

Monitoring Framework (part 3)

Monitoring our National Park Core – *Considering the provision of Cultural Ecosystem Services within planetary and social boundaries.*

This document is part three of a three part series, which in combination make up the Monitoring Framework for *Y Bannau: The Future the Management Plan for the Brecon Beacons National Park Authority (2023-2028)*.

This section seeks to consider how the organisation fulfils its second purpose to provide opportunities for enjoyment and understanding of the National Park, without impacting our the quality of life of our communities or degrading our Natural Resources.

Part one considers the sustainable management of natural resources with the Brecon Beacons.

Part two considers quality of life issues for the residents of the National Park.

Monitoring and reporting the five missions, - Doughnut indicators

The five missions adopted in *Y Bannau: The Future* are chosen because they are biggest shifts needed to achieve a sustainable future for the National Park.

It is therefore important to measure and report on progress towards achieving the missions, and on wider indicators of National Park sustainability - the extent to which ecological ceiling (Planetary Boundaries) and the social foundation (Sustainable Development Goals) are being breached.

A series of indicators have been selected as the best metrics for understanding and tracking change in the National Park in relation to the Doughnut Economics:

- Ecological ceiling (Planetary Boundaries)
- Social foundation (Sustainable Development Goals), and
- The 'safe and just space' in the middle of the ring which reflects ecological and human wellbeing in the unique context of Bannau Brycheiniog National Park.

The indicators have been chosen because they represent the best direct metric or proxy, and because it is envisaged that data will be available to track change over a long timescale.

Indicators were identified through detailed workshop sessions with expert contributions from BBNPA officers and the National Park's Stakeholder Reference Panel.

Timescales

Several different timescales are important in considering the sustainable future of the National Park.

Ongoing: Updates on the BBNPA website and other platforms, and that of partners, sharing information about actions and outcomes, celebrating successes, and highlighting opportunities and challenges.

1 year: Annual Doughnut Economics assessment 'health check' of the National Park, and annual assessment of progress in achieving the missions.

4 years: State of the Park Report 2027 The State of the Park report is an important synthesis of all the data being gathered in relation to the doughnut. It is an important moment to reflect on the key issues facing the Park in order to inform the review of *Y Bannau*.

5 years: The duration of *Y Bannau: The Future* management plan. Used to focus near-term action towards achieving the missions.

2030 and 2035: The timescales to achieve the nature and water missions and the climate mission respectively.

25 years: The medium-term vision for the National Park.

50 years: Long-term change horizon. Used to track long-term sustainability as indicated by Doughnut Economics metrics.

National Park core

Domain	Sub domain	Indicator	Current situation															
Visitor Knowledge	Behaviour	Incidences of reported antisocial behaviour via BBNPA report it form	From May 22 to March 23 there were 13 incidences of anti social behaviour reported to the BBNPA 23% of reports related to fly tipping 46% related to dead or injured animals 30% related to raves or illegal camping															Environmental overshoot
	Understanding	Reporting of access to information prior or during visit	39% of visitors do not access information during their visits to the Park.															Social shortfall
Landscape	Condition	Landscape condition	The Reading landscape Assessment identifies 4 out of 12 landscape character types in need of restoration (25%).															Environmental overshoot
			LANDMAP visual and sensory data identifies that 60% of the Park are is of high or outstanding landscape quality. 36% of the landscape quality of the Park is declining and 16% of the landscape area is in inappropriate management.															
Visitor transport		Use of public transport to access the park and travel during stay.	83% of visitors surveyed used a private car or van to travel during their visit.															Environmental overshoot

Visitor experience	Enjoyment	Reported levels of visitor enjoyment.	85% of visitors rate their visit to the Park as 'very good' and 13% good. There are no negative ratings.											Environmental overshoot
														Social shortfall
Access	Rights of way network	General accessibility of the National Park for all users.	In 2019 34% of our rights of way were not considered easy to use.	■	■	■								
				■	■	■	■	■						

