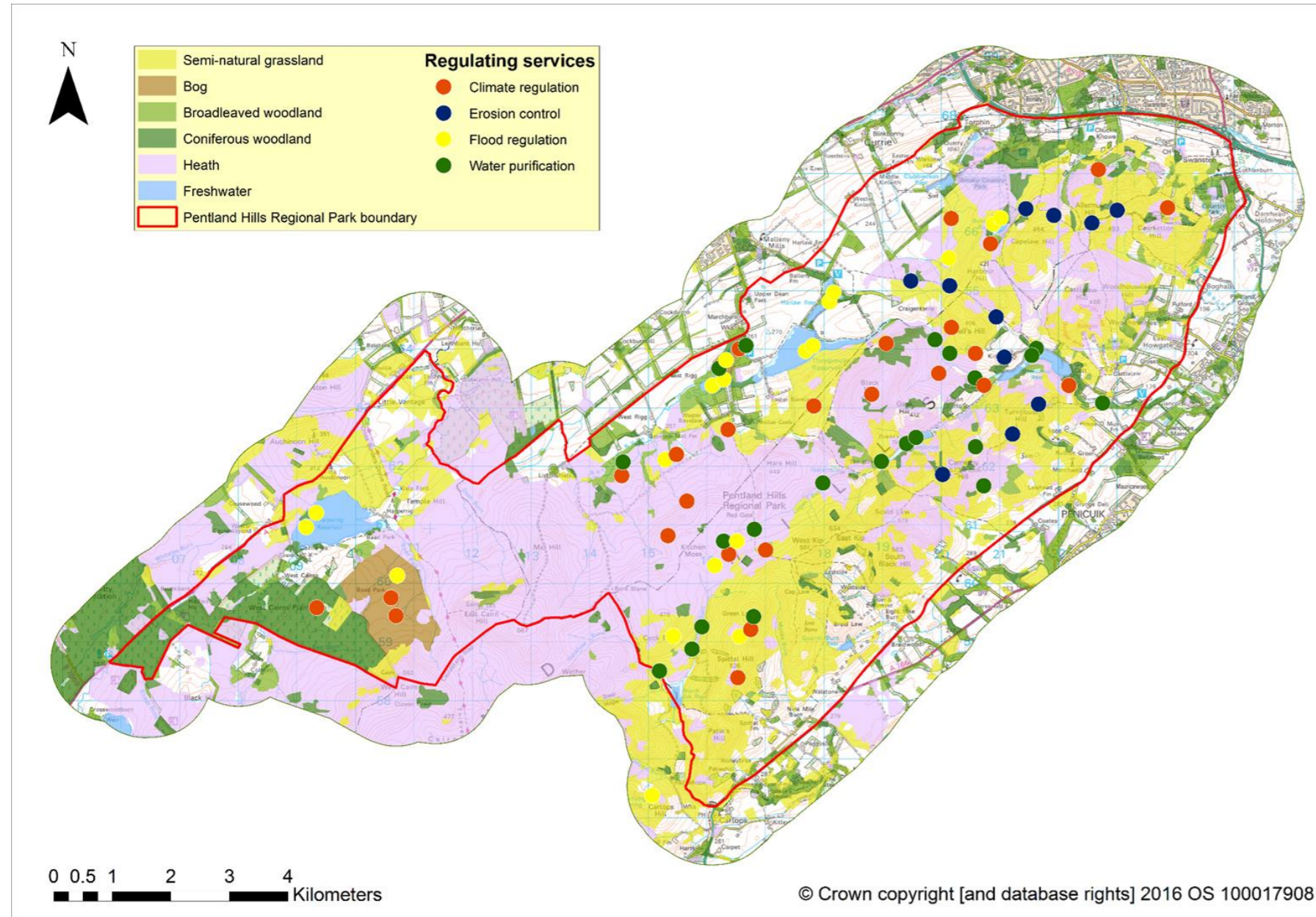
Diagram A3-2: Semi-natural habitats coinciding with natural environment benefits mapped by Forum Members – provisioning services



What habitats are potentially important underpinning provisioning services?

- Unsurprisingly **intensively managed / improved land** is the land cover that coincides most with provisioning service related benefits mapped by participants (12). Farmed food is the most important benefit (5) though biomass (3) and wind energy (2) also appear to be important (it was noted during conversations on the provisioning services table that several farms in the area manage coppice woodland for biomass energy).
- **Heath** appears to be an important habitat for a number of benefits (9) including farmed food (3), wild food (2) and freshwater (2). Hill farming (sheep) is an important agricultural sector in the Park and the upland areas (heath and grassland) are used as summer grazings (see Table 2.4). Heathland is also a common habitat in the headwaters of many watercourses in the Park, hence the links with freshwater perhaps.
- **Timber and other wood products** was identified relatively frequently as a provisioning service related benefit in the Park (7). Unsurprisingly the habitat analysis shows this benefit coinciding with **coniferous woodland** (3) and **broadleaved woodland** (1) yet at three locations it coincides with non-wooded habitats: **heath** (2) and **semi-natural grassland** (1).

