THE FLOW COUNTRY WORLD HERITAGE SITE

MANAGEMENT PLAN

July 2026



"There was once a Bog Girl. Her dress was peat-black fringed with soft green moss. In her dark hair she wore tiny flowers of white bog cotton and pink bog-bean, and her long necklace was made from dark green Bog-firs.

But she was lonely, this Bog-Girl, and often gazed at her reflection in dark pools for company. The Bog Girl looked after the wilderness of the Flow Country, caring for its marvel of deep peat Blanket Bog that covered the ancient and vast sunken forest.

The Bog Girl sang with the wind to help the people of Scotland breathe good clean air. She sang songs to encourage the insects, the birds, the running deer, and she sang to remember the Bog People, now gone, but not forgotten, for she, The Bog Girl, remembered them.

Some called the Bog Girl the spirit of the wind. Others called her the guardian of the great bog. Though few have ever seen her."

From 'The Bog Girl of the Flow Country', by Janis Mackay, 2022

Front cover: Sam Rose, 2023

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Acronyms commonly used in the Management Plan

IUCN	International Union for the Conservation of Nature – UNESCO's Natural WHS advisors
OUV	Outstanding Universal Value – see Chapter 3 for details
SAC	Special Area of Conservation – designated for conserving protected habitats and species
SPA	Special Protection Area – designated for protected bird species
SSSI	Site of Special Scientific Interest – designated for plants, animals, habitats or geology
SOUV	Statement of Outstanding Universal Value – see Chapter 3 for details
TFC	The Flow Country (as a World Heritage Site)
UNESCO	United Nations Educational, Scientific and Cultural Organisation – they oversee the World Heritage convention
WH	World Heritage
WHS	World Heritage Site(s)

Introduction to this version of the Management Plan:

On July 26th 2024, and after many years of preparation and a lot of hard work, the blanket bog peatlands of The Flow Country were inscribed by United Nations Educational, Scientific and Cultural Organisation (UNESCO) on the World Heritage list, joining 230 other natural Sites worldwide to receive this accolade. This means that The Flow Country is now recognised as being as important globally as the Great Barrier Reef, the Serengeti, the Okavango Delta and many other incredible places already on the World Heritage List for their outstanding natural values.

This Management Plan is the **first revision** of the draft document submitted to UNESCO as part of the Nomination Dossier which was assessed by UNESCO to establish if World Heritage Status was merited for the Site. The pre-inscription version of this management plan was produced by a local partnership of organisations and individuals in order to explain to UNESCO how the World Heritage Site is to be looked after, collaboratively, after achieving the globally important WHS accolade. This revised version is, to a large degree the same document, but has been updated in a number of areas following the inscription, including:

- Inscription under Criterion x was not accepted by UNESCO, so references to it are removed;
- National Planning Framework 4 (NPF4) has come into law since the original was written, so the text is updated to reflect that;
- Recommendations were made by IUCN in respect of wind energy, which is reflected in the text.

This Plan should not be seen in isolation. It relates to, and in turn supports the new and updated working version of the Nomination Dossier, now referred to as the Site Dossier which is an extensive piece of work setting out in detail why The Flow Country merited World Heritage Site status, and will support the WHS development goals. This Plan will also work alongside a Delivery Plan for its 5–6-year duration, which will set out agreed actions to deliver the Plan's aims over that period.

Once this plan is endorsed by the Highland Council as supporting information for the planning system, it can be used locally to protect the World Heritage Site, and in particular help bring social, economic and cultural gains to the far north of Scotland. The post-inscription consultation draft was subject to public scrutiny for five weeks in May/June 2026. The feedback from the consultation period was incorporated into this final version and can be found on The Flow Country website at www.theflowcountry.org.uk. This final version of the Plan will be published for endorsement by the Highland Council.

Notes on terminology:

1) The words **designation** and **inscription** are both used throughout this document to refer to the application of a 'layer of significance' over a geographical area. In the UK we tend to use designation for 'layers of significance' such as National Parks or SSSI, but UNESCO use 'inscription' in the context of World Heritage Sites because when a place is given World Heritage Status, it is *inscribed* – literally written – onto the World Heritage List. Both terms are used in this Plan depending on the context and type of site being referred to.

2) The words **Site** and **property** are both used by UNESCO when referring to places on the World Heritage List. Referring to them as World Heritage *Sites* is more commonplace, whereas use of the word *property* by UNESCO tends to be for technical reasons. Both words are used in this Plan, depending on the context, but when referring to the WHS, **S**ite is always capitalised to differentiate it from other sites (such as SSSI/SAC/SPAs) within the area.

3) When we refer to **The Flow Country**, initials all capitalised, or (**The**) **Flow Country World Heritage Site**, we refer to the World Heritage Site area – see Chapter 2 for the Site boundary. When we use '**the Flow Country**', or '**the wider Flow Country'**, without a capitalised '**the**', then we refer to the wider area in Caithness and Sutherland that people call the Flow Country, but which is undefined by a specific border, and relates to the area including and surrounding all of the peatlands, no matter what condition they are in.

Foreword by the Chair of The Flow Country World Heritage Site Steering Group

As a native of The Flow Country and a long-time advocate for sensitive development in our beautiful and remote part of the world, it gives me great pleasure to write the foreword for this Management Plan for the Flow Country World Heritage Site.

It is more than 30 years[1] since the idea of gaining World Heritage status for The Flow Country was first proposed, and work began in earnest some 12 years ago. Much has happened in our beautiful part of the world over that period. Perhaps of most significance for this Plan is that during this period the world has started to recognise the huge importance of peat, for biodiversity, for our climate, for our water and air quality, and for our way of life. World Heritage status, now successfully gained, will firmly put our incredible blanket bog on the map for all time as the best example of its type in the world.

This Management Plan provides detail about how we intend to look after the World Heritage Site, and what arrangements need to be in place in order to achieve that. By 'we', I mean you and me, the people who own, live and work in the area, and those organisations who work with us to make it special. The Plan has been written with the intention of safeguarding this outstanding natural heritage for future generations. There are some complex and challenging issues in there, and we are always happy to get your thoughts about what is being proposed, not just about the difficult issues, but also about the really positive benefits World Heritage status can bring.

As the Chair of The Flow Country World Heritage Site Steering Group, I can genuinely say that this Plan, and the decisions made in it, have been made collaboratively, with the best interests of the blanket bog and the wider Flow Country and its communities in mind.

With best wishes and thanks,



Frances Gunn MBE, on behalf of the Steering Group for the World Heritage Site. More details about the Partnership can be seen Chapter 8.



Organisations represented on the WHS Steering Group (the Partnership):

NatureScot, The Highland Council, Flow Country Partnership, Armadale Farm, Confor, Crofting Commission, Focus North, Forestry and Land Scotland, Highland Coast Hotels, Highlands and Islands Climate Hub, Highlands and Islands Enterprise, Highlife Highland, Kyle of Sutherland Rivers Trust, NC500, North Highland Chamber of Commerce, North Highland Initiative, NW2045, Plantlife Scotland, RSPB, Scottish Environmental Protection Agency, Scottish Land and Estates, Scottish Renewables, Strathnaver Museum, University of the Highlands and Islands, VisitScotland, Voluntary Groups Sutherland, Welbeck Estates with Historic Environment Scotland, Scottish Forestry, Scottish Government, Joint Nature Conservation Commission, Historic England and the Department for Culture, Media and Sport as observers.

[1] Resolution (17/63) of the 17th General Assembly of the IUCN in Costa Rica, 1987 (https://portals.iucn.org/library/efiles/documents/GA-17th-011.pdf p147) and in Lindsay et al, 1988, (https://repository.uel.ac.uk/item/86qqv)

Executive Summary

Our vision for the Site is:

Our vision is that World Heritage Status for the Flow Country will ensure that its world-class blanket bog, associated biodiversity and carbon storage ability is protected and enhanced, that it is an unparalleled and accessible natural resource for education and well-being, and that the status is beneficial both for our vibrant communities and our visitors.

Those responsible for managing World Heritage Sites have a duty to ensure that they are protected for present and future generations, for the whole world[2]. This is not just through legal means, but also through responsible, inclusive, sustainable management practices, which is the primary reason why a Site must have an appropriate, agreed management framework in place, highlighting the need for this document.

"Heritage is our legacy from the past, what we live with today, and what we pass on to future generations. Our cultural and natural heritage are both irreplaceable sources of life and inspiration." (UNESCO) [3]

This Management Plan sets out how the people and organisations of the Highlands, Scotland and the UK will look after The Flow Country as a World Heritage Site. The intention within the Plan is to meet both the global aims of UNESCO, and the aspirations of local Highland communities.

The blanket bog of The Flow Country is an outstanding peatland ecosystem, with important associated biodiversity assemblages and a record of the past 9,000 years. Its future value is also highly significant, not least because of the local and global significance for biodiversity, but also because of its role in sequestering and storing carbon in the fight against human-induced climate change. It is also a living landscape; people live and work in and around it. The 'flows' have always been a part of people's lives here, whether through cutting peat for fuel, crofting, sporting pursuits or other forms of work or recreation. World Heritage Status will not change that but instead will be a collaboration of stakeholders working together to manage the blanket bog landscape in the best interests of people and the peatland.

Given the size of the area, the level of human intervention over millennia, and the complications of land tenure, setting out how the World Heritage Site will be managed is no straightforward task. Working in partnership across many stakeholders and communities, it is achievable, and this Plan sets out how it will be done. The document is broken down into three parts: (1) Introduction, description and justification, (2) Policy context, protection, and issues and opportunities, (3) Policy framework, governance, and implementation.

Part 1 (Chapters 1-3) sets the scene for World Heritage and the reasons why the status was sought for The Flow Country. This is the world's first World Heritage Site based on the importance of peatland, but that in itself did not guarantee the status. The boundary area, with rationale for why some areas are included and others aren't, is also described in this section, as are the key 'attributes' of the areas that together make up the concept that UNESCO calls Outstanding Universal Value, or OUV; the reason why a place deserves to be a World Heritage Site.

Part 2 (Chapters 4-6) sets out the international, national and local policy context in which the World Heritage Site sits, demonstrating a very supportive political environment which can only benefit the Site's future safeguarding. The legislative and planning context is also set out here and shows the multiple levels of protection that are already afforded to much of the area within the boundary. It also discusses the planning policy that affords protection to the parts of the boundary without statutory environmental designation, and the

[2] From the World Heritage Convention (1972) "*the States Parties to this Convention recognize that such heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to co-operate*."
[3] UNESCO – https://whc.unesco.org/en/about

area outside of the World Heritage Site that may have an impact on the Site itself; known as the setting. The conclusion is that existing protection arrangements for the World Heritage Site are strong and appropriate for the designation.

The final part of this section – Chapter 6 – is a detailed discussion about the threats and opportunities facing the Site, including issues such as deer management, woodland creation and wind turbine arrays. These are all complex issues, and there will be challenges going forward; however, it is also apparent that there is nothing in here that cannot be resolved through collaboration and discussion.

Part 3 (Chapters 7-8) of the document presents the policy framework – the decision-making structure by which the area, as a World Heritage Site, will be managed going forward. It is important to recognise that this does not override decisions or impose conditions on landowners or managers, it sets out a suite of policies to which, by working in partnership, landowners and managers, organisations and individuals will work, in the best interests of the World Heritage Site. The policies are broken down into four themes that can be broadly summarised as protection, living landscape, education and management, and the policies contained therein will set the tone for World Heritage Site management into the future. This section also sets out the governance arrangements for the Site, and touches on how implementation of the Plan will take place.

"What makes the concept of World Heritage exceptional is its universal application. World Heritage sites belong to all the peoples of the world, irrespective of the territory on which they are located."[4]

World Heritage status has the potential to bring considerable benefits to the far north of Scotland, and not just for the protection and recognition of the blanket bog. Following the example of other World Heritage Sites, sensitive use of the designation can bring real and long-term social, economic and cultural benefits to the area that work in harmony with protection of the natural asset. This Plan aims to achieve that balance.

Acknowledgements

This Plan, alongside the WHS Site Dossier, has been put together with the commitment and support of the organisations on the Partnership, as listed out on page 6. Most notably, the Highland Council, NatureScot, ERI, RSPB and Wildland Ltd have taken a lead in providing financial and staff support over the last 5-6 years and have driven the work programme, so thanks are due to them. Thanks also are due to all members of the Steering Group, Working Groups and Flow Country Partnership for their roles in helping to develop the bid, and key staff and consultants who played a significant role, most notably Andrew Coupar, Brigid Primrose, Sam Rose, Graham Neville, Roxane Anderson and Steven Andrews

[4] UNESCO – https://whc.unesco.org/en/about

PART 1

Chapter 1. Introduction, World Heritage and OUV

World Heritage Sites (WHS) are places of global significance. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) recognises WHS through the Convention Concerning the Protection of the World Cultural and Natural Heritage (1972), more commonly known as the World Heritage Convention and which has been ratified by 194 member states.

1.1 UNESCO and World Heritage

UNESCO was established in 1945, and its Constitution declares that '*since wars begin in the minds of men and women, it is in the minds of men and women that the defences of peace must be constructed'*[5].

The overriding purpose of UNESCO is: "*to contribute to peace and security by promoting collaboration among nations through education, science and culture in order to further universal respect for justice, for the rule of law and for the human rights and fundamental freedoms which are affirmed for the peoples of the world, without distinction of race, sex, language or religions*". We talk about peace more in Chapter 7.

One of UNESCO's roles relates to the protection of both natural and cultural heritage and ensuring that the conservation of sites and monuments contributes to social cohesion. *"Insofar as monuments and sites are also spaces for sustainable development and reconciliation, UNESCO coordinates actions of its partners by administering the World Heritage Convention (1972)."*

The World Heritage Convention

UNESCO further states that: "*Reflecting the natural and cultural wealth that belongs to all of humanity, World Heritage Sites and monuments constitute crucial landmarks for our world. They symbolize the consciousness of States and peoples of the significance of these places and reflect their attachment to collective ownership and to the transmission of this heritage to future generations*."

"*What makes the concept of World Heritage exceptional is its universal application. World Heritage Sites belong to all the peoples of the world, irrespective of the territory on which they are located. The United Nations Educational, Scientific and Cultural Organization (UNESCO) seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity*. "

The Convention (ratified by the UK Government in 1984), is exceptional in two ways: first, it is international, able to be applied equally over all 194 member-states, and with a global level of responsibility; secondly, it embraces both culture and the natural environment in one designation (World Heritage Sites) and depends very much on the interdependence of the two dimensions of heritage.