Visitor knowledge

Principal domain	Incidences of reported antisocial behaviour via BBNPA <i>report it form</i>
The most up to date data available	From May 22 to March 23 there were 13 incidences of anti social behaviour reported to the BBNPA 23% of reports related to fly tipping 46% related to dead or injured animals 30% related to raves or illegal camping
Why are we monitoring this sector?	Understanding visitor behaviour helps us to understand the extent to which we are delivering on our second purpose to provide opportunities for understanding and enjoyment. Antisocial behaviour, and its impacts, has a negative impact on visitors enjoyment of the park, it also significantly impacts on our residents quality of life as well as causing detrimental harm to our environment. When the antisocial behaviour is related to visitor activity, it also suggests that additional action is needed around <i>understanding</i> As we progress with delivering <i>Y Bannau</i> additional indicators will need to be developed to help further define negative visitor behaviour (littering/ inappropriate toileting/countryside code breaches etc) and a mechanism for measuring the location and timing of instances. This may involve promotion of the 'report it' system on our website.
What we will report on annually	We will continue to report on instances of antisocial behaviour reported via our website. We will expand the 'behaviours' that can be reported and investigate using interactive mapping to help better understand patterns of activity which may require future intervention. We will work internally on better collation of data relating to the work of our warden service in responding to incidences of antisocial behaviour.
What picture we want to see if the plan is successful	<i>Y Bannau The Future</i> seeks to ensure that tourism within the National Park is sustainable providing benefit to both communities and the environment. In implementing the plan, we expect to see the levels of antisocial behaviour displayed by visitors decline, as levels of understanding increase and respect for the people and places of the park improves.
Boundary level	For the above reasons our boundary levels for this domain are drawn at zero instances of visitor related antisocial behaviour.
Related Mission Area(s)	People
Related objectives	Future Visitors
Related outcomes	Future lives

Data Source: BBNPA

Visitor knowledge (contd)

Sub domain	Extent to which visitors access information about the National Park prior or during visit
The most up to date data available	Data gathered in 2017 found that 39% of visitors do not access information during their visits to the Park. Meaning that in 2017 1.6million visitors did not seek out information about the Park as part of their visit. 2021 data records 3.1 million visits to the park of which 2.8million day visitors.
Why are we monitoring this sector?	The second purpose of the National Park is to provide opportunities for understanding and enjoyment of the National Park. In response to this purpose, we put significant resource into providing a range of visitor information services, including training tourism providers in our ambassador programme. In making this information available, we are hoping to help develop a mindset of care in our visitors – care for the environment, and care for our communities. A mindset that could provide benefit beyond their visit, leading to behaviour changes which lead to a ripple effect of wider social and environmental benefit.
What we will report on annually	We will report on our visitor numbers each year, alongside data about the number of visitor interactions at our visitor centres etc Towards the end of the Plan period (2026-7) we will undertake a wider visitor survey to update this data and to provide more information about the changes implementation of the Plan has brought about. We will also report on annual uptake of our ambassador programme.
What picture we want to see if the plan is successful	<i>Y Bannau: The Future</i> Sustainable Tourism objective talks of visitors knowing ‘our story’ and that knowledge improving behaviours during their visit. Therefore we would want to see visitors wanting to, and being easily able to, access information about the park.
Boundary level	The boundary levels are drawn at 90% of visitors gain information about the National Park (its environment and communities) during their time here.
Related Mission Area(s)	People
Related objectives	Future Visitors
Related outcomes	Future lives

Data Source:

[BBNPA Visitor Survey](#)

[STEAM data](#)