Diagram A3-3: Semi-natural habitats coinciding with natural environment benefits mapped by Forum Members – regulating services



What habitats are potentially important underpinning regulating services?

- The analysis here suggests that regulating services are potentially provided by a range of semi-natural habitats in the Park especially **heath** (25), **semi-natural grassland** (20), **freshwater** (14) and **bog** (6).
- Heath** and **semi-natural grassland** habitat are particularly prominent (45). Both are mainly upland habitats in the Park and the regulating benefits mapped by participants cluster mainly in the upland areas. This is an intuitive finding as upland areas contain the headwaters that filter out pollutants / provide flood storage. Also, upland soils tend to be less disturbed or cultivated and therefore store more carbon.
- Bog** habitat features more prominently in the analysis here than any other service category (6). Furthermore, climate regulation was the benefit most frequently coincidental with bog habitat in the benefits mapping exercise (3). Again, this is an intuitive finding as bog habitat contains particularly high carbon soils (peats) by virtue of their acidic and poorly drained nature, which inhibits plant decomposition (see Table 2.5 above). Bogs can also be important for flood regulation, depending on their specific hydrology (2).

Annex 4: Selection of images from the CF workshop

Image A4-1: Benefits mapping outputs from the cultural services table

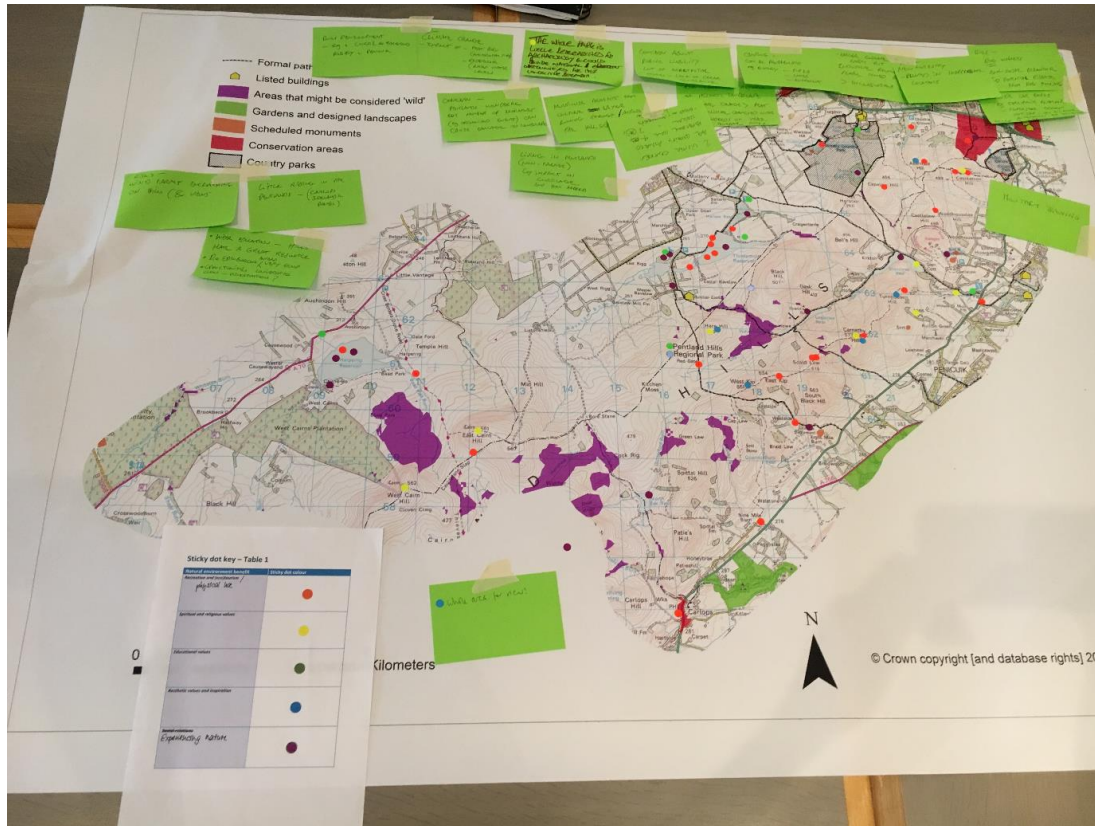


Image A4-2: Benefits mapping outputs from the provisioning services table

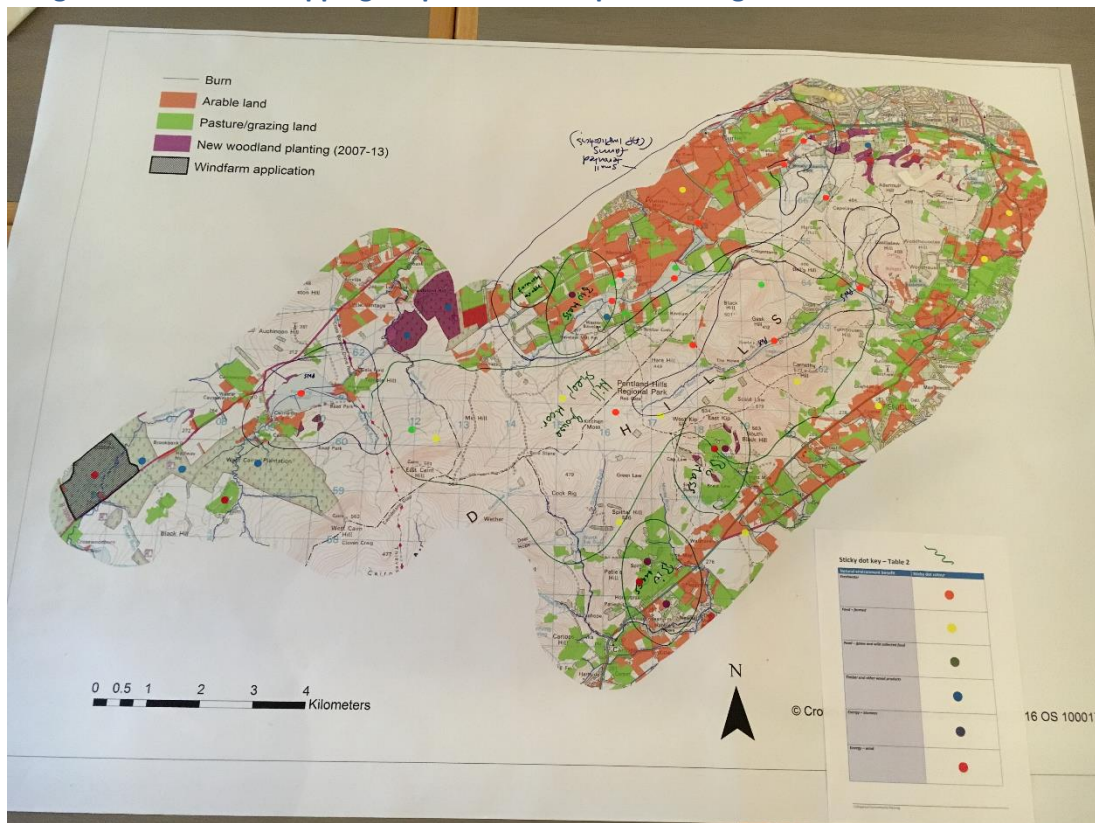


Image A4-3: Benefits mapping outputs from the regulating services table

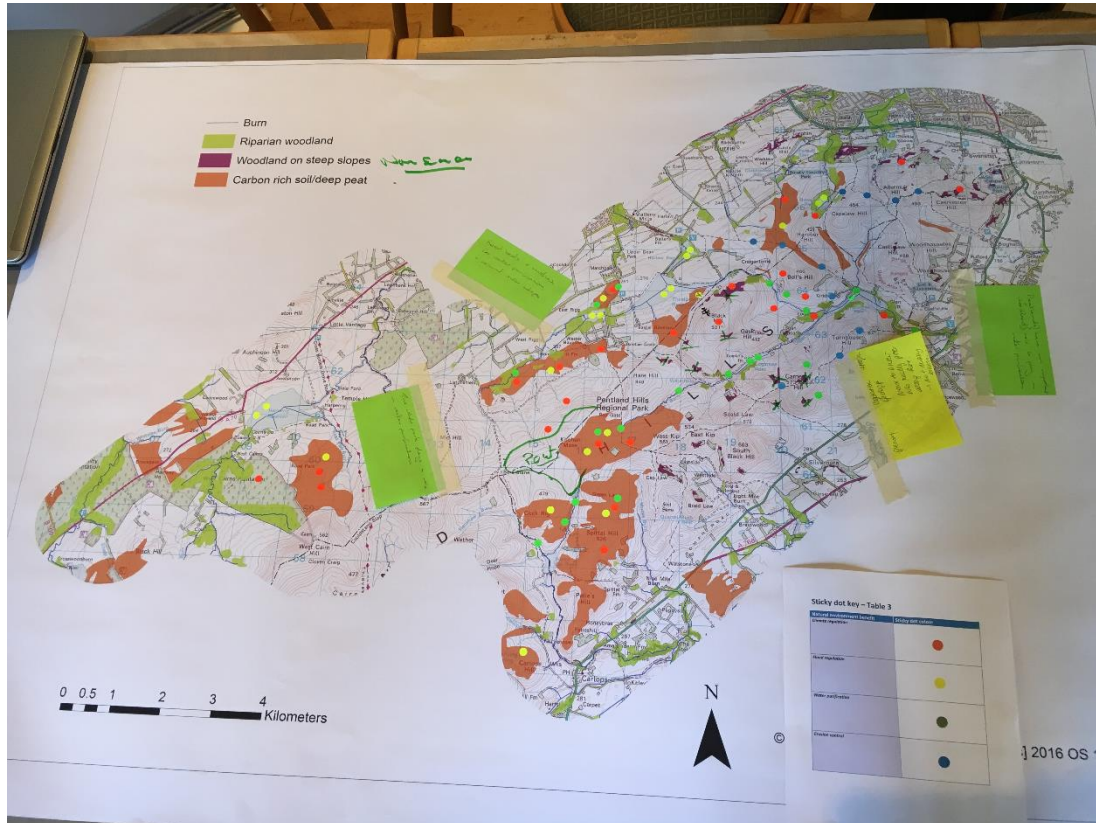


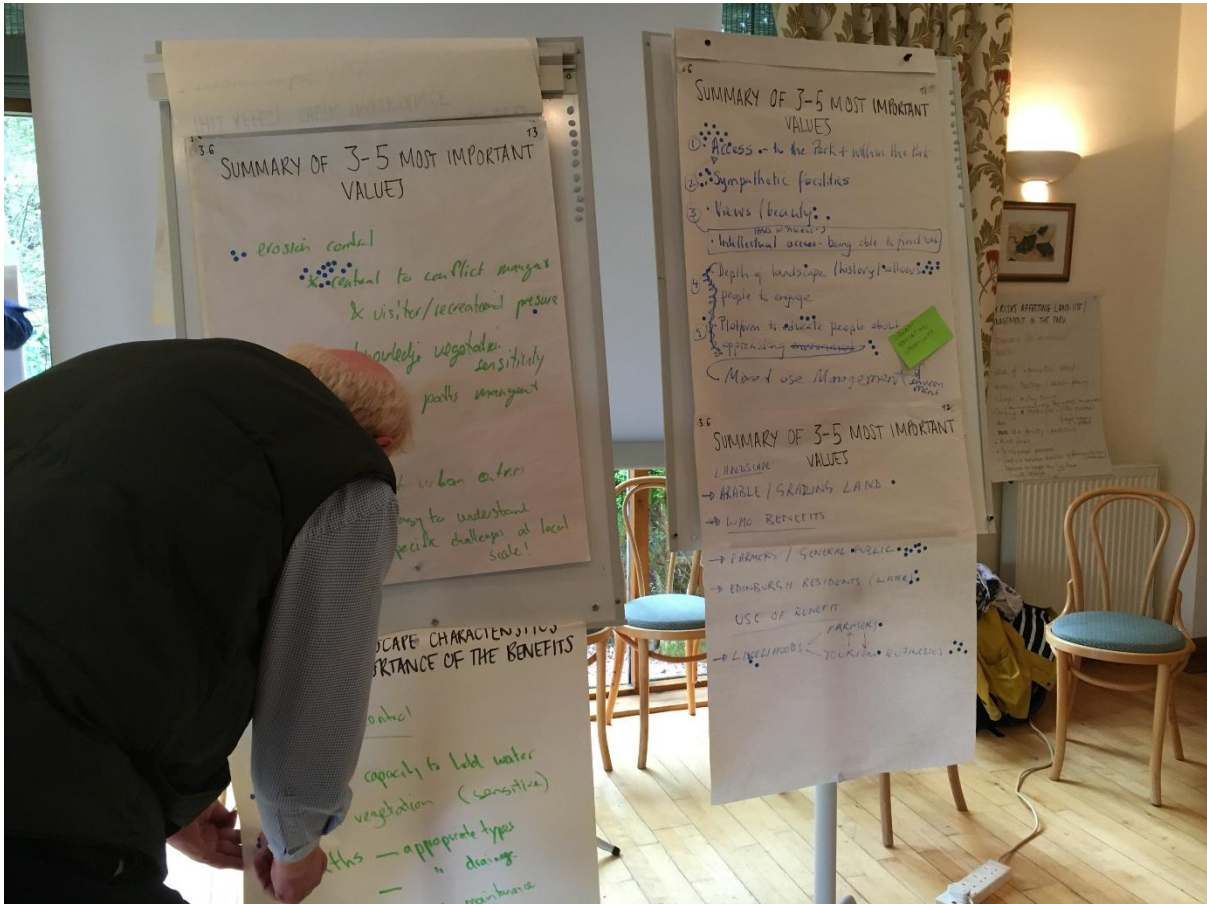
Image A4-4: Benefits mapping discussions on the cultural services table