> *"in regarding heritage as both cultural and natural, the Convention reminds us of the ways in which people interact with nature, and of the fundamental need to preserve the balance between the two*."

The Convention also has objectives, strong messages to emphasise that inscription onto the World Heritage List is not just a badge of honour, and that World Heritage is trying to make a real difference in the world. These objectives are described in Box 1.1.

[5] This and subsequent quotes on same page from whc.unesco.org

Box 1.1 The 'five Cs' of World Heritage[6]

***Credibility**:*	*Strengthen the Credibility of the World Heritage List, as a representative and geographically balanced testimony of cultural and natural properties of outstanding universal value.*
***Conservation**:*	*Ensure the effective Conservation of World Heritage properties.*
***Capacity-building**:*	*Promote the development of effective Capacity-building measures, including assistance for preparing the nomination of properties to the World Heritage List, for the understanding and implementation of the World Heritage Convention and related instruments.*
***Communication**:*	*Increase public awareness, involvement and support for World Heritage through communication.*
***Communities**:*	*Enhance the role of communities in the implementation of the World Heritage Convention.*

Logistically, the World Heritage Convention sets out the guidance for nomination and, once inscribed management of World Heritage Sites. In this context, UNESCO's World Heritage mission is to:

- encourage States Parties to establish Management Plans and set up reporting systems on the state of conservation of their World Heritage Sites;
- help States Parties safeguard World Heritage properties by providing technical assistance and professional training;
- provide emergency assistance for World Heritage Sites in immediate danger;
- support States Parties' public awareness-building activities for World Heritage conservation;
- encourage participation of the local population in the preservation of their cultural and natural heritage;
- encourage international cooperation in the conservation of our world's cultural and natural heritage.

The implications of being on the World Heritage List are that properties have "*Outstanding Universal Value" (OUV)*, a "*cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole*"

Outstanding Universal Value (OUV)

OUV, is defined in terms of three pillars for natural Sites:

- **Criteria** – the factors for which the Site is globally outstanding; there are six cultural and four natural heritage criteria
- **Integrity** – the 'wholeness' or completeness of the Site; an expression of whether all of the component parts of what is being described are present in good condition within the boundary area
- **Protection and management** – the extent to which the area inscribed can be protected and managed effectively

All three pillars must be met before the Site can be inscribed on the World Heritage List. If any one of these pillars is at risk, UNESCO can ask for it to be remedied and if that is not possible, the Site could be put onto the World Heritage in Danger list. Once on that list, the only way to be taken off it is if the risk is minimised or the Site is de-listed from the World Heritage List, as happened with Liverpool Mercantile City in 2021. More about this information can be found on UNESCO's website[7].

[6] Source: https://whc.unesco.org
[7] https://whc.unesco.org/en/danger

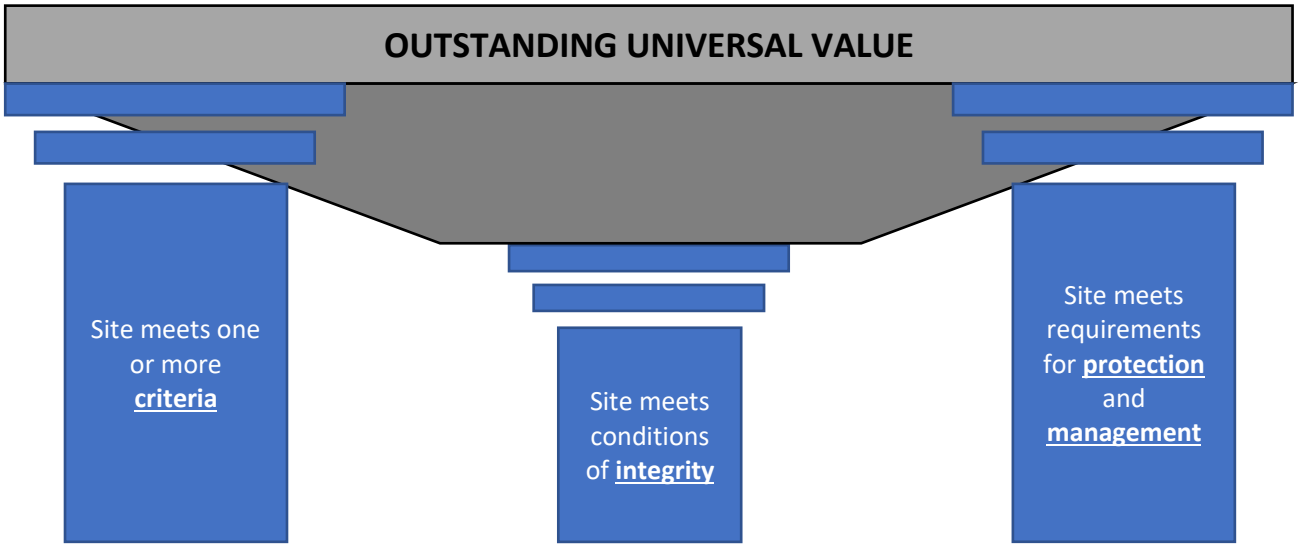


Figure 1.1 The three pillars of OUV

Those responsible for managing World Heritage Sites have a shared obligation to ensure that their Sites are protected for present and future generations, not just through legal means, but also through responsible, inclusive, sustainable management practices. This is the primary reason why a World Heritage Site must have an appropriate, agreed management framework in place, and therefore highlights the need for this document.

1.2 The inscription process and the Flow Country's inscription, July 2024

World Heritage status is not automatically bestowed on a property by the States Party[8] Government or UNESCO. All World Heritage Sites must have a clear case for Outstanding Universal Value to be inscribed onto the World Heritage List.

The normal route to inscription in the UK is for a local Partnership to come together around a common belief that a place or area has the potential to be a World Heritage Site and then work with the Government and its agencies to gain a place on the UK's 'Tentative List for Nominations'[9]. If the proposals meet the criteria of the UK Government and then UNESCO[10] then it can proceed to the nomination stage,

The Partnership is then able to develop and submit a Nomination Dossier to UNESCO, whose World Heritage Committee makes the decisions at their annual meetings. The Flow Country Partnership has been working since 2011/12 to develop and put forward the case for World Heritage status and passed the UK Government's Technical Evaluation stage in 2020. There are many people to thank for their input along the way, both those working with the inscribed WHS currently and those instrumental in getting the bid going and maintaining momentum.

The Flow Country Nomination Dossier submission was made in February 2023, after which time there was an evaluation period of 18 months. IUCN – the International Union for Conservation of Nature, UNESCO's Advisory Body for natural heritage, visited the Site and met the team and community. After a further set of questions, they then gave their Technical Evaluation to UNESCO, and it was considered by the World Heritage Committee in July 2024. The Site was then inscribed onto the World Heritage List on July 26th 2024.

[8] State Party is UNESCO terminology for a nation state that has signed the World Heritage Convention.
[9] https://www.gov.uk/government/consultations/unesco-world-heritage-sites-uk-tentative-list-revie
[10] There is a pre-approval process required by UNESCO for all nominations to be considered by Committee on or after 2027. This was not a requirement for the Flow Country.

IUCN Technical Evaluation

The IUCN Technical Evaluation[11] is an important document for this plan, so it is useful to reflect on it here. As mentioned above, the Site was *nominated* under criteria ix and x but only *inscribed* under criterion ix. IUCN's document states:

> ***Criterion (ix): Ecosystems/communities and ecological/biological processes***
>
> *The Flow Country is considered the most extensive and diverse example of an actively accumulating blanket bog landscape found globally. Distinctive forms of blanket bog have evolved, exhibiting a diversity of mire and vegetation types with their associated species assemblages, including the full range of habitats from pools to drier hummock microsites including elements of damaged bog, transitional bog, and fen communities. In large parts undisturbed, specific communities composed of Atlantic, boreal and arctic taxa depend on the integrity of the bog ecosystem.*
>
> *The Flow Country is a type reference for a rare and threatened ecosystem not yet appropriately represented on the World Heritage List. The nominated property overlaps with one biogeographical province, two terrestrial ecoregions and one biorealm not currently represented on the World Heritage List and would thus also fill a gap on the List in this regard. In addition, the nominated property's ongoing ecological processes gain even greater significance today for their role in sequestering carbon.*
>
> *IUCN considers that the nominated property **meets** this criterion.*
>
> ***Criterion (x): Biodiversity and threatened species***
> *The nomination highlights the distinct bird community, bryophyte assemblage, and ecological integrity under criterion (x). Comparisons in the nomination were limited to other blanket bogs and not to wider boreal communities. Species numbers do not appear to be exceptionally high. There are only a few globally threatened species and the threatened bird species are rarely migrating through the nominated property, the threatened mammal is invasive to the United Kingdom, and threatened fish and invertebrate species have wide ranges. Sphagnum species numbers are not exceptionally high compared to other areas in Scandinavia. However, the species assemblages cited frequently in the documentation, particularly the blanket bog vegetation and bird assemblages from an integral part of the ecosystem and ecological processes under criterion (ix).*
>
> *IUCN considers that the nominated property does **not** meet this criterion.*

The report also states that IUCN considers that the **protection status** of the nominated property, the boundaries of the nominated property and **buffer zones**, the **management** of the nominated property and the **integrity requirements and protection and management** of the nominated property all *meet the requirement of the Operational Guidelines*.

In essence IUCN were very supportive of the bid, considered it an exemplary nomination, but didn't agree with the team's assertion that the biodiversity assemblage was also globally significant. The nomination set out that the biodiversity was globally significant as a *representative example of a blanket bog ecosystem*, but for criterion x to be met fully, IUCN for the most part need the biodiversity to show OUV on its own merit and not just in relation to another criterion.

Further recommendations in the report of note were that IUCN:

- Strongly encourages the State Party to further strengthen the protection of the nominated property and its wider setting through the expansion of or through additional statutory protection designations;
- Requests the State Party not to approve any wind turbines that are proposed to be constructed within the property and to ensure that any proposed developments in proximity of the nominated property

[11] https://whc.unesco.org/document/206980 pp 57-67

that may impact on its Outstanding Universal Value (OUV) are assessed for their potential impacts, in line with the *Guidance and Toolkit for Impact Assessments in a World Heritage Context*, prior to making any decision that would be difficult to reverse;

- Also requests that the State Party submit to the World Heritage Centre a report providing an update on the status of proposed wind farms within the boundaries and in the vicinity of the property, and further describing how the property will be protected from future energy development proposals that could pose a serious threat to the Outstanding Universal Value, by 1 December 2025;

- Commends the State Party for the high-quality Nomination Dossier and supporting documentation, including the detailed articulation of attributes of the Outstanding Universal Value under criterion (ix)

The first two points are referred to later in this document, and the third will be part of the Action Plan.

Formal inscription documentation

Formally the Site's inscription is comprised of **five documents**, which may need to be referred to in cases of management issues. All of these documents are fixed and represent the condition of the Site at Inscription, other that this Management Plan, which must reflect these documents but can change:

- Original Nomination Dossier and draft Management Plan submitted, Feb 2023[12]
- Supplementary information in support of the Nomination, submitted, Feb 2024[13]
- IUCN Technical Evaluation Report, pp 57-67 May 2024[14]
- World Heritage Committee INF.8B4: Factual errors letters, pp6-8, July 2024[15]
- World Heritage Committee Decision: 46 COM 8B.5, pp203-205, July 2024[16]

1.3 Management of the World Heritage Site

Management of World Heritage Sites is complex but always based on a partnership approach. Sites vary in tenure, from wholly owned Sites such as Blenheim Palace, to places with many landowners, such as the Lake District, cities like Bath or Edinburgh, or serial Sites such as the Cornish Mining landscape. Land management, whether ownership or tenancy has a key role in management, and it is important that land managers are supportive. In the UK, World Heritage does not currently carry any *direct* legal implications, so there is no statutory or legal obligation to consult residents or property owners. That said, all Sites in the UK make a point of providing mechanisms for owners to input, and many are involved at the pre-inscription phase.

The Flow Country Partnership has held two periods of public consultation about the WHS with local communities prior to consultation on the previous version of this Management Plan, as well as holding many other less formal meetings. Notably, it made every effort to ensure that all parties involved in the management of land within the WHS, irrespective of the nature of their land tenure, have been given opportunities to engage in the consultation process.

Wider public, private and organisational involvement in a WHS is normally through the mechanism of a stakeholder Partnership. This Partnership should have a transparent governance structure, with one or more groups or committees set up to oversee it, which tend to be non-executive bodies that work on a consensus basis to make coordination decisions and actions.

In the case of The Flow Country, it is governed by a Steering Group comprising representatives of key stakeholder organisations, as well as individual technical specialists. The Steering Group is a constitutionally named subcommittee of the Flow Country Partnership[17], and reports to the Partnership's Trustees. The

[12] https://whc.unesco.org/document/199174
https://whc.unesco.org/document/200762
[13] https://whc.unesco.org/document/206493
[14] https://whc.unesco.org/document/206980
[15] https://whc.unesco.org/document/206988
[16] https://whc.unesco.org/document/207010
[17] Constituted as a Scottish Charity (SCIO) in 2024

Partnership, along with key partners The Highland Council and NatureScot, together make up the three 'accountable bodies' for the Site. The Steering Group is chaired by an independent Chair from within the community, who is also a Trustee on the Flow Country Partnership charity.

This governance approach will evolve over time, but the technical need for such a committee and its role is to meet the requirements of the Operational Guidelines for the Implementation of the World Heritage Convention[18]. They state in para 111 in respect of the management system requiring "*the development of mechanisms for the involvement and coordination of the various activities between different partners and stakeholders*". Regulations aside, a wide stakeholder partnership is of most importance to ensure that all of the key partners who will play a part in the management of the WHS have a voice around the table. The Steering Group also has representatives of the local community on board, which in this case includes Councillors from the Highland Council as democratically elected representatives. Governance is set out in more detail in Chapter 8, but the list of partners currently in the Steering Group is in Table 1.1 below.