Landscape

Principal domain	Landscape condition
The most up to date data available	The Reading landscape Assessment identifies 4 out of 12 landscape character types in need of restoration (25%). LANDMAP visual and sensory data identifies that - 60% of the Park area is of high or outstanding landscape quality. - 36% of the Park area is exhibiting declining landscape quality - 16% of the Park area is inappropriately managed for landscape quality attributes.
Why are we monitoring this sector?	Our landscape quality is fundamental to our designation. Landscape is formed through geological and natural processes, but how we experience that landscape, the meaning and significance we attach to it is culturally and social defined. This is why landscape sits in the National Park Core element of the doughnut, rather than as part of our ecological ceiling. Landscape is not in of itself an environmental phenomena. It is a human interpretation of the environment, and that human interpretation can shift as cultural priorities change. Managing landscape for the cultural ecosystem services it provides is a key function of the National Park, however such a frame can have negative impacts on both our social foundation and ecological ceiling. We monitor this element to ensure that the focus on landscape quality is equally beneficial to our environment and communities.
What we will report on annually	Due to the nature of landscape change data is not gathered on an annual basis We will aim to update BBNPA Landscape Character Assessment towards the end of the Plan cycle to understand how plan implementation is impacting landscape character. See also tranquillity above
What picture we want to see if the plan is successful	<i>Y Bannau: The Future</i> through the place mission seeks to ensure that the essential landscape character of the Park is conserved and enhanced through the sustainable management of natural resources. Success would therefore mean reassessment under the Reading method finding that there were 0 landscape areas in need of restoration.
Boundary level	0 instances of landscape being classed as being in need of restoration. 0 instances of landscape areas within the park exhibiting declining landscape quality 0 instances of landscape areas within the park being classed as being inappropriately managed
Related Mission Area(s)	Place
Related objectives	Collaborating in place
Related outcomes	Beautiful Places

Data Source:

[Reading Landscape Study](#)

[LANDMAP – visual and sensory layer](#)

[Landscape Character Assessment Brecon Beacons National Park \(2012\)](#)

Visitor transport

<See also access to transport domain of the social foundation>

Principal domain	Use of public transport and/or LEV/Active Travel to access the park and travel during stay.
The most up to date data available	In 2016/17 835 of visitors surveyed stated they used a private car or van to travel during their visit. Visitor numbers during this period were over 4million, we could therefore estimate 3.2 million car journeys made. Carparking provision is significantly oversubscribed in tourist hotspots, between 60-200% over capacity.
Why are we monitoring this sector?	Transportation, by private cars with traditional combustion engines are the biggest sources of pollution within the National Park. The environmental impact of visitor transport in terms of GHG and particulate pollution is significant. Moreover with the car journeys, comes car parking. The National Park does not have the infrastructure to support this number of car journeys, or provision for this number of cars looking to park. This leads to problem parking within communities, causing significant disruption at times putting communities in danger by preventing passage of emergency vehicles etc.
What we will report on annually	The visitor survey will be re-run towards the end of the plan period. Annually we will report on any data we have in relation to visitor transport, including parking numbers and incidences of 'antisocial' parking reported to the NPA or partner organisations. We will also report on the useage of our EV charging stations to give an indication of the need for this service.
What picture we want to see if the plan is successful	<i>Y Bannau: The Future</i> envisions a modal shift in terms of visitor transport moving from private combustion engine to public transport, LEV and active travel modes. Therefore we would hope to see the number of visitor trips taken by private combustion engine cars reducing significantly during the lifetime of the plan.
Boundary level	We set our boundary level at less than 20% of visitor trips being taken by methods other than <ul style="list-style-type: none"> • Low Emission Vehicles • Public Transport including park and ride • Active travel
Related Mission Area(s)	Climate Place People
Related objectives	Decarbonisation Quality of life Collaborating in Place Future Visitors
Related outcomes	Sustainable transport Future Transport Future lives

Data Source:

[BBNPA Visitor Survey](#)