Image A4-5: Benefits mapping group work session



Image A4-6: Prioritising natural environment benefit values in plenary



Annex 5: Consultation responses and how they have been accounted for

The table below lists specific responses to the consultation on the DRAFT Consultative Forum Report and DRAFT Technical Annex and how these have been accounted for in revised reports.

Page	Comment	How the comment has been addressed
<i>General comments</i>		
	VisitScotland welcomes all activities aiming to improve the visitor experience as long as they also take into consideration the needs of residents and local businesses.	Noted.
	The ecosystems approach and ecosystems services: is there an opportunity for highlighting good examples of an ecosystems approach that already exist historically or have been taken recently in the report. An example of the latter would be the new woodland planting areas identified under the CSGN development fund and then delivered through SRDP.	Unfortunately, this is beyond the scope of this project / report.
<i>Comments on Part 1: Introduction and methodology</i>		
	No comments	
<i>Comments on Part 2: Natural environment benefits currently provided by the Park</i>		
6 - 8	Diagrams 1 - 3 are a little difficult to interpret as there is a lot of text as well as the maps could this be illustrated differently?	Suggest that these diagrams are acceptable as they are. No change made.
6 - 8	Diagrams 1- 3 map existing benefits in relation to accessibility. It isn't surprising that the natural environmental benefits are identified in areas where there is already access networks or features such as reservoirs / hill tops etc that are destinations. If a new feature e.g. new woodland or a new access network was added then these would create new opportunities. I suppose my point is that the workshop perhaps only identified what was there already rather than the potential opportunities that could be managed going forward.	A point of clarification has been added in Part 2 of the report highlighting that the mapping in the workshop identified primarily existing benefits. An additional note has been added to Recommendations Nos. 6 and 8 to promote the development of appropriate access enhancements in conjunction with woodland expansion projects.
7	Diagram 2: minor point: text in the orange box what did CF members say, refers to arable farming (there is also improved grassland in these areas). It also mentions flood storage; should this be water storage and flood regulation?	Agree that this is a minor point – no change required.
7	Diagram 2 map. The Pentland Springs should be marked as a freshwater service for completeness.	Done.
7	Diagram 2. It mentions that Private water supplies were also discussed, this should be amended to read Private and Public water supplies were also discussed.	Done.
8	Diagram 3 Could the statement reading Scottish Water drainage put in on Black Hill "many, many years ago" please be removed? Unless	Amended – reference to Scottish Water and specific

Page	Comment	How the comment has been addressed
	there is evidence to withhold this statement?	places removed.
8	Diagram 3 shows areas of carbon rich soil and deep peat. Where there is an overlap with drinking water catchments, care should be taken. Disturbance could cause a release of dissolved organic carbon into surrounding watercourses.	Additional note added under recommendation 7.
9 - 10	Include Harlaw Reservoir and its Ranger Centre in the Threipmuir / Red Moss area, the latter as a resource for educating the public about the park and about nature.	Noted.
9 - 10	One benefit for a relatively small but significant group is the opportunity to volunteer for ‘citizen science’ survey or monitoring activities or for hands-on conservation work. Examples might be surveying for rare species such as the green hair streak butterfly in upland areas; undertaking monthly WeBS surveys for the British Trust for Ornithology at freshwater bodies such as Bavelaw Marsh or Threipmuir Reservoir; taking monthly water table measurements at the Red Moss of Balerno for the SWT; working with the Rangers or with conservation bodies on footpath maintenance and habitat management projects such as scrub removal or tree planting as members of groups like the Lothian Conservation Volunteers or Friends of the Pentlands. Enjoyment of nature need not be as passive an activity as the report may imply. Volunteers benefit not only by being active outdoors, but also by becoming better informed about and acquiring a better understanding of nature and conservation issues. Volunteers’ contribution to the Park and the benefits accruing, particularly to recreational users, should not be underestimated	Volunteering added as a benefit in the new Chapter 2 sub-section <i>“additional benefits identified through consultation on the draft report”</i> . The issue of interaction between volunteers and other beneficiaries in the Park has been mentioned in the Chapter 3 sub-section on <i>“the influence of who the beneficiaries are”</i> .
9 - 10	Health and wellbeing was not specifically identified [as a benefit]. It could be argued that health and wellbeing is implicit in ‘recreation and physically using nature’ but I genuinely think it is more than this. For the most part those using the Pentland Hills for recreation tend to be the very active people. However, there is a need to encourage less active or those that use the hills infrequently to become more active within a managed environment. This will depend on promotion and targeting. Green exercise and healthy living is very much a government priority and the Pentland Hills offers a solution in social terms. Places in the park where this could be accommodated is within and around the existing visitor centre areas and larger all abilities or core paths. Trends information on health inequalities and inactivity would be useful here.	The rationale behind the ecosystem services concept is that all services combine to contribute to the constituents of wellbeing (of which health is one); i.e. wellbeing is implicit to the whole approach. Health and wellbeing has also been added as a benefit in the new Chapter 2 sub-section <i>“additional benefits identified through consultation on the draft report”</i> . New footnotes added at Table 8 to incorporate consideration of these issues with the report’s recommendations.
9 – 10	Pentland hills in the wider Edinburgh / Midlothian context. We were very much focused on being in the Pentlands in the workshop but there are wider economic development benefits provided in terms of	Wider economic benefits added as a benefit in the new Chapter 2 sub-section