[18] Operational Guidelines for the Implementation of the World Heritage Convention https://whc.unesco.org/en/guidelines/

Table 1.1 Flow Country Steering Group partners and their roles

Organisation	Role, responsibilities, expertise and experience it brings to the Steering Group	Roll on Steering Group
The Highland Council	Local Authority – planning, highways, tourism, education etc.	Members for one ward from each of Caithness and Sutherland areas. Accountable Body
NatureScot	Scottish Government adviser on all aspects of nature, wildlife management and landscape	Member, Accountable Body
Flow Country Partnership	Charitable organisation and WHS accountable body	Member, Accountable Body
Armadale Farm (farming interest)	Local landowner	Member
Confor (forestry interest)	Confederation of Forestry businesses	Member
Focus North	Membership organisation with economic development interest	Member
Forestry and Land Scotland	State forestry business, with responsibility for management of public land and recreation	Member
Historic England	UK Focal point for World Heritage	Observer
Historic Environment Scotland	Scottish Government Agency with responsibility for World Heritage	Observer
Highland Coast Hotels	A privately owned, community focused collection of hotels with a local membership, supporting other hospitality and activity businesses in and around the Flow Country	Member
Highlands and Islands Climate Hub	Membership organisation supporting community-led climate action	Member
Highland and Islands Enterprise / Caithness Community Planning Partnership	Membership organisation with economic development interest / representing Community Planning Partnership	Member
Highlife Highland	Membership organisation promoting culture, learning, sports, and leisure	Member
Joint Nature Conservation Committee (JNCC)	Oversight of international natural designations in the UK, including natural WHSs	Observer
Kyle of Sutherland Rivers Trust	Conservation charity with rivers interests across the catchment of Kyle of Sutherland	Member
NC500	Membership organisation representing NC500	Member
North Highland Chamber of Commerce / Venture North	Membership organisation representing businesses in the north	Member
North Highland Initiative	Membership organisation supporting local people and businesses	Member

NW2045	Membership organisation with North West Sutherland social and economic interest	Member
Melness Crofting Estate (crofting and common grazing interests)	Local crofting interest and common grazing clerk	Member
Plantlife Scotland	Conservation charity & landowner	Member
Police Scotland / Sutherland Community Planning Partnership	Membership organisation representing Community Planning Partnership	Member
RSPB Scotland	Significant conservation charity and local landowner.	Member
Scottish Environmental Protection Agency	Environmental regulator	Member
Scottish Forestry	Scottish Government agency responsible for forestry policy, support and regulation	Observer
Scottish Government	Devolved Government	Observer
Scottish Land and Estates	Membership organisation with rural business interest	Member
Scottish Renewables	Membership organisation representing the renewable energy sector	Member
Strathnaver Museum	Local museum and research facility	Member
UHI Environmental Research Institute (ERI)	Leading Flow Country research institute and source of expertise	Member
VisitScotland	Tourism body for Scotland	Member
Voluntary Groups Sutherland	Membership organisation supporting local charities, community groups and volunteers	Member
Welbeck Estates (landowning interest)	Representative of local landowner	Member
Landowning interests (Wildland Ltd.)	Landowner with conservation interests	Member
UK Department for Digital, Culture, Media and Sport (DCMS)	UK State Party to the World Heritage Convention	Observer

1.4 Purpose of this document

It is a formal requirement of both UNESCO and the UK Government for inscribed Sites to have a Management Plan. This document is the first revision of The Flow Country's management plan, and the first for it as an inscribed Site. For the most part it is the same as the pre-inscription draft but updated appropriately. It is a public document which outlines a Vision and Aims for the Site over the coming years and indicates a range of policies setting out how those Aims, and other aspirations, will be achieved. It also explains the reasons for designation and how it is to be protected and managed.

There is no prescribed format for a World Heritage Site Management Plan, either in the UK or anywhere else. This is because every Site is different and needs to be managed according to its needs. The approach set out here is based on experience and good practice from other UK Sites, leading to a comprehensive document, which at this initial stage, seeks to lay out all of the issues and opportunities in detail for local policymakers, communities and UNESCO to scrutinise. The structure for The Flow Country WHS Management Plan is set out in the following sections:

- Chapter 2 describes the Site, including a level of detail for each of the areas within the boundary;
- Chapter 3 then presents the Site's Statement of OUV and its attributes;
- Chapter 4 gives the International, National, Regional and Local policy contexts to the Site and its values;
- Chapter 5 presents a detailed analysis of the protection arrangements;
- Chapter 6 provides an analysis of the issues affecting the Site, including both threats and opportunities;
- Chapter 7 then sets out the policy framework in detail;
- Chapter 8 completes the main document with details of implementation, governance and monitoring.

An Action Plan will be prepared in parallel with the consultation on this plan, and will have more details about implementation, including priorities, resources, monitoring and evaluation.

1.5 Summary of the Management Plan process

This Management Plan builds on work done by members of the Partnership over the last 12 years, most notably by NatureScot, RSPB, the Flow Country Partnership (formerly the Peatlands Partnership) and the Highland Council. It also draws heavily on existing resources and materials, including the Peatlands of Caithness and Sutherland Management Strategy (2021-2030)[19], and outputs from the Flows to the Future project[20].

The Partnership that has been instrumental to developing this Plan have considered all the potential issues that an inscribed Site might face, and set out the context, protection arrangements and policies to prevent harm and promote benefits from the WHS designation. The first version of this plan was tested with the Steering Group, other Stakeholders and through public consultation in 2022, after which changes were made.

The Operational Guidelines for the Implementation of the World Heritage Convention require very strong partner and stakeholder involvement. The nature of the Site and the scope for its management is such that it is really only possible through collaborative working between organisations and individuals, and it is this approach that runs throughout, not just the Plan, but also the process.

[19] THE-PEATLANDS-OF-CAITHNESS-AND-SUTHERLAND-MANAGEMENT-STRATEGY-2021-2030.pdf
[20] Find out more at: https://www.theflowcountry.org.uk/flows-to-the-future/

Chapter 2. Description of the World Heritage Site and its setting

This chapter sets out the geographical context of the Site and its setting, with an introduction that sets out the context for peatlands globally.

2.1 Global context of peatlands

Peatlands are very important ecosystems that are under threat globally. Dr Roxane Andersen of the University of the Highlands and Islands' Environmental research Institute (ERI) sets out below the current situation.

Box 2.1 Summary of the current global context of peatlands (with thanks to Dr Andersen).

Global peatlands context

Peatlands are the most carbon-dense ecosystems on Earth and should be second only to the oceans in their potential to remove carbon dioxide (CO_2) from the atmosphere[1,2]. In good condition, peatlands are inherently extremely resilient, accumulating and storing carbon for millennia[3]. They also support a unique and specialist biodiversity across a range of taxa and are known to provide a whole range of wider ecosystem services.

However, the huge stock of carbon stored by peatlands globally is under threat from extraction, fire, and accelerated decomposition from increased aeration[4]. As a result of historic drainage and land conversion, peatlands have now become the globally most intensive source of carbon emissions from the land use sector, contributing an estimated 5% of all anthropogenic emissions[5, 6,7]. In other words, despite drainage impacting only ~10% of global peatlands mostly in Europe and in the tropics, the whole global peatland system has now shifted from a net sink to a net source of C[8].

In addition, peatlands across the spectrum of condition are now facing the added threat of rapid climate change. Climate change is already impacting upon peatlands, with widespread, long-term drying already evidenced in Europe[9]. While there are clear messages around the urgent need to protect and conserve peatlands in good condition and large investments in the restoration of degraded peatlands, the benefits of these interventions may take decades to fully materialise. In that time, based on the current trajectory, shifts in both average and extreme conditions are predicted to become more acute. The added pressure from climate change may threaten the stability of natural peatlands, hamper the recovery of restored peatlands, accelerate the degradation of heavily modified peatlands, and generally increase the likelihood of catastrophic losses through e.g. wildfires and landslides.

[1] Yu et al. (2010) Geophys. Res. Lett. 37, L13402.
[2] Loisel et al. (2014) Holocene 24, 1028–1042.
[3] Alexandrov et al. (2020) Biogeosci, 17, 47–54.
[4] Crump, J. (Ed.) (2017) Smoke on Water – Countering Global Threats From Peatland Loss and Degradation. A UNEP Rapid Response Assessment. United Nations Environment Programme & GRID-Arendal, Nairobi and Arendal, www.grida.no.
[5] Leifeld & Menichetti (2018) Nat Comms 9, Article number: 1071.
[6] Parish et al. (2008). Assessment on Peatlands, Biodiversity and Climate Change: Main Report. Global Environment Centre, Kuala Lumpur & Wetlands International, Wageningen.
[7] *Tanneberger et al. (2017) Mires & Peat 19, 1–17.*
[8] *Leifeld, J., Wüst-Galley, C. and Page, S., 2019. Intact and managed peatland soils as a source and sink of GHGs from 1850 to 2100. Nature Climate Change, 9(12), pp.945-947.*
[9] *Swindles, G.T., Morris, P.J., Mullan, D.J., Payne, R.J., Roland, T.P., Amesbury, M.J., Lamentowicz, M., Turner, T.E., Gallego-Sala, A., Sim, T. and Barr, I.D., 2019. Widespread drying of European peatlands in recent centuries. Nature Geoscience, 12(11), pp.922-928.*

2.2 Description of the World Heritage Site

Background and location

The 'Flow Country' is the name given to the extensive area of blanket bog situated in the very far north of mainland Scotland, and within the Scottish counties of Caithness and Sutherland. It is a wide, open, landscape visually not unlike the Arctic tundra, but that is where the similarity ends. The Flow Country has no permafrost and is instead waterlogged due to high levels of precipitation, mainly rain, experienced in this region. The input of water is consistently greater than the evaporation potential, resulting in a water balance that allows for the formation and accumulation of peat.

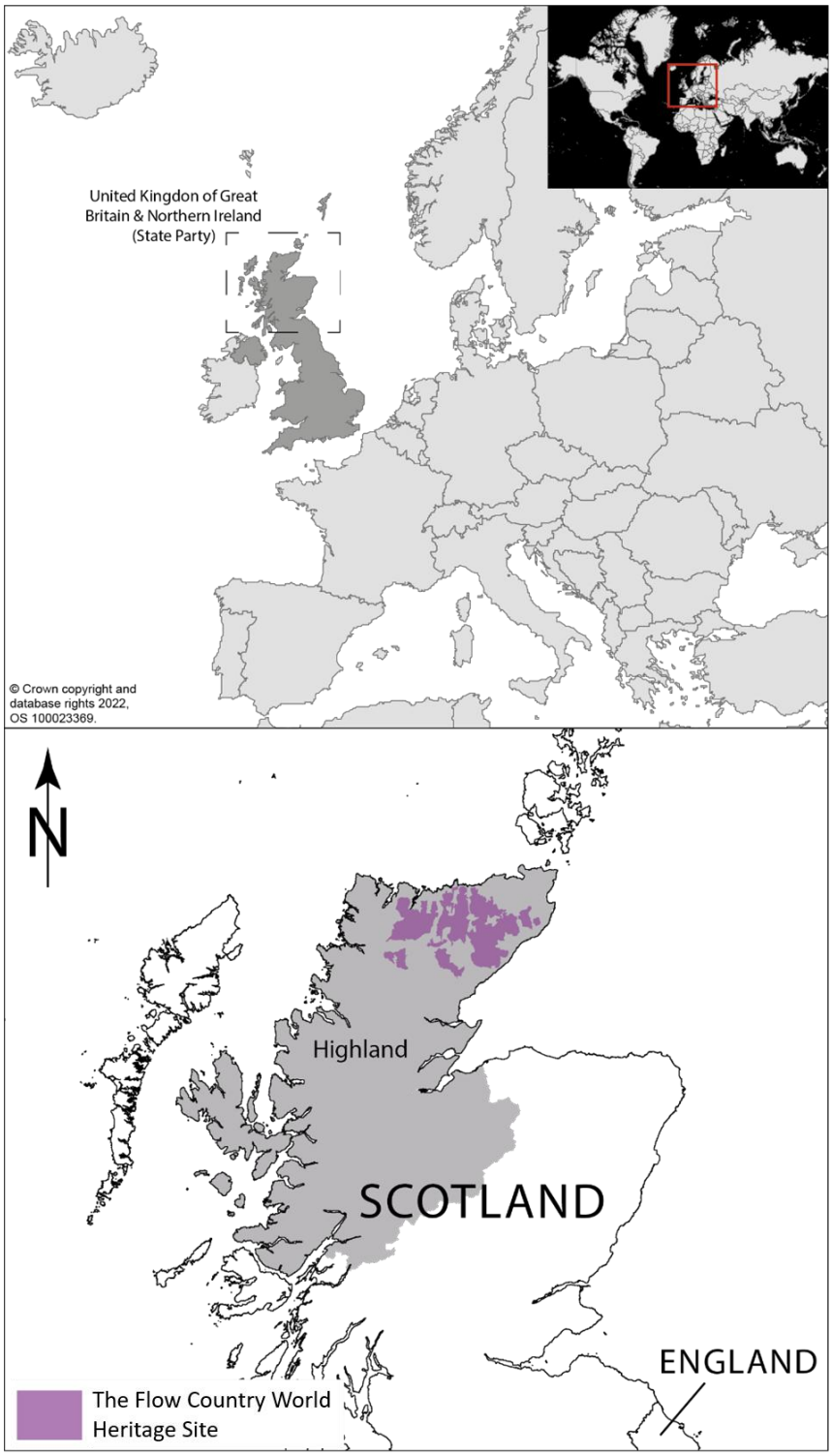


Figure 2.1 Location of The Flow Country in the world and Scotland

Special qualities

Blanket bog is a specific and globally rare form of peatland, confined to the oceanic margins of the cool temperate zones of the northern and southern hemispheres. It is typically treeless over much of its range, covering undulating mineral soil of varying topography like a blanket.

The range of climatic conditions and landforms found across Caithness and Sutherland together give rise to distinctive forms of blanket bog habitat characterised by varied vegetation assemblages and surface patterns. The variety of characteristic surface patterning, including numerous groups of pools and pool systems, known as 'dubh lochs' (meaning dark pools), of various shapes and sizes, "*glitter like jewels in the landscape*" when seen from above or higher ground (Lindsay et al., 1988). These occur in intricate patchworks with alternating hummocks of bog moss (*Sphagnum spp.*) and lichens, and wet hollows.

These surface patterns are more extensive and unbroken to the east, in Caithness, and more scattered in south and west Sutherland where the relief is more pronounced. Together with intimately associated areas of mountains, heaths, fens and open water, this area is of international importance for its habitat and the range of wildlife it supports, including a variety of specialist plants, globally unique assemblages of birds, and a range of other major groups (mammals, fish, insects, microbes).

The biodiversity found across The Flow Country reflects the internationally rare and important assemblage of habitats, flora and fauna, with variation in the specialist species found across a climatic gradient from east to west. It is also home to a bird assemblage not seen anywhere else in the world due to a conjunction of latitudinal and climatic gradients and supports over 10% of the global *Sphagnum* bog moss flora.