BBNPA internal data

Historic Environment

Principal domain	Condition of all historic features whether scheduled or not.
The most up to date data available	Data gathered in 2019 demonstrates that 18% of the Park's 358 protected Scheduled Ancient Monuments were in unfavourable condition.
Why are we monitoring this sector?	One of the key components of National Park designation is the protection and enhancement of cultural heritage. Our historic environment is the physical manifestation that cultural heritage, it is a key national asset, as such we need to understand whether the implementation of the plan is conducive to the protection of the Historic Environment.
What we will report on annually	We can report on the condition of protected features such as Scheduled Ancient Monuments and Listed Buildings. This will provide us part of the picture. It's the undesignated features which are most at risk from harm and so we will work through the Historic Environment Partnership to determine a mechanism for assessing and reporting the condition of these non-statutorily protected features.
What picture we want to see if the plan is successful	Success would be a marked improvement in the condition of our historic environment, alongside a general recognition of the value of the historic environment by all those who live, work and visit the park.
Boundary level	Our boundary levels are ambitious being set at all historic features whether scheduled or not are in good (or improving) condition.
Related Mission Area(s)	People Place
Related objectives	Future visitors Welsh culture and language Collaborating in Place
Related outcomes	Future lives Historic places

Data Source:

[BBNPA SOPR](#)

[Buildings at risk register](#)

Cultural Heritage

Principal domain	Numbers of cultural events
The most up to date data available	64 cultural events held in 2019 (including Eisteddfodau and Agricultural Shows) Increasing in number and scope from the 2005 assessment
Why are we monitoring this sector?	People connect to the National Park landscape and cultural heritage through coming together at events, which also play an important role in wellbeing and community cohesion for residents and awareness, understanding and enjoyment for residents and visitors alike. Cultural events encompass a wide range from traditional local Eisteddfodai and local agricultural shows, to new forms through theatre, local arts and dramatic groups including the Young Farmers Clubs. In addition to cultural events a wide range of walking festivals and other outdoor events also take place each year.
What we will report on annually	We will report on the number of cultural events held across the park, and where data is available attendance data We will report this data as a trend year on year.
What picture we want to see if the plan is successful	The occurrence of cultural events has a significant correlation with community cohesion and cultural identity. This indicator therefore helps us understand the extent to which outcomes related to supporting caring, cohesive and enriching communities. Success would therefore be an increasing number of events being held year on year. Our boundary is drawn at no net loss from 2005 base.
Boundary level	Our boundary is drawn at no net loss of events occurring from 2005 base.
Related Mission Area(s)	People Place
Related objectives	Future visitors Welsh culture and language Collaborating in Place
Related outcomes	Future lives Well-planned places Inspiring places

Data Source:

[BBNPA SOPR](#)

Darkness and Tranquillity

Principal domain	Night Sky Quality
The most up to date data available	The BBNP is an International Dark Sky Reserve The majority of the Park registers at the lowest levels of radiance emissions, meaning that the area is one where dark skies predominate. There are however much higher levels in the areas of high population density.
Why are we monitoring this sector?	Our dark skies are a precious resource providing opportunities for quiet and deep reflection, connecting the individual to the wonders of the universe. Darkness is one of the Park's Special Qualities, but this attribute is immensely fragile and easily lost. Absence of darkness impacts our health and wellbeing; disrupts ecosystem function and over lighting has a huge carbon burden damaging to climate stability.
What we will report on annually	Each year the NPA provides a report to the International Dark Sky Association detailing compliance with the Management Plan for the reserve. We will report on the principle findings of this report We will also report on any updates to the external lighting survey as and when that is made available.
What picture we want to see if the plan is successful	In keeping with outcomes relating to outcomes relating to Y Bannau as a place of inspiration, we wish to ensure that our Dark Skies continue to predominate. We would wish to see the levels of darkness improving across the entire Reserve, particularly in urban areas, and an appreciable increase in control of external lighting changes in the External Zone.
Boundary levels	At least 2012 levels for the core zone. With significant improvements across the external zone
Related Mission Area(s)	People Place Climate Nature
Related objectives	Future visitors Collaborating in Place Decarbonisation Species conservation Ecosystem Management
Related outcomes	Healthy places Well-planned places Inspiring places Sustainable energy Ecosystem resilience is enhanced Species threats are reduced

Data Source:

[BBNPA Annual Dark Skies Report\(s\)](#)

Darkness and Tranquillity (contd)