Page	Comment	How the comment has been addressed
	attracting tourism and business to the City of Edinburgh and Midlothian. Likewise, the hills provide a defining point to much of the housing in the south Edinburgh and Midlothian.	<i>“additional benefits identified through consultation on the draft report”.</i>
9 - 10	The hotspots identification exercise perhaps pulled out the most obvious upland feature for natural environment benefits but I wonder if this picture is skewed by those who took part on the day i.e. the higher proportion of agency and recreational groups rather than farmers and landowners. I think that the value of the farmland is underrepresented in delivering multiple benefits. For example, apart from food production there is the aesthetic value of the more intensively managed farmland, the patterns of fields and woodland in relation to the more natural upland areas. The small woodlands not only provide timber but also provide shelter for livestock and contribute to the landscape quality. The semi-natural woodland also provide habitats for wildlife and contribute to water retention / regulation. It is the combination of these that is important and helps define the Pentland Hills and the overall benefits that can be derived.	The hotspot analysis is an accurate representation of the benefits mapped by participants on the day. To account for any bias within this, recommendation 1 proposes a validation of the hotspot areas with a <i>representative</i> sample of CF members. This would help to iron out any bias and identify additional hotspot areas, such as multifunctional farmland in the lower lying peripheral parts of the Park.
10	Table 2. Provisioning Services. There is not a pressure on housing allocation and water infrastructure (supply and treatment). The Edinburgh supply has sufficient capacity for this. The key pressure from housing allocation would be on the loss of arable and grazing land, indicated at the end of page 25 and start of page 26 of the Forum Report.	Text updated accordingly.
<i>Comments on Part 3: Valuing the natural environment benefits in the Park</i>		
	No comments	
<i>Comments on Part 4: Land use / management change in the Park</i>		
23	The key risks and threats are probably all captured and have probably remained the same for many years. What is perhaps of more value is identifying which of these are likely to stay the same, diminish (probably very few) and increase (probably several). There is trends data available to then illustrate which are likely to be the key risks. This would be particularly helpful in allocating management resources in the coming years. It would also provide an evidence base to this piece of work.	Additional footnote added at Table 7 highlighting the use of trends data to better illustrate and evidence some of the key changes identified.
24 - 25	Land abandonment for farming could allow the re-wilding of some upland areas with major benefits for biodiversity and flood control.	Footnotes added in Chapter 4 on this potential outcome.
24 - 25	Technology changes. We touched briefly on these in the workshop how mobile apps could suddenly promote a route for a certain type of recreational user and change the management required rapidly. I assume this type of promotion will increase. There are technological advances in equipment that could affect farming, forestry, recreation etc. Main pressures: I think that we shall continue to see recreational pressures between users and land managers as more people take recreational opportunities closer to home. Pressures are likely to increase between user groups (see trends in mountain bike	Suggest that these points are covered adequately in the discussion and bullets at the <i>“implications of change for natural environment benefits in the Park”</i> sub-section.