The size and scale of the Site, and the wider blanket bog landscape setting, ensures that genetic diversity is retained amongst breeding populations of resident species. The advantage of its extent and scale means that within a relatively short distance, it supports a diverse mosaic of mire and vegetation types with associated species assemblages, including an exceptional diversity of microtopographic features, usually rare and localised in other peatlands globally.

This allows for connectivity, maintaining diversity, supporting genetically diverse populations of key species and enabling their movement. At the same time, the relative isolation of the Flow Country from the rest of Eurasia has meant that it has also supported evolutionary processes with non-mobile populations of species allowing genetic distinction from their continental counterparts.

As well as the quality of its habitat and representative biodiversity, the Site also has significance for carbon sequestration and storage, climate regulation, oxygen production, water regulation and water quality. Carbon sequestration, and subsequent storage, has occurred as an integral part of the eco-hydrological process of blanket bog formation throughout the Holocene[21] and continues today.

The Outstanding Universal Value is explained in more detail in Chapter 3.

Site Location and the 'wider Flow Country'

The wider Flow Country area across the counties of Caithness and Sutherland is the most extensive and varied expanse of treeless blanket mire in the world. It dominates an approximate 400,000 ha ice-scoured plain forming the northernmost part of the Scottish mainland and is gently inclined from north-east to south-west from sea level to 350m, with occasional higher hills.

The maps in Figs 2.2 and 2.3 provide context information. The first, Fig 2.2, shows the estimated extent of peatland – in any condition – in the wider Flow Country area from Lindsay et al (1988), the first published paper to suggest that the area could be a WHS; this is the wider Flow Country area. The second map, Fig. 2.3, shows the WHS boundary overlain on the current peatland condition map. This latter map has a lot more data and shows that some of the wider peatland has been excluded from the boundary because it cannot demonstrate OUV at this time but is still seen as part of the wider Flow Country.

[21] Go to this link for more details: https://www.sciencedirect.com/topics/earth-and-planetary-sciences/holocene

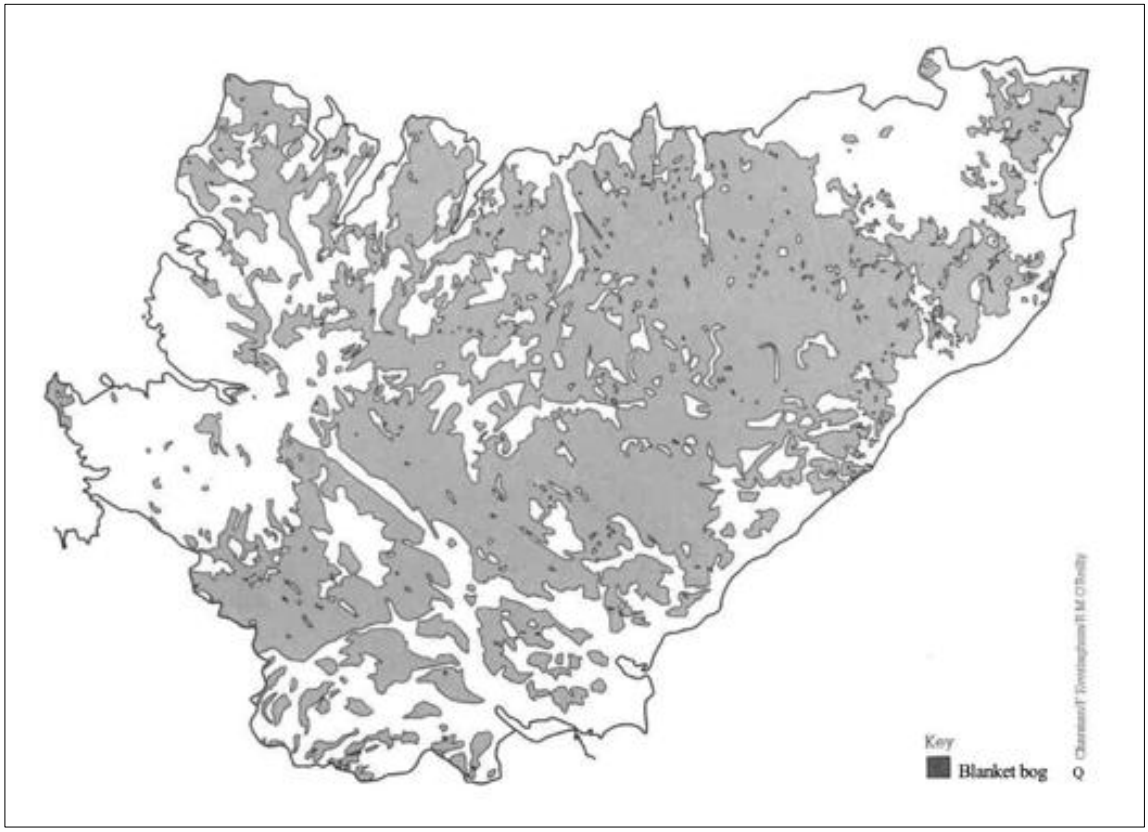


Figure 2.2 The extent of the wider Flow Country peatlands, from Lindsay et al. 1988[22]

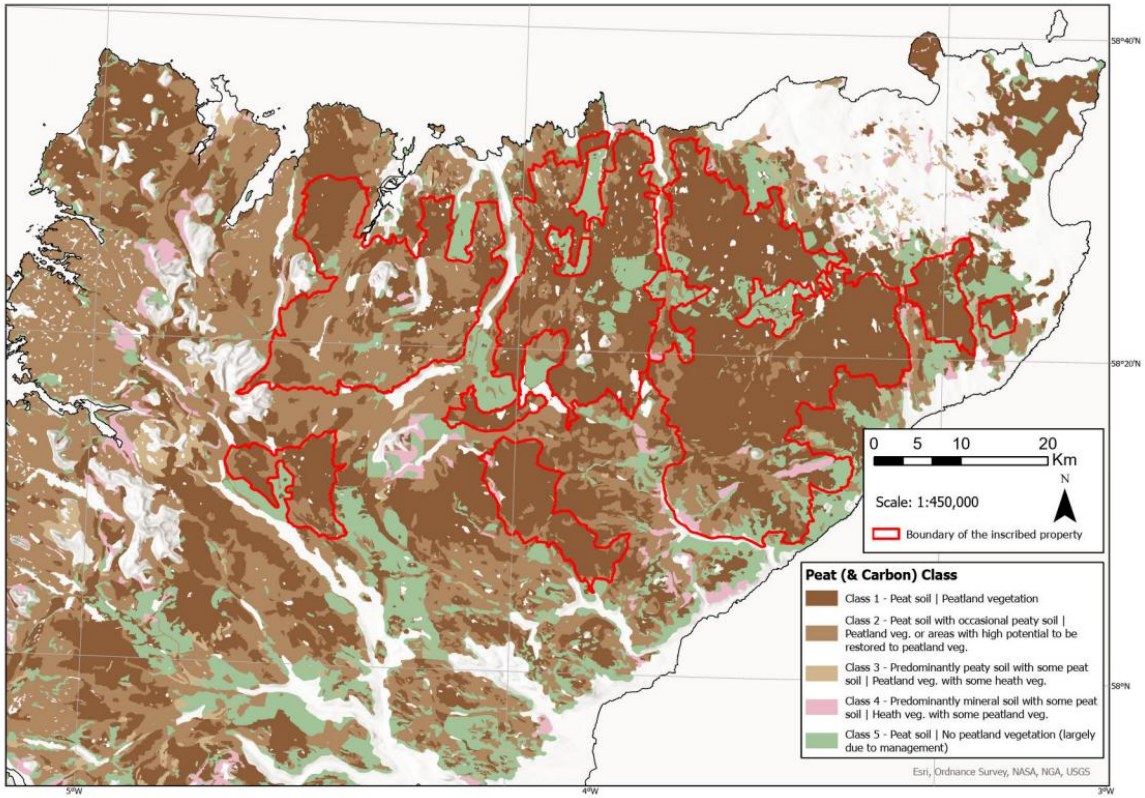


Figure 2.3 The WHS boundary in relation to the extent of peatlands in the wider Flow Country based on data from 2016[23]

[22] Source, Lindsay et al 1988
[23] Source, NatureScot

Site Boundary

The World Heritage Site comprises seven discrete but adjacent areas totalling approximately 190,000 ha as shown in Figure 2.4. In UNESCO's terminology, a Site such as this is referred to as a *serial* site and when 'the boundary' is discussed it refers to all of the boundaries around the seven areas.

The rationale for the boundaries is threefold:

1) that they contain areas of the blanket bog landscape in the most natural condition, the majority of which is contained within SSSIs and other designations, which provide the required protection;
2) that they include areas adjacent to the blanket bog landscape that are functionally important as part of the bog hydrological units and provide protection to the property's values. This includes areas that are otherwise surrounded by blanket bog and form part of the blanket bog landscape;
3) that they include areas under restoration, or with potential to be restored, as there is sufficient evidence to suggest that over time, they would be on a trajectory towards functional blanket bog.

This means that significant areas of mineral soil or in-bye land, such as in the straths, are excluded, as are any areas of population. In contrast, small areas of mineral soil, rocky outcrops or hills, tracks or roads, and areas of woodland on deep peat that are likely to be restored in the future, are included within the boundary area if they are completely enclosed by a blanket bog ecosystem.

Whilst not as big as the whole of the wider Flow Country, it is emphasised that the boundary area is easily sufficient to demonstrate OUV under criterion ix) containing all component parts (integrity) and demonstrating appropriate and effective protection and management.

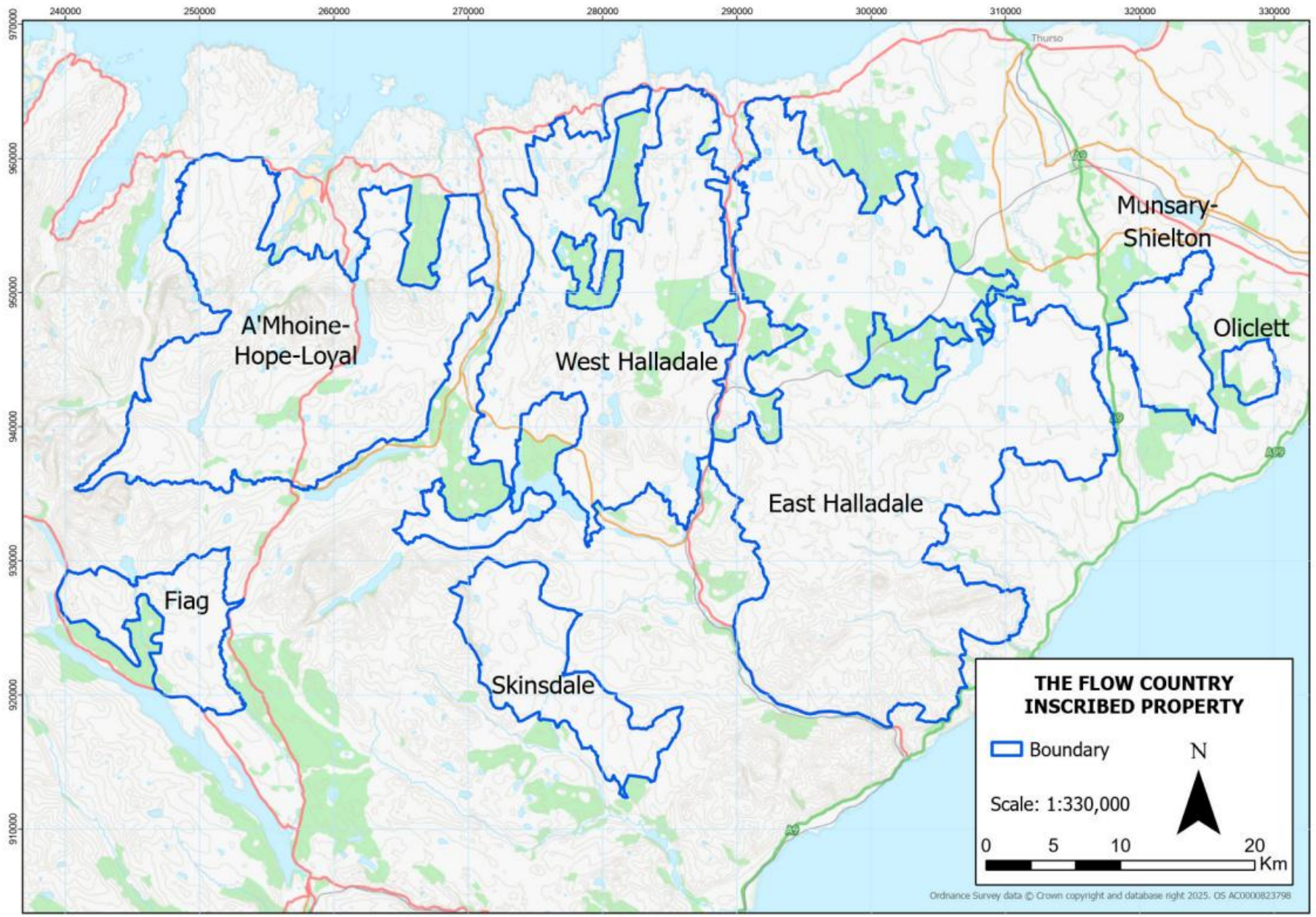


Figure 2.4 World Heritage Site boundary showing the seven constituent parts.

The seven areas have some differences in bog features, quality of naturalness, and biodiversity. These are summarised in the table below, and more detail is available in the Site Dossier by contacting the Site Coordination Team. The areas are also shown in more detail in Figs 2.5 to 2.7 on subsequent pages.

Table 2.1 Summary table of the seven areas that comprise this serial WHS. The brief descriptions of some sections inevitably overlap as the changes in the blanket bog landscape between east and west are gradual.