Principal domain	No change in levels of tranquillity from base.
The most upto date data available	83% of the Park is classified as undisturbed
Why are we monitoring this sector?	<p>Tranquillity is one of the National Park's Special Qualities. Its continued protection and enhancement is a key objective of the way we as an organisation manage the Park.</p> <p>Because of the relative subjectivity of the experience of tranquillity we utilise a national data set as our baseline. The national data set published by National Resources Wales considers a range of factors that in combination either contribute to or detract from tranquillity. This comprises a composite understanding of the following factors.</p> <ol style="list-style-type: none"> 1. Relative abundance, perception or experience of nature, natural landscapes and greenspaces 2. Relative freedom from intrusive visual disturbance and human influence. 3. Relative dark skies 4. Sound environment
What we will report on annually	We will report on any updates to the National Tranquillity Map produced by NRW. We are working with NRW to disaggregate the overall tranquillity rating into its component features for the National Park, this will help to determine the nature of more detailed monitoring indicators.
What picture we want to see if the plan is successful	<p>As a core component of our special qualities, we would hope to see the recorded levels of tranquillity across the National Park remain the same or improve. Our boundary levels are set at the 2017 base.</p> <p>This subdomain combines with landscape quality and should be understood together (see above).</p>
Boundary level	No decrease in tranquillity register from 2017 base.
Related Mission Area(s)	Place
Related objectives	Collaborating in Place
Related outcomes	Inspiring Places Healthy Places

Data source

[Tranquil Areas Wales \(2017\) NRW](#)

Visitor experience

Principal domain	Reported levels of visitor enjoyment
The most up to date data available	85% of visitors rate their visit to the Park as 'very good' and 13% good. There are no negative ratings
Why are we monitoring this sector?	Understanding visitor experience helps us to understand the extent to which we are delivering on our second purpose to provide opportunities for understanding and enjoyment. A positive experience is correlated to enjoying the National Park. Knowing people are enjoying this landscape makes us very happy.
What we will report on annually	We do not systematically capture data to help us report on this measure annually. Towards the end of the Plan period (2026-7) we will undertake a wider visitor survey to update this data and to provide more information about the changes implementation of the Plan has brought about for our visitor enjoyment.
What picture we want to see if the plan is successful	We want to ensure that visitors continue to rate their visit to the park as good or very good.
Boundary level	We set our boundary at the 2017 base and anticipate seeing improvement in the % of visitors who rate their visit to the Park as 'very good'.
Related Mission Area(s)	People Place
Related objectives	Future Visitors Collaborating in Place
Related outcomes	Future lives Inspiring Places

Data Source:

[BBNPA Visitor Survey](#)

Access

Principal domain	General accessibility of the National Park for all users.
The most up to date data available	In 2019 34% of our rights of way were not considered easy to use.
Why are we monitoring this sector?	Our rights of way network is the principle means by which visitors and residents can experience the special qualities of the National Park. Ensuring that this network is accessible and easy to use is a mark of the extent to which we are meeting our obligations to all members of society, we therefore utilise this measure as a proxy for general accessibility. However we do recognise that it is insufficient in addressing issues of wider accessibility.
What we will report on annually	The National Park undertakes a yearly sampling exercise to assess the accessibility of a percentage of the network. The NPAs assessment is then used as a proxy for the status of the general network. We will use this data to provide a picture of the rights of way network year on year. We will also work through our Local Access Forum to design measures of general accessibility, including the accessibility of Visitor attractions and barriers to a fully accessible National Park for all.
What picture we want to see if the plan is successful	Although the network is improving in terms of its ease of use, there is still some work to do on getting this measure within social and environmental boundaries. We would hope to see the network continue to improve in terms of its ease of use. And although we know that there will be some footpaths that will by their very nature never register as easy to use, we hope that such paths will be in a very small minority.
Boundary level	A fully accessible National Park for all users.
Related Mission Area(s)	People Place
Related objectives	Quality of life Future Visitors
Related outcomes	Future Transport Equity, diversity, inclusion Nature connected places Healthy places Inspiring places

Data Source: [BBNPA Rights of Way Improvement Plan](#)