Page	Comment	How the comment has been addressed
	ownership and usage). Added to all this are climatic pressures of increased rainfall at certain times of years (see monthly figures for this showing increased flash flooding) increasing the need for higher path maintenance etc.	
26	Developmental pressures will also have an effect on biodiversity and could cause a decrease in productive land. The future changes could have a negative impact on water quality and quantity; however, some could have a positive impact. Drinking water quality can be effected by a number of the changes.	Freshwater added as a potentially affected benefit to Diagram 5. Multiple mixed impacts to freshwater added to Diagram 5.
<i>Comments on Part 5: Recommendations for future land use and management in the Park</i>		
27-29	The most important [of the proposed objectives and recommendations in Table 8] are those that require joined-up thinking and cooperation and achieving a balance between different interests mainly A. B. E. and H.; C. and D. perhaps favour sectional interests but are also very important; G. is also important in environmental terms. F. seems to me to be less relevant to the Park and the majority of users and in any case is unlikely to be adversely affected if the other aims are achieved.	New paragraph added to Chapter 5 intro text setting out potential pre-requisites of cooperation etc for the delivery of objectives and the importance of the CF prioritising objectives.
27 - 29	All of the recommendations seem valid. Is it not a case of separating out which are the most urgent and important to prevent further conflict and those that are important but less urgent.	The recommendations will be reviewed and validated / refined at the October 2016 CF meeting. Separating out importance and urgency of the recommendations could be a useful objective for this meeting.
27	Objective f: wild food. It seems odd to select a very small additional activity in terms of economic development that the Regional Park could promote. Is there scope to promote a wider range of diversified activities and small businesses e.g. crafts, art, food processing, wood processing, environmental tourism etc.	The objective on wild food reflects the prioritised benefits identified in the ranking exercise at the workshop (see Table 3 in the main CF report).
27	Most relevant: Align relevant LDP policy with park objectives. It is vitally important that the parks natural assets are protected from surrounding developments and activities. Suitable protection measures should be put in place to avoid deterioration of drinking water quality and interruption to supply. Scottish Water will outline these measures once notified or consulted on land use changes or activities.	Additional note added to recommendation 4 on the importance of managing development and other land use management change in drinking water catchments.
27	I tend to think that infrastructure provision is key to getting the recreational management right and reducing conflict. Without this all the visitor management time will be spent in sorting out issues. There is a case for not only working on the existing infrastructure but diversifying the access networks and facilities to move certain groups away from the honey pot / hotspot sites. However, I understand that this will not be the case for all types of recreation as there will still be	Additional text added to recommendations 2 and 3 on this issue.

Page	Comment	How the comment has been addressed
	a requirement to get to the reservoirs and the hill tops for views etc. However, there are many other possibilities for creating new destinations and new access routes that will lessen the pressures in some areas and for some recreational or other activities.	
28	In the longer term the provision of new woodland will offer good scope for absorbing recreational activity and increasing biodiversity etc so some early expansion of this woodland cover is required.	Additional text added to recommendations 6 and 8 on this issue.
28	In relation to Draft Recommendation 9 (guidance on sustainable access and recreation), any such guidance should be prepared in consultation with relevant bodies including sports Governing Bodies which represent the various sports.	Recommendation 9 updated accordingly.
28	The local FWS should already align to the woodland objectives for the Regional Park? Targeted restoration of bog habitat is already on-going uptake may depend on incentive rates?	Noted.
29	Protect and enhance access for disabled people could be widened to include enhancing access and information for those visiting the Regional Park for the first time (excluded groups etc).	Wording of recommendation 11 tweaked to reflect this.
29	Drinking water quality and quantity is an important benefit that should be considered. There are multiple water sources in the Pentland Hills which contribute to supplying Edinburgh and local private supplies with drinking water on a continuous basis. A catchment map of Scottish Water’s drinking water protected areas (DWPA) was forwarded to Peter Phillips on 6/6/16. It is extremely important that activities within drinking water catchments, does not affect the ability of Scottish Water to meet its regulatory requirements. Water Treatment Works are designed to treat the specific parameters of the raw water source they receive (i.e. the specific chemical, biological and other characteristics of natural, untreated water). If the characteristics of the raw water change or deteriorate, it can affect the ability of the works to supply drinking water to customers at the required standards. It can also affect the amount of energy and chemicals required and waste produced treating the water. There can also be improvements to water quality and quantity as a result of good practices or changes to land use which Scottish Water would welcome. Scottish Water would request to be notified regarding any proposed alterations to activities or land use within the drinking water catchments to allow consideration of any negative or positive impacts. This information should be submitted to EIA@scottishwater.co.uk .	Note on the importance of considering impacts of land use management change in drinking water catchments on drinking water quality added in Part 5 recommendations. Footnote added on Scottish Water consultation process – email address included also.
<i>Comments on the Annexes</i>		
A-1	I note that Annex 1: Context for the project says under <i>Policy context for Regional Parks</i> that “designation can require confirmation by Scottish Ministers, as has been the case with the proposed extension to the Pentland Hills Regional Park (which was rejected by the Scottish Parliament)”. This sentence is rather misleading - it runs together the order making process for designating any Regional Park	Agree that the designation process is not a significant part of the report. The sentence has been removed.