Area number	Name	Size (ha)	Brief description
001	A'Mhoine-Hope-Loyal	42,438	– Blanket mires are broken up by rocky outcrops, knolls and hills, including the rugged Ben Loyal. – A combination of mire types of restricted distribution is found, alongside wet and dry heath, dry grassland, native woodlands, montane habitats, but also swamp, flushes, lochs and streams. – Markedly oceanic in its vegetation composition.
002	Fiag	8,450	Similar characteristics to A'Mhoine-Hope-Loyal but with a more rolling landscape: – Blanket mires are interrupted by rocky outcrops, knolls and hills. – A combination of mire types is found in combination with pool systems, wet and dry heath, dry grassland, native woodlands, montane habitats, as well as swamps, flushes, lochs and streams. Ladder fens occur at a range of altitudes; watershed mires over gently rounded hill tops merge with valley-side mires on slopes, and saddle mires in the intervening hollows. – Markedly oceanic in its vegetation composition.
003	West Halladale	41,735	– A glaciated landscape broken by rocky ridges and knolls of the underlying Moine schist. – The irregular nature of the ground has led to the formation of a more complex mosaic of habitats with blanket mires (including quaking, valley side, and watershed mires), wet heath and pool systems in a landscape of rocky ridges. – Includes more westerly distributed bog specialists and some of the scarce *Sphagnum* species. – To the west, the vegetation also begins to show signs of a distinct oceanic influence.
004	Skinsdale	11,387	Some similar characteristics to both West Halladale and East Halladale: – A glaciated landscape with a wide range of mire types (especially watershed, valley side and terrace mires), and pool systems with water bodies through the range of sizes. This is all broken by knolls, basins and river valleys. – To the west, the vegetation also begins to show signs of a distinct oceanic influence.
005	East Halladale	75,536	– Characterised by gently sloping terrain underlain mostly by Old Red Sandstone, with a band of Moine schist along the western edge and granites and Moine granulites in the south. – Euoceanic, extremely humid, southern boreal and lower oroboreal climatic zone. – Gentle topography with a continuous blanket of peat Interrupted by small streams, lochs and only occasional rocky outcrops.

Area number	Name	Size (ha)	Brief description
			– The different types of blanket bog here reflect the varied topography. The range of mires includes - low-relief northern boreal blanket bog with well-defined patterns of parallel, long narrow pools, low ridges and extensive *Sphagnum* carpets; watershed mires with widely spaced, oval pools; and terraced blanket bogs at higher elevations with linear pools amongst ridges.
006	Munsary & Shielton	5,989	– Characterised by gently sloping terrain underlain mostly by Old Red Sandstone. – Hyperoceanic humid southern boreal and humid hemiboreal bioclimatic zone transitioning to euoceanic extremely humid southern boreal and lower oroboreal. – Blanket bog has formed on a gently undulating landscape between 50m and 150m above sea level. Mainly comprises valley side and watershed mires. The type of watershed mire here has numerous, deep, widely spaced pools, particularly noteworthy being found only in this part of Caithness.
007	Oliclett	1,491	– Characterised by gently sloping terrain underlain mostly by Old Red Sandstone. – Hyperoceanic, humid southern boreal, and humid hemiboreal bioclimatic zone. – Gentle topography. – These Eastern blanket mires tend to be dominated by valley side and watershed mires. There are also spur mires. This area is dominated by a large saddle mire in the area between Hill of Oliclett and Hill of Yarrows. – Some pool systems with long, narrow pools and hollows running parallel to the contours.

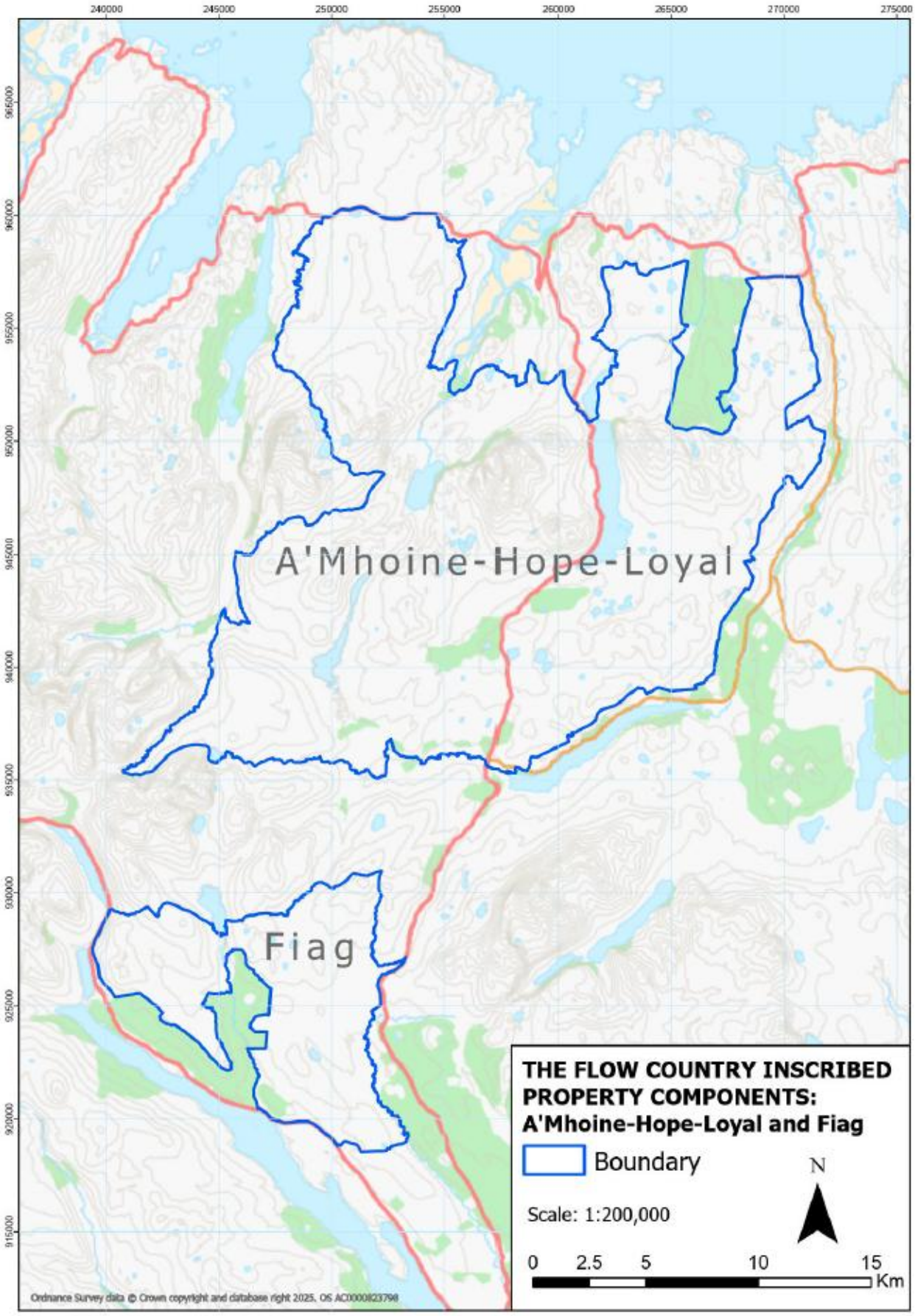


Figure 2.5 Site boundary – components 1 and 2

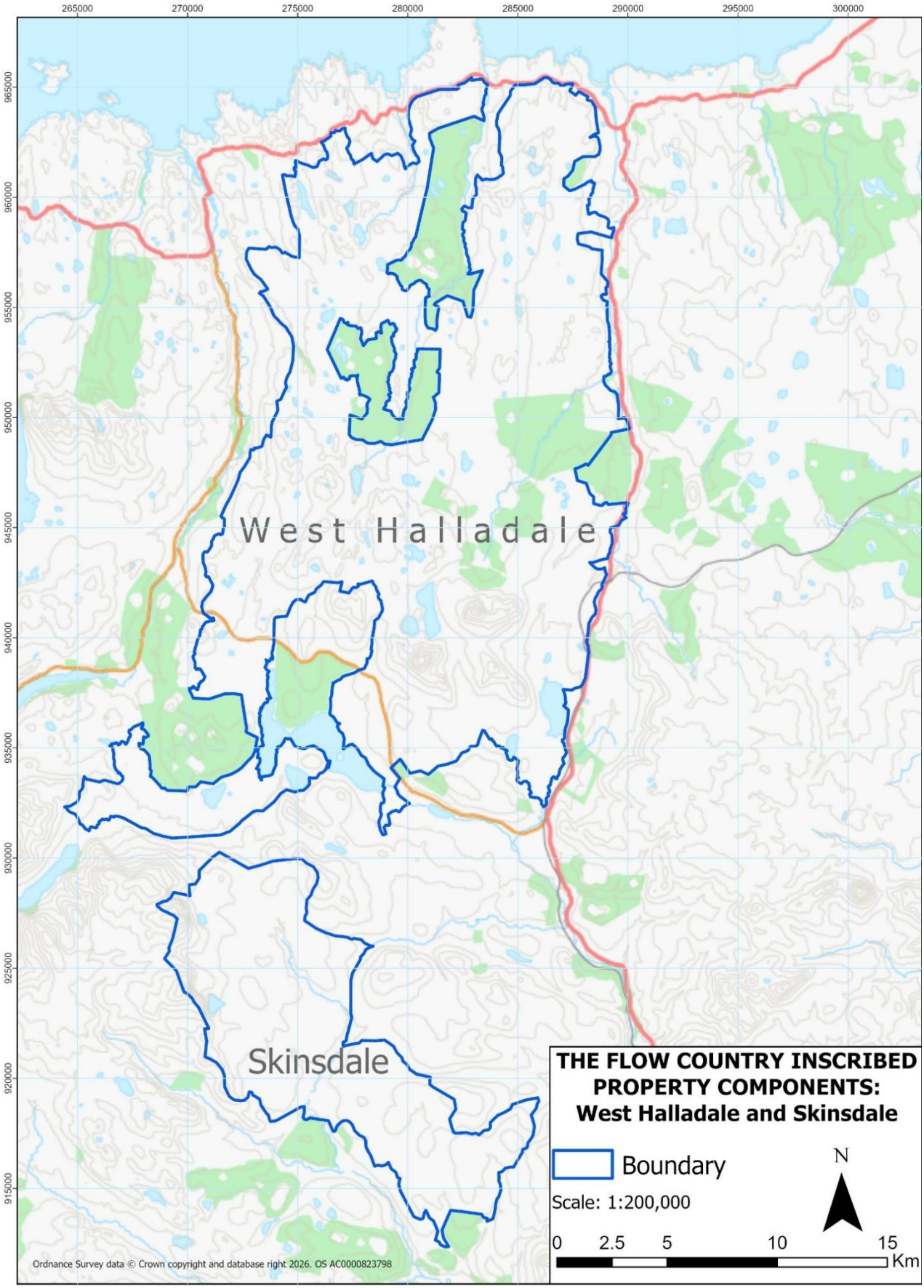


Figure 2.6 Site boundary – components 3 and 4

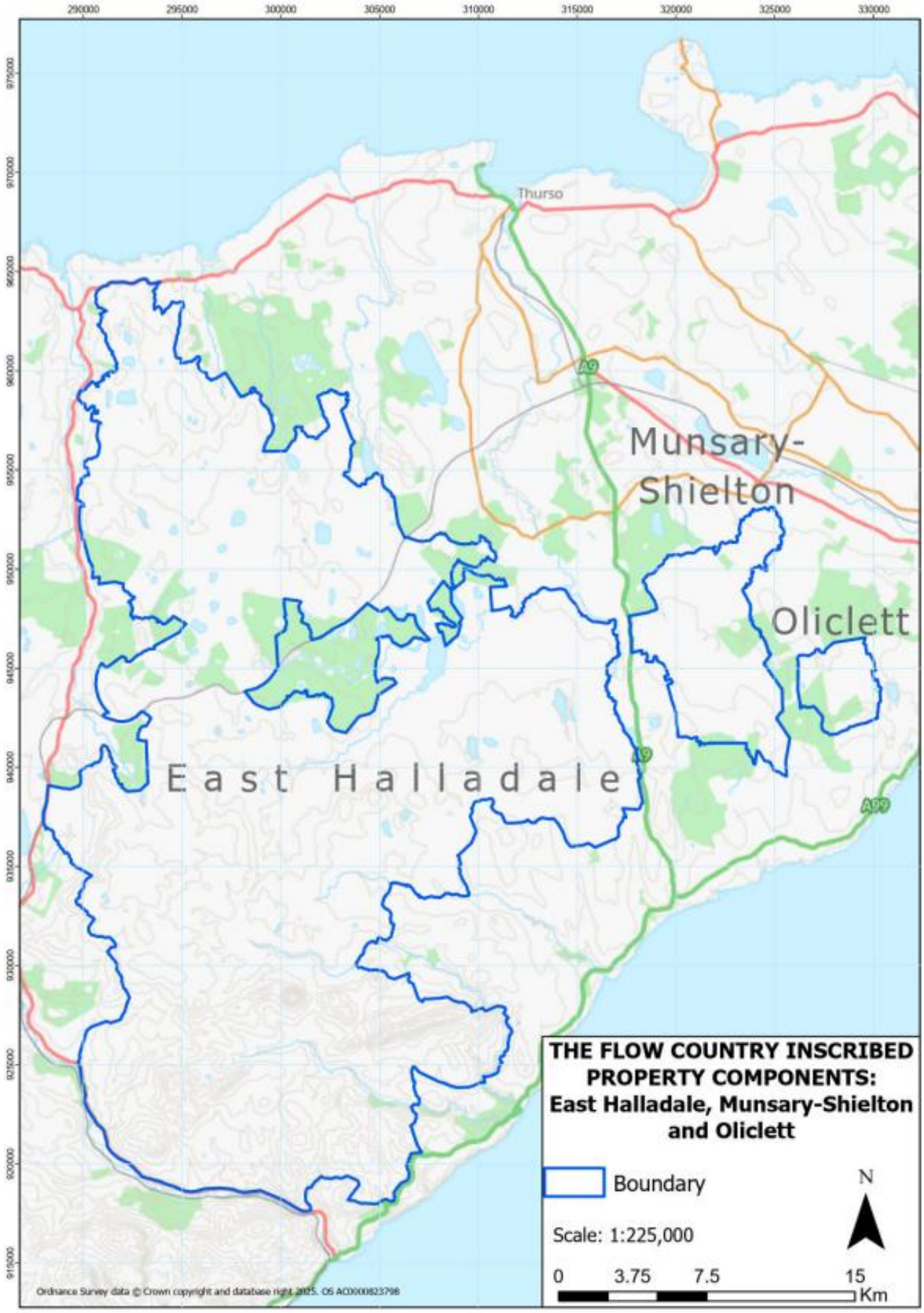


Figure 2.7 Site boundary – components 5, 6 and 7

In terms of land tenure, the Site is owned by many different landowners, primarily from private and non-governmental organisation (NGO) sectors, and either owner- or tenant-managed. This comprises a few individual owners of large estates, a conservation charity with c. 21,000 ha, and many smaller landowners, mainly crofters[24] who are either owner-occupiers or tenants. The issues that impact upon owners and tenants are set out in Chapters 5 and 6 and converted to policies in Chapter 7. At this stage it is sufficient to say that continuation of the close ongoing cooperation and dialogue between land managers and the agencies regarding Site management for the WHS is essential.