Page	Comment	How the comment has been addressed
	with the Parliamentary process for a member's Bill. I appreciate you do not want to dwell on process but suggest you remove or amend the sentence.	
A-1	The legislation for designating a Regional Park is the Countryside (Scotland) Act 1967 and The Regional Parks (Scotland) Regulations 1981.	Legislation references updated.
A-1	Technical Annex, page 3. Edinburgh's water supply is provided by catchments and reservoirs within the Park. There are abstractions from Loganlee and Glencorse with Threipmuir and Harperrig identified as drought option sources. There are also a number of private water supplies in the Park.	Text updated accordingly.
A-1	In the document (p8) freshwater is defined as water for human consumption. However, it appears that freshwater is also considered as a provisioning service for people, wildlife and a healthy environment. The document should be changed to reflect this.	Noted. Suggest that this is implicit in the document and does not need to be included specifically in the definition.
A-1	Technical Annex, Table A1-2 page 9. The provisioning service freshwater considered by those in attendance as a healthy environment for people and wildlife.	Noted. Suggest that this is implicit in the document and does not need to be included specifically in the definition.
A-2	Figure A2:1- 3 the shading in the purple figure is a little difficult to decipher, may need some additional hatching?	Noted. Suggest that current format of this Figure is acceptable for annex.
A-3	Annex 3: semi-natural habitats in the park: the table with the habitat type is very interesting. It would be useful in management terms to highlight the trends data for these habitat types how they are increasing or decreasing over time.	Unfortunately, this is beyond the scope of this project / report.
A-3	Diagram: some useful information here but the presentation could be larger for the bar charts or even included as a separate page leaving the map larger and easier to read.	Noted. Suggest that current format of this Figure is acceptable for annex.

Annex 6: Summary of key points raised at the October 2016 CF meeting

Question	Key points raised
<i>Objective No.1: Discuss and agree how the CF will use the report</i>	
Any general comments on how far the report meets your expectations as CF members?	<ul style="list-style-type: none"> • The mapping work done [benefits mapping, hotspot analysis] should be combined with the COAT path survey work. The mapping work identifies the sensitivities that could be considered. • Consideration should be given to how underutilised paths on the periphery of the Park could be used better. • The report provides a useful backstop / check for future management objectives that may be considered for the Park (i.e. to ensure that future land use management addresses the issues identified in the CF workshops). • The recommendations on aligning the report with other relevant plans and programmes (e.g. LDPs) are common sense but what mechanisms are in place to deliver this? • Concern that the hotspots could be perceived as a further constraint on land owners / managers in the Park. • Concern that the findings of the report are not representative. Particularly important to speak to all landowners in the hotspot areas. • MOD are a large landowner (the largest public one) in the Park that should be engaged in this process (e.g. hotspot recommendations). Go higher up in the MOD to get a response.
How can the static “snapshot” nature of the report be addressed?	<ul style="list-style-type: none"> • Use it to get / attract more funds – the report makes the case for more management. • There are limited benefits of being “just” a farmer in the Park. There can be tensions between public and private objectives. • Farmers are “surrogate rangers”.
What would be useful information to include in a 1-2 page executive summary?	<ul style="list-style-type: none"> • A summary of everything! • [The summary] should maintain interest in the project / report. • Mechanisms for how the report can influence other things, policies, actions, practices etc. • Plain English – perhaps using a map as the main focus with a list of the key recommendations. • Ensure communication to wider publics and elected members etc.
<i>Objective No.2: Discuss, refine and agree the draft land use management recommendations in the report</i>	
Comments on recommendation category B – access and recreation	<ul style="list-style-type: none"> • Add in horse riders as a user group (e.g. under recommendation No.9). • Audit of existing infrastructure for disabled users (e.g. under recommendation No.11). VisitScotland have a specific person / programme on this issue including a quality assurance scheme. Sonia Valcarcel to provide further information. • The importance of responsible dog ownership – raising the profile of the Scottish Outdoor Access Code. • There are specific times of year and situations (e.g. certain types of land) when people should avoid certain areas. • Importance of roles and responsibilities for recommendations and actions / sub-recommendations – feed into management plan revisions, hotspot management etc.
<i>Next steps in the project</i>	
General comments / discussion	<ul style="list-style-type: none"> • There is an opportunity for financial support (e.g. for further facilitation) from SNH (before April 2017). • The report should be sent out for comment to all relevant people on CF. • Workshop on recommendations 1 and 2 (linked to additional support from SNH?).

Annex 7: References

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