2.3 Description of the setting

UNESCO requires that areas around World Heritage Sites that support the Site and emphasise its importance are also protected. They refer to this area as the setting. This section describes the setting whereas Chapter 5 identifies how it is protected.

UNESCO states[25], in reference to protection of the property, that: "[protection] *should include the immediate setting of the nominated property, important views and other areas or attributes that are functionally important as a support to the property and its protection*."

They further state[26]: "*Where the setting may assist in the appreciation of the Outstanding Universal Value, but does not contribute to the Outstanding Universal Value, then it is desirable that it be incorporated in the buffer zone or otherwise protected*."

To add to this, the Scottish National Planning Framework NPF4 states – "*Development proposals affecting a World Heritage Site or its setting will only be supported where their Outstanding Universal Value is protected and preserved*." which means that for the first time in Scotland, the setting of all WHSs needs to be taken into account, and so defining what this means is important.

Definitions

The definition of setting for a World Heritage Site is first and foremost dependent on its role and importance in supporting OUV, which is explored fully in Chapter 3. In the context of the setting, the OUV of The Flow Country is focused on ecosystem processes (criterion ix) and not natural beauty (criterion vi). This means that there is no explicit link between OUV and important views, visual relationships or natural beauty. This is not to rule out any importance attributed to views in terms of appreciation of the OUV, but technically there is only a very marginal link to the OUV, as is set out below

The second factor to take into account is that the setting contributes towards the Site's **distinctive character**, helps our understanding of it, and links to cultural associations and perceptions of the Site.

So, in respect of the two factors, it is appropriate for the definition of setting to be considered in terms of the **functional** component – the parts of the wider setting that may, through their topography or other factors have a tangible impact on OUV – and the **experiential** component, in terms of how the Site is experienced and understood. This is set out in the following section, but the means by which the setting is protected are discussed in Chapter 5. Moreover, it is important to recognise that now the Site is inscribed on the World Heritage List, the status of the setting as it is at date of inscription acts as the baseline for the future and the potential for change.

In late 2023 and early 2024, the partnership commissioned a study to help define the setting, this was then updated post-inscription in July 2026[27]. This study forms the basis of our understanding of setting and how it will be considered in the future management of the Site.

[24] See Chapter 6 for more details about crofting
[25] Para 104 Operational Guidelines
[26] https://whc.unesco.org/en/preparing-world-heritage-nominations/ p33
[27] Flow-Country-WHS-setting-definition-report-final-report-as-revised-July-2026.pdf

Functional setting

The report states:

> *Functional aspects of setting are those which directly support the functioning of the Site and its protection. Functional setting is the primary consideration because the Site is nominated under natural criteria of OUV only, and the receptors of change are the attributes of OUV, directly.*
>
> *Functional setting means the environmental context in which change can affect the ecological health and resilience of the WHS. These effects could be positive or negative. It encompasses those areas outside the boundary that are needed to maintain the ecological functioning and integrity of the inscribed area, based on interactions between hydrological, biological and climatic processes.*
>
> *Functional setting identifies the parts of the WHS's surroundings which carry or embody the attributes of OUV ('receptors'). These are grouped into broad categories of receptor type: local climate and environmental conditions; water sources and hydrological units; ecosystems and communities of species; land use and land management practices. Data on these receptor types is analysed and considered against the types of change which could affect them, to determine how change in the setting may affect OUV.*

In essence the functional setting of The Flow Country includes any areas in the region from which an action can impact upon the OUV, and more specifically the Attributes (see Section 3.3). For example, impacts on water courses that flow into and through the blanket bog area from external catchments, or forestry outside of the Site which is leading to natural regeneration on the fringes of the blanket bog. It is impossible to predict much of this, but it is something that needs to be considered when assessing development proposals in the area outside of the boundary. Functional setting is not defined by a line on a map, more by an analysis of potential impact through activity nearby.

Experiential setting

This is more complex and the report states:

> *Experiential aspects of setting are those which relate to the way people experience, understand, or appreciate the Site. Experiential setting encompasses the parts of the WHS's surroundings where change may affect the presentation and appreciation of the WHS's qualities which derive from its OUV.*
>
> *Experiential setting is an important consideration, though secondary to functional, because the Site is not inscribed under cultural criteria. It is only relevant in the specific instances when the ways in which people appreciate the WHS derive directly from its attributes of OUV and the proposed change can affect that appreciation.*
>
> *The human experience of the WHS is through a series of qualities, which include the sensory characteristics and associations by which humans respond to the attributes of OUV. These qualities include the Site's scale and continuousness; the interaction with and appreciation of its species; transient aspects such as light, weather and seasonal variations; the variety of its landscape patterning; and its time-depth, cultural and historical associations.*
>
> *Existing land types which are shared or intersect with the WHS provide a proxy for understanding where these qualities can be experienced. These include land use/ landcover data and designations based on landscape and historic character types which relate to the peatland. The final step in defining experiential setting is considering where, and which groups, of people can experience the qualities that derive from OUV – such as local residents, visitors or travellers – and how change of various types could affect their experience and appreciation of OUV.*

In essence, the experiential setting concerns the quality of the cultural and sensory experience surrounding the nearly 190,000 ha. of peatland, in relation to any impact on the OUV. It is not easy to define or grasp, and work to expand on what this means will continue in collaboration with the Highland Council.

Setting summary

The setting is complex, as evidenced at many WHSs elsewhere in the UK. The Flow Country World Heritage Site Setting Guidance has been developed to help guide and support how this Study should be approached. The Study and guidance will give the Site, developers, planning authorities and other stakeholders a better understand how the setting, and hence the Site, may be protected in the long term, and how developments respond to the mention of setting in NPF4. But what is clear is that this is not about a line on a map, rather developments will need to be considered against the functional and experiential criteria on a case-by-case basis, and where appropriate. Furthermore, the extent to which this will be applicable in law will depend on how it is incorporated into the Highland Council's next Local Development Plan.

2.4 Prehistory and history of the Flow Country: Humans and the peatlands

The Site Dossier has a significant section about the human history of the area over the 9,000 years or more during which the blanket bog has been forming. This is very relevant contextual information, particularly as UNESCO ask for a summary of "*significant events in history or pre-history that have affected the evolution of the property and give an account of its interaction with humankind*[18]".

For this Plan, it is useful to summarise the timeline (Table 2.2) written into the Dossier, as this tells the story of the development of the area and how the location of the blanket bogs, their extent and condition, have affected and been affected by people throughout their development. It is important to recognise that these cultural and historic values are supportive and illustrative of the ecosystem and biodiversity values rather than additional 'values' in their own right.

Table 2.2 Summary of major historical and pre-historical timescales relating to the Site.

Theme	**Time period and context**
The Wooded Landscape, Foraging to Farming and Advancing Bogs (Mesolithic to Neolithic)	Post-glacial woodland growth and decline during early Holocene, with major decline some 4-5,000 years ago. Major bog growth throughout this period.
Circles within Circles within Ovals (Bronze Age & Iron Age)	Era of roundhouses and brochs, from c.3,500 to c. 2,500 years ago at the end of the Bronze age.
The hidden people and invisible invaders (Norse)	4th to 8th centuries AD the area was home to the Picts, followed by the Norse in the 8th-10th centuries.
Transhumance	Around the 16th-18th centuries, and possibly long before then, people would spend the summer with their livestock on the bogs to take advantage of the more lush vegetation.
Emptying of the straths: the Highland Clearances	During the 18th and 19th century, with a particular focus on 1790-1850, leading to people being cleared off the land to accommodate a significant increase in the number of sheep being grazed there.
Draining the Land and Pasture Improvement	Post Clearances expansion of drained land on to the edges of the peatlands adjoining the straths.
Changing Values: from Sheep to Grouse & Deer	The decline in sheep and rise of management for game (particularly deer and fish) began in the 19th Century and has continued since.
Planting and Ploughing: afforestation	Post-WW2 introduction of ploughing for forestry and in particular Sitka spruce and lodgepole pine.
Forestry boom	Tax incentives in the 1980s led to wide scale afforestation on deep peat.
Fuel from the Flows	Domestic peat cutting has been done on a small scale for hundreds of years, but commercial cutting has stopped.
The growth of peatland conservation	Conservation efforts started to gather momentum in the 1990s and continue apace.

Chapter 3. Justification for World Heritage Status

For inclusion on the World Heritage List, Sites must demonstrate Outstanding Universal Value (OUV). This is defined through how a Site meets one or more of UNESCO's ten criteria, and, through a global comparative analysis assessing whether it is exceptional in a global context. Furthermore, it must meet conditions of integrity and must have an adequate protection and management system to ensure it is safeguarded into the future. A summary of these aspects follows, and further information can be found in the Operational Guidelines for the Implementation of the World Heritage Convention, on the UNESCO World Heritage Centre website[6].

3.1 Introduction: justifying Outstanding Universal Value

OUV is introduced in Chapter 1, and as set out there, for natural Sites it is comprised of three pillars: criteria, integrity, and protection and management. An additional factor – the global comparative analysis – is also important for justifying OUV, and that is also described in this section.

Criteria

UNESCO identify ten criteria for World Heritage Sites – four of which, criteria vii) - x), relate to natural heritage. The Flow Country has been inscribed under criterion ix);

> (ix) *to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals*

A summary of the attributes underpinning how the Site meets criterion (ix) is in Section 3.3 below, with more details set out in the Site Dossier.

Comparative analysis

Before The Flow Country, no World Heritage Site has been inscribed primarily for peatlands. This fact makes The Flow Country inscription even more important globally, but the omission of peatlands from the World Heritage List did not mean that World Heritage status for The Flow Country was guaranteed, and the proposal still had to meet the criterion set out above.

To achieve inscription onto the List, a natural Site must demonstrate not only that it has outstanding natural values but must also show that it is exceptional on a global scale; "*A comparative analysis of the property in relation to similar properties ... shall also be provided. The comparative analysis shall explain the importance of the nominated property in its national and international context*[18].

The Comparative Analysis for the Flow Country World Heritage Site concludes[28]:

> *"Based on current literature, and visual assessments using satellite imagery, The Flow Country represents one of the most important blanket bog landscape areas in the world. To date, no WHS has a comparable blanket bog landscape to those found in The Flow Country. Although several blanket bog habitats are present on the tentative list, they are not comparable with The Flow Country in extent and quality (e.g. The Céide Fields and North West Mayo Boglands) nor do they contain this type of peatland as the main characteristic (e.g. The Great Vasyugan Mire).*
>
> *Regarding the total extent of blanket bog landscape, The Flow Country represents the most important continuous blanket bog landscape globally; however, it is important to highlight that not all this continuous peatland is currently functional, and restoration actions are needed in order to recover the total functional area. It should also be noted that blanket bog landscapes reported as being larger than The Flow Country are usually fragmented and their geomorphological characteristics (such as peat depth and pool systems) are less diverse, making The Flow Country a remarkably unique blanket bog landscape. "*

To add further context, the comparison of natural sites relies on the availability of comparable data, but blanket bog landscapes often occupy areas of low population and present logistical challenges to access and have consequently gone under-studied at a global level. The more recent realisation of the importance of these ecosystems has gone some way to rectifying this bias but many areas remain where reliable data is scarce. Therefore, alongside a review of published sources of information on blanket bog globally, the interpretation of remote sensing data has been heavily utilised in The Flow Country comparative study to provide information on the less studied regions. In this context it has also been important to ensure that comparison was made using metrics which are as robust as possible.

The summary of this is that to the best of all available knowledge, and now agreed by IUCN and UNESCO, The Flow Country property represents an outstanding example of blanket bog at a global scale. Whilst there are other, larger areas of peatland, none has the quality, continuity, depth of peat and consistent climatic regime that The Flow County does.

The IUCN response to the nomination under criterion ix (including comparative analysis) was:
In conclusion, IUCN considers that the nominated property demonstrates global significance under criterion (ix). The nomination is exemplary in articulating attributes of OUV under this criterion[29].

Integrity

A Site must also meet criteria of integrity:

> *"Integrity is a measure of the wholeness and intactness of the natural and/or cultural heritage and its attributes. Examining the conditions of integrity therefore requires assessing the extent to which the property:*
>
> *a) includes all elements necessary to express its Outstanding Universal Value*
> *b) is of adequate size to ensure the complete representation of the features and processes which convey the property's significance*
> *c) suffers from adverse effects of development and/or neglect.*
>
> *This should be presented in a statement of integrity*"

UNESCO identifies that "*it is recognized that no area is totally pristine and that all natural areas are in a dynamic state, and to some extent involve contact with people*." The Statement of Integrity for The Flow Country follows in section 3.2 the Statement of Outstanding Universal Value (SOUV).

[28] Chico (2022)
[29] https://whc.unesco.org/document/206980

Protection and management

UNESCO states that the "*Protection and management of World Heritage properties should ensure that the outstanding universal value, the conditions of integrity and/or authenticity at the time of inscription are maintained or enhanced in the future*.". Protection and management of the Site is set out in detail Chapter 5, with a short paragraph in the SOUV.

The IUCN response to Integrity, Protection and Management of the WHS in the Nomination Dossier was:
In conclusion, IUCN considers that the proposed OUV of the nominated property would be legally protected across the entire nominated area. [… and …] that the protection status of the nominated property meets the requirements of the Operational Guidelines.[14]

UNESCO Evaluation and Criterion x

We have included above two of the conclusions from IUCN – UNESCO's technical advisory body for World Heritage – as part of their evaluation process for the Site. The full details can be seen at the footnote link below. The key outcome from the evaluation process was that whilst the nomination was submitted for Criterion ix and x, IUCN did **not** consider that the Site met Criterion x, but **only ix**. Whilst this makes no difference to inscription, it subtly changes the way the Site is managed and protected, changes for which are represented in this version of the Management Plan.

3.2 Statement of Outstanding Universal Value (SOUV)

The Statement of Outstanding Universal Value is the defining short description of the inscribed Site. The version agreed by IUCN and UNESCO is below.

Statement of Outstanding Universal Value

Brief synthesis

The Flow Country is considered the most outstanding example of a blanket bog ecosystem in the world. This blanket peat and its intricate network of pools, hummocks and ridges stretches across nearly 190,000 ha of the northern mainland Scotland, with the boundary comprising seven separate but proximal areas. The peat has been accumulating for the past 9,000 years and displays a remarkable range of features resulting from the climatic, altitudinal, geological and geomorphological gradients found across the region. Peatlands play an important role in storing carbon, and The Flow Country has an extensive record of peatland accumulation, with peat thicknesses which reach over eight metres. Ongoing peat-forming ecological processes continue to sequester carbon on a very large scale.

The Flow Country blanket bog also provides a diversity of habitats, combined with the patchwork of connected farming and coastal landscape elements within the wider setting. The area supports a distinctive assemblage of birds, with a combination of arctic-alpine and temperate and continental species.

Protection for The Flow Country is provided through international and national designations, and national, and local planning law and policy, and there is scope for future expansion of the property through restoration of adjacent degraded blanket bog. The area is also considered to be the type-locality for description of blanket bog and so represents a significant research and educational resource.

Criterion (ix)

Since the glaciers receded from Scotland, climatic conditions in combination with the underlying geology, the resultant topography, and the biogeography have led to the formation of a vast and diverse blanket bog landscape that stretches across the north of Scotland. The persistent precipitation-fed waterlogging of the soil has led to an expanse of peat bog that blankets the landscape, including hills, slopes and hollows, and forming a globally rare and significant peatland ecosystem and associated species assemblage. The property represents the most extensive, near-continuous, high quality and near-natural blanket bog landscape found globally. The active processes of blanket bog formation have continued for 9,000 years, and the diversity of blanket bog features is not found anywhere else on Earth.

The blanket bog also provides a highly significant record of its formation, preserved as pollen and plant fossils, and telling a story of its past flora, fauna, palaeoecology and human influence. This is important for the understanding of the future evolution of this and other blanket bogs globally. Moreover, the processes of blanket bog formation provide a significant example of carbon sequestration on a large scale.

The property holds 34 peat forming species of Sphagnum moss, which are themselves home to complex assemblages of unique microorganisms adapted to survive in the low oxygen, cold temperature, acidity, and oligotrophic conditions of bog systems, adding to the biodiversity value of peatland habitats, and which also provide refuge for many breeding bird species. The property hosts a particular biodiversity assembly with specific communities composed of Atlantic, boreal and arctic taxa.

Integrity

The Flow Country property comprises seven discrete but adjacent areas totalling nearly 190,000 ha, which encompasses a large expanse of actively accumulating blanket bog ecosystem. The overwhelming majority of the blanket bog within the property boundary is in near-natural condition. The remainder includes areas of blanket bog that are undergoing restoration, and areas that are expected to be restored in the near future.

The property is of sufficient size to contain all of the elements of Outstanding Universal Value needed to demonstrate the ecological and biological processes, and the biodiversity that comprises this globally significant ecosystem. These include the blanket bog itself, the wider peatland landscape complex in which it lies and the finer elements, including pool systems, diverse surface patterning, fens, and the range of flora and fauna that all

of these systems support. The climatic, altitudinal, geological and geomorphological gradients that occur across the Flow Country all contribute to ensuring that the variety of features that make up blanket bogs are represented. Furthermore, the boundaries of the property are largely defined on the basis of the hydrological elements that comprise the blanket bog and therefore ensure ecosystem integrity and coherence.

Areas of the property have suffered from poor historical management decisions such as drainage and woodland creation, but the boundary has been chosen to include only those areas of deep peat which are in good condition or have the ability to return to a near-natural state within the next 10-25 years. It is expected that in time, it will be possible to integrate some of the bog of the wider Flow Country into the property. The construction of wind turbines represents a more recent threat to the property through supporting infrastructure and through negative impacts on the avian fauna, which constitutes an integral part of the blanket bog ecosystem.

Protection and Management Requirements

The property is legally protected in its entirety based on its Outstanding Universal Value. Around 73 percent of the area within the property boundary has the highest level of statutory protection that domestic law can provide: SSSIs, SACs (for habitats), SPAs (for birds) and a Ramsar Site (for wetlands). These laws provide specific protection for the elements of Outstanding Universal Value as set out in the property's attributes, notably including the processes for the maintenance and formation of blanket bog, and the associated flora and fauna.

Further to statutory environmental protection, peatlands, particularly those containing deep peat greater than 50 centimetres, are protected through the planning system for Scotland, both at national and local level. There are planning policies at national level in relation to both World Heritage properties and areas of peatland that afford effective protection from development proposals that might impact upon Outstanding Universal Value. Moreover, where the boundary is not coincident with existing environmental designations, protection will be ensured by national and local planning policy, other planning measures and other regulatory regimes.

The property has no buffer zone. However, areas important for the protection of Outstanding Universal Value outside of the boundary are protected through a combination of national and local planning policy, and the wider protection of features afforded by the existing European-level environmental designations. In addition, the integrity of the property is ensured thanks to its large size and the inclusion of areas that provide a buffering function within the property boundaries.

Management of the property's Outstanding Universal Value is guided by a single clear Management Plan, developed by the Flow Country Partnership in collaboration with key stakeholders such as landowners and managers, government agencies, local communities and scientific experts. Management requirements include bog restoration, monitoring of and responding to any potential developments in the vicinity of the property, including the construction of wind farms and other infrastructure. Potential threats include woodland restocking and regeneration of non-native conifers, water management and drainage, intensive agriculture, wind farms, inappropriate deer management, burning and climate change. A key requirement for the management of this property lies in continued strong and adequately resourced coordination and partnership arrangements focused on the World Heritage property and its Outstanding Universal Value

3.3 Attributes of OUV

Attributes, sometimes called 'features' for natural Sites, provide detail about the criteria for Outstanding Universal Value at a more granular level. In essence, they break down the reasons why the area is considered to be worthy of World Heritage Site inscription into a straightforward list. As outlined within the Site Dossier, the Site is inscribed for its blanket bog habitats but is punctuated by associated habitats and communities that are intimately associated with the blanket bog, and which are all important elements of its value as a blanket bog ecosystem. The attributes for The Flow Country are set out in Table 3.1.

Table 3.1 List and description of World Heritage Site Attributes

Attribute	**Description**
Criterion ix.- outstanding example representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals	
a) most extensive near continuous example of natural actively accumulating blanket bog ecosystem found globally	Persistent rain fed wetness and low rates of evaporation across the Flow Country leads to widespread, year-round waterlogged ground conditions which are ideal for the growth and preservation of peat forming plants. This ongoing process (paludification) began around 9,000 years ago and is key in the formation of blanket bog. Unlike other bog types, which are confined by topography, this allows blanket bog to mantle entire landscapes. The Flow Country is one of only a few locations globally where conditions exist that are conducive to blanket bog formation, and combines a quality, extent and connectivity of this habitat exceeding that of any other known blanket bog.
b) climatic and topographic gradients, and geological diversity: bog macroform diversity	The scale of the site, alongside the gradients in climate and topography, and the diversity of the underlying geology, provide the setting for subtle variations in processes which result in a wide diversity in the character of the blanket bog. These factors control the development of complex systems of hummocks, moss lawns, hollows and pools, and the associated plant species, which produce surface patterning that has been classified into 15 site-types. No other blanket bog in the world contains, or is reported to contain, such a diverse collection of surface patterning within a single area.
c) archive it stores (4th dimension)	Delving deeper, the peat, which has been forming for over 9,000 years, reaches thicknesses of over 8 m, providing an exceptional archive and a 4th dimension to the Flow Country blanket bog. The processes responsible for the development of the blanket bog system and the ecosystems it supports can be scrutinised back through time across the vast area it covers using pollen records; plant fossils (e.g. hazelnuts, pine cones, pine stumps); lake sediment records (midge and diatom (alga) remains); tephra (ash) layers blown south from Icelandic volcanoes; charcoal (indicating in situ burning).
d) natural laboratory – ongoing scientific and educational use	The exceptional nature of the Flow Country makes it the 'type site' for blanket bog study and it continues to be used as a 'test bed' for peatland research globally. The diversity of features related to altitudinal and climatic gradients across the region and the depth of archive provides significant scope for research. Furthermore, the breadth of existing studies provides a fantastic foundation for future research.
e) carbon sequestration and storage	Globally peatlands are the largest natural terrestrial carbon store. Covering only 3% of the world's land area, they hold nearly 30% of all the carbon stored on land. In blanket bog, year-round waterlogged conditions slow the process of plant decomposition such that the dead plants accumulate to form peat and thereby sequester carbon from the atmosphere. Over thousands of years this plant material builds up and becomes several metres thick creating a valuable carbon store. The Flow Country provides a superb example of ongoing sequestration, alongside carbon storage demonstrated by peat thicknesses which can reach over 8 metres.
f) water filtration and the impact on the water quality of	The catchments draining the Flow Country sustain exceptional water quality, resulting from the natural filtration of rainwater as it slowly seeps through these vast peatlands. The superb water quality is critically important in sustaining globally important populations of the

Attribute	Description
associated riverine habitats	freshwater pearl mussel in rivers which drain from The Flow Country. The European eel (classed by the IUCN as Critically Endangered) is also recorded from these catchments. Furthermore, the rivers of the Flow Country maintain strong populations of Atlantic salmon which is in global decline.

Additional supporting values that relate to the biodiversity of the Site but not considered globally significant so not included under the criteria of OUV. These features combined with the attributes of OUV help to make the property especially distinctive.

a) species associations	The diverse range of habitats that The Flow Country contains supports an exceptional and specialised blanket bog biodiversity and holds biological associations unlike any other blanket bog found globally. This is a consequence of the overlapping distributions of species typical of both arctic and temperate climatic zones and is further influenced by altitudinal and climatic gradients and the geological diversity found across the site. Furthermore, the scale and connectivity of the site provides genetic resilience to species it contains.
b) birds	The diversity of environments within the blanket bog of The Flow Country, and the patchwork of connected landscape elements within the wider setting (farmland, coastal, etc.), supports a distinctively special assemblage of birds. The precise combination of species, with arctic-alpine and temperate and continental elements is not found anywhere else in the world and includes red-throated diver, black-throated diver, common scoter, Eurasian wigeon, golden plover, Eurasian greenshank, dunlin, wood sandpiper, golden eagle, merlin, hen harrier and short-eared owl.
c) plants	The floristic composition of the Flow Country blanket bogs, and associated wet heath, is not found anywhere else globally, and represents a highly Atlantic influence on plant distribution and development. Key plants of importance are dwarf birch, alpine bearberry, bogbean, bog hairgrass, water lobelia, bog orchid, marsh saxifrage and at least 29 species of *Sphagnum* (over 10% of global *Sphagnum* flora).
d) genetic diversity	The Flow Country occupies a position at the western extreme of the Eurasian landmass. As such it is a haven of locally adapted genetic diversity. Many species here are isolated from their continental relatives, which means that local lineages have developed. Whilst small, isolated populations frequently suffer from inbreeding depression, the large size of the Flow Country means that this not a significant issue here. Furthermore, many species operate as metapopulations: groups of smaller populations between which individuals can move. Not only does this mean that genes can flow between populations, it also means that individuals can recolonise sites in the event of short-term localised extinction, as has been demonstrated with newts. Given models that suggest droughts will increase in both frequency and intensity in the north of Scotland, the large number of waterbodies in the Flow Country will greatly reduce the likelihood of population loss. This makes it a valuable refuge for wildlife of many species at both a population and a genetic level.

3.4 State of conservation

As support to the justification UNESCO required, it was and is important to assess the current biological condition of the area in the form of a baseline. Now that the Site is inscribed this sets the marker against which any future actual or proposed change is assessed and so is critical for assessing potential impact of developments, but assessing the condition of the WHS is complex due to the vast size and relative isolation of much of the blanket bog.

Around 73% of The Flow Country WHS is notified as a series of Sites of Special Scientific Interest (SSSI) under Nature Conservation (Scotland) Act 2004, and which underpin the Caithness and Sutherland Peatlands Special Area of Conservation (SAC) and Special Protection Area (SPA), originally under the EU Habitats and Birds Directives respectively, and now under The Conservation of Habitats and Species Regulations 2017 (as amended). The Caithness and Sutherland Peatlands are also listed as a single Site under the International Ramsar Convention on Wetlands, to which the UK is a contracting party. There is an obligation to regularly monitor the qualifying features of SACs and SPAs and Ramsar sites, undertaken through a system of site condition monitoring for the underpinning SSSIs, to determine their condition, enabling the reporting required by Scottish Government and the Bern Convention[30].

Blanket bog is the most extensive feature of the Caithness and Sutherland Peatlands SAC and Ramsar Site. Wet heath also forms large parts of the SAC. Two other terrestrial SAC features - 'very wet mires often identified by an unstable quaking surface', and 'depressions on peat substrates' – are found as small areas embedded within the blanket bog and wet heath. All four habitats form an intricate mosaic across the SAC requiring that they are managed together. The blanket bog and depressions on peat substrates habitats are so intimately related that they are monitored together as one feature, and both are included in the term ‘blanket bog’ in the rest of this section. Box 3.1 below summarises the Caithness and Sutherland Peatlands SAC site condition as of 2022.

[30] The Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) was adopted in Bern, Switzerland in 1979, and came into force in 1982. For more details go to https://jncc.gov.uk/our-work/bern-convention/

Box 3.1 Condition summary based on the best information as of 2022

Summary of the condition of the Site in 2022

Based on the best information as of summer 2022, a majority of the features of the Caithness and Sutherland Peatlands SAC, where it overlaps with the WHS, are currently in favourable condition. Those features are - very wet mires often identified by an unstable quaking surface, acid peat-stained lakes and ponds, marsh saxifrage, and, clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels.

Although the blanket bog and wet heath features of the SAC were both assessed in 2017 as being in 'Unfavourable – no change' condition, this was mainly because, although much of the site was showing the benefits of good management, some parts had been damaged by fire and trampling by red deer. Since 2017, there have been notable improvements in the management of the SAC, particularly in places where pressure from deer trampling had previously been a concern.

By October 2021, more than 90% of the blanket bog and wet heath in the SAC was either in favourable condition or under management intended to bring the habitat back into favourable condition. The pressures in the remaining parts of the SAC include burning, deer trampling, drainage and other land disturbance, are being monitored and where possible, interventions are in place to start to move the condition forward to being in more favourable condition.

In addition to the regular habitat monitoring, the SAC is monitored for any fire impact using Sentinel satellite imagery backed up with ground-truthing. By October 2021, there had been fire damage to 6% of the blanket bog and 20% of the wet heath in the SAC since the most recent scheduled monitoring. However, the number of uncontrolled fires has been decreasing in recent years, with none in 2021, and most of the land previously damaged by burning is under management that aims to prevent future fires.

The majority of the bird features of Caithness and Sutherland Peatlands SPA and Ramsar Site were monitored, most recently, in the six years running up to 2018, the others between 2004 -2009. Ten of the twelve qualifying SPA bird species and the one Ramsar bird feature were all in 'favourable condition'. This analysis has enabled us to identify the parts of the SAC where we need to focus efforts to encourage land management that should bring all features into favourable condition before the next monitoring cycle. The main pressures that need to be addressed are burning, trampling by red deer and drainage. Existing initiatives such as the Muirburn Code, Agri-Environment schemes, Deer Management Groups and the Peatland ACTION scheme should help address these pressures both within the SAC/SPA and in the parts of the WHS that lie outwith the SAC/SPA. In addition, the WHS bid process itself has raised the profile of the habitats and species of the Flow Country and is encouraging land managers to work in partnership towards their good management.

PART 2

Chapter 4. International, National and Regional Policy Context

World Heritage designation is a complex process in the UK, especially so where Sites lie within one of the devolved nations. There is currently no primary legislation for World Heritage in UK law, with protection instead relying on existing statutory designations, a highly developed planning system, and the strength of the Convention.

Reference should be made to Chapter 5 that provides a summary of the National Planning Framework 4 and Chapter 6 that focuses on the details of protection for the WHS, but first it is important to recognise the geographic and demographic context in which the Site sits. For example, an area that is under pressure from large or growing populations, and with multiple vehicular access routes will be harder to protect than one which is served by only a few communities and roads such as with The Flow Country.

This chapter first very briefly sets out the international context in terms of peatlands, climate change and biodiversity. This is followed by the UK national context that relates to the Site and then goes into more depth in terms of Scottish devolved national policy. This is then followed by a more granular look at the Highlands, specifically Caithness and Sutherland.

By way of reminder, when the wider area known as the Flow Country is referred to, it relates to the sub-region covering much of Caithness and Sutherland and is written as 'the Flow Country'. When the Flow Country World Heritage Site is referred to, it is written as 'The Flow Country' (with a capitalised 'The') and means the area within the Site boundary.

4.1 International policy context

There is no doubt now that human-induced climate change is very real and presents an existential threat to people and the fate of other species on the planet. CO_2 and other greenhouse gases continue to rise and replacement technologies for energy and fuel remain slow in becoming mainstream. The evidence of increased temperatures, extreme weather events and the resulting natural disasters are clear to see, with the Global South being disproportionately affected.

Biodiversity has also been degraded and depleted globally, with areas of 'potential for exploitation' such as forests, peatlands and wetlands being affected more than others. The changing climate is also having an impact on nature, exposing very sensitive ecosystems to extreme weather events, forcing changes in species distribution patterns and leading, in some cases, to genetic isolation.

The problems are highly significant, manifold and interconnected. Many countries globally are starting to make changes that will, in time, lead to improvements, but whether it is too little too late it is not yet possible to say. This represents the international context in which The Flow Country's World Heritage Status sits, and its role may be important.

Of peatlands, an IUCN report[31] states:

- *Peatlands are the largest natural terrestrial carbon store. They store more carbon than all other vegetation types in the world combined.*
- *Damaged peatlands are a major source of greenhouse gas emissions, responsible for almost 5% of global anthropogenic CO_2 emissions. Peatland restoration can reduce emissions significantly.*

IUCN also notes that the peatlands cover nearly 3% of the Earth's land surface, but that in some areas they are up to 80% degraded from drainage, cultivation for agriculture, burning and mining for fuel. The report also states, and is, supported by other studies, that it is clear that there is also a lack of awareness of the benefits of peatlands:

> *"Peatlands provide indispensable Nature-based Solutions for adapting to and mitigating the effects of climate change, including regulating water flows, minimising the risk of flooding and drought, and preventing seawater intrusion. Wet peatlands lower ambient temperatures in surrounding areas, providing refuge from extreme heat, and are less likely to burn during wildfires. This helps to preserve air quality."*

It is therefore clear that globally, in terms of both biodiversity and climate change mitigation, peatlands are of immense international importance, and particularly those areas that are least degraded and form large continuous areas. The Flow Country fits into both of these categories, and although there has been variable disturbance across the WHS Site, areas of the blanket bog where damage has occurred have demonstrated remarkable resilience with active peat formation proven to return quickly once restoration measures are taken.

Of equal importance to the value of the site in directly addressing climate change impacts as a carbon store and water regulator, is the potential for the area, as an inscribed World Heritage Site, to be a global beacon for raising awareness about peatlands and their importance to the world. Even locally, in Scotland, the full benefits of peatlands are not widely understood, but this is changing alongside the initiation of national climate and biodiversity emergency measures. Having the world's first peatland World Heritage Site, will allow The Flow Country management team to reach out to those involved in the management of other blanket bog ecosystems globally, to share learning concerning restoration and raising awareness, and to generally benefit and improve peatlands globally.

4.2 UK National Policy and Devolved matters

Since 1999, Scotland has had a devolved government whereby a range of powers and legislation lie within the remit of the Scottish Government. The UK government retains power and responsibility over certain pieces of legislation some of which are particularly relevant to the World Heritage bid. Devolution of power in certain areas, including healthcare and environment, has enabled the Scottish parliament to make decisions and bring forward laws that are more tailored to the lives of people in Scotland, and recognises their wishes to have more say over matters that affect them.

Under the devolution settlement, the environment is one of the areas where a wide range of powers were passed to the Scottish Parliament and Government. The World Heritage Convention oversight has, however, not been devolved. The United Kingdom government works closely with UNESCO on many issues including World Heritage. The UK Government's Department for Digital, Culture, Media and Sport (DCMS) is the lead government department on World Heritage issues and is responsible for ensuring that the UK as a State Party fulfils its obligations under the World Heritage Convention[32]. DCMS liaises with the devolved administrations on the nomination, conservation and protection of UK World Heritage Sites and on matters of policy as appropriate. The Wildlife and Natural Environment (Scotland) Act 2011 [33] and the Nature Conservation (Scotland) Act 2004[34] are the Scottish Acts of Parliament that have the most relevance to the protection of the Site. Details can be

[31] https://www.iucn.org/resources/issues-briefs/peatlands-and-climate-change
[32] https://historicengland.org.uk/advice/planning/world-heritage/protection-management/
[33] https://www.legislation.gov.uk/asp/2011/6/contents/enacted
[34] https://www.legislation.gov.uk/asp/2004/6/contents

accessed in full online, but their expression of the legislation in terms of the World Heritage Site is set out, in relation to protective designations in Chapter 5, and in the Policy Framework in Chapter 7.

Whilst the legislative situation related to the devolved administration is complex, it is clear that environmental protection is taken very seriously by the Scottish and UK administrations, as are their duties to fulfil its obligations under the World Heritage Convention. Furthermore, as representative of the State Party, DCMS is committed to supporting World Heritage anywhere within the United Kingdom and maintaining a positive dialogue with the devolved administrations and their agencies.

4.3 Scottish policy context

The inscription of Scotland's first wholly natural World Heritage Site, and the World's first peatland World Heritage Site, is well supported by and well aligned with Scottish policy and legislation. The key Acts and Policies/Strategies that provide this support are outlined below.

Environment and climate change

Natural Environment

In 2020 the Scottish Government published The Environment Strategy for Scotland: Vision and Outcomes (Scottish Government, 2020) which has long-term ambitions for restoring the natural environment, tackling the global climate and nature crises, and ending Scotland's contribution to climate change by 2045. The strategy is designed to act as an overarching framework for Scotland's existing environmental strategies and plans, including: the Nature Conservation (Scotland) Act (Scottish Government 2004); the Wildlife and Natural Environment (Scotland) Act (Scottish Government, 2011); and the Update to the Climate Change Plan 2018-2032: Securing a Green Recovery on a Path to Net Zero (Scottish Government 2020)).

As part of this work, the Scottish Government published in draft an ambitious Scottish Biodiversity Strategy[35] in late 2023, which sets out a framework, to 2045, allowing Scotland to tackle both biodiversity and climate crises in tandem. The full version of the Scottish Biodiversity Strategy to 2045 and the Scottish Biodiversity Delivery Plan 2024 -30 were published on 27 November 2024.The Flow Country has an important role to play in relation to the strategy, both in terms of the biodiversity that is commensurate with a healthy blanket bog ecosystem, and its ability to sequester and store carbon. Restoration and regeneration are at the heart of the strategy and any work done to meet its goals, including through The Flow Country Management Plan, will contribute to National Outcomes and UN Sustainability Development Goals, as illustrated in Figure 4.1.

Climate change

The Climate Change (Scotland) Act 2009 (as amended) (2019)[36] was drafted as a direct response the UN Paris Agreement (2015). Set out within the Act is the target to reach net zero emissions by 2045. In 2018, the Scottish Government also published the Climate Change Plan: The Third Report on Policies and Proposals: 2018- 2032 and this was updated in 2020 with the publication of the Update to the Climate Change Plan 2018-2032: Securing a Green Recovery on a Path to Net Zero (2020). Within the Climate Change Plan update Scotland's natural capital, biodiversity, peatland restoration, and ensuring that our peatlands are in good condition are recognised as key in tackling climate change, as is indicated by the commitment of £250million of investment in peatland restoration promised over the subsequent 10 years. As Scotland's largest area of functional peatland, the Flow Country is clearly central to the aspirations of this legislation, and to meeting Scotland's commitment to net zero. World Heritage status for The Flow Country is wholly compatible with this and has the added bonus of improving the case for accelerated restoration within the property.

An important strand of the Scottish Government's policy around the climate emergency relates to renewable energy, and of particular pertinence to the Flow Country is the development of onshore wind, as set out in the Onshore Wind Policy Statement (Scottish Government, 2022)[37]. Central to this policy is acceleration of our

[35] https://www.nature.scot/scotlands-biodiversity-strategy-2022-2045
[36] https://www.gov.scot/policies/climate-change/
[37] https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2022/12/onshore-wind-policy-statement-2022/documents/onshore-wind-policy-statement-2022/onshore-wind-policy-statement-2022/govscot%3Adocument/onshore-wind-policy-statement-2022.pdf

transition towards a net zero society, a key part of which is the decarbonisation of our energy generation, with the continued deployment of onshore wind seen as key to ensuring that Scotland's 2030 targets are met. It is, however, recognised as vital that this ambition is delivered in a way that is fully aligned with, and continues to enhance, our rich natural heritage and native flora and fauna, and supports our actions to address the nature crisis and the climate crisis, whilst climate change targets should be achieved in a way that maximises the economic and social benefits of a just transition to a net-zero economy. On 10 January 2023 Scottish Government published for consultation its Draft Energy Strategy and Just Transition Plan[38] - a draft route map actions to deliver a flourishing net zero energy system that supplies affordable, resilient and clean energy to Scotland's workers, households, communities and businesses.

The appropriate development of onshore wind infrastructure is managed through local and national planning policy and may have implications for the setting of the Site. This is discussed in Chapters 5, 6 and 7, which provide some background to the potential for conflict between the issues of protecting natural spaces for the long term. Specifically, there is a need to promote the development of carbon reducing energy generation sources – essential for reducing the severity and impacts of climate change – but without negative impact on carbon sequestering natural habitats such as blanket bog and the species they support. Some impact on Scotland's peatlands can be expected, and peatland restoration can help to mitigate such impacts, with good practice being recognised by the Onshore Wind Policy Statement. However, specific sites that are designated for their blanket bog value (including The Flow Country) are subject of additional policy protection.

Biodiversity

The renewed Scottish Biodiversity Strategy to 2045[39] was published in 2024 along with its detailed Delivery Plan 2024-2030[40]. This replaces the original Scottish Biodiversity Strategy (2004) and its supplement the 2020 Challenge for Scotland's Biodiversity (2013).

The Scottish Biodiversity Strategy sets out a nature positive vision for Scotland. It has three key outcomes:

- By 2045, Scotland will have restored and regenerated biodiversity across our land, freshwater and seas.
- Our natural environment, our habitats, ecosystems and species, will be diverse, thriving, resilient and adapting to climate change.
- Regenerated biodiversity will drive a sustainable economy and support thriving communities and people will play their part in the stewardship of nature for future generations.

In general terms the main aims relating to the conservation and management of biodiversity in Scotland are to support healthy ecosystems through protection and restoration of biodiversity, aiding that by connecting people with, and encouraging their involvement in decision making about the environment. It is envisaged that this approach will maximising benefits to both the environment and to Scotland. World Heritage status for The Flow Country is clearly closely aligned to these outcomes, and the approaches taken in Scotland also fit with the UN Development Goals, as shown in Fig. 4.1.

[38] https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/01/draft-energy-strategy-transition-plan/documents/draft-energy-strategy-transition-plan/draft-energy-strategy-transition-plan/govscot%3Adocument/draft-energy-strategy-transition-plan.pdf

[39] Scottish Biodiversity Strategy to 2045 - gov.scot

[40] Biodiversity: delivery plan 2024 to 2030 - gov.scot



Key

National Outcomes in the National Performance Framework:

Children & young people: We grow up loved, safe and respected so that we realise our full potential

Communities: We live in communities that are inclusive, empowered, resilient and safe

Culture: We are creative and our vibrant and diverse cultures are expressed and enjoyed widely

Economy: We have a globally competitive, entrepreneurial, inclusive and sustainable economy

Education: We are well-educated, skilled and able to contribute to society

Environment: We value, enjoy, protect and enhance our environment

Fair work & business: We have thriving and innovative businesses, with quality jobs and fair work for everyone

Health: We are healthy and active

Human rights: We respect, protect and fulfil human rights and live free from discrimination

International: We are open, connected and make a positive contribution internationally

Poverty: We tackle poverty by sharing opportunities, wealth and power more equally

Figure 4.1 Environment Strategy Vision and outcomes and their contribution to National (Scottish) Outcomes and UN Sustainable Development Goals[41]

[41] https://www.gov.scot/publications/environment-strategy-scotland-initial-monitoring-framework/pages/6/

Peatland Management

Building on Scotland's National Peatland Plan published in 2015, the Scottish Government's updated long-term strategic aims for peatland management and restoration is set out in Climate Change Plan 2026-2040[42]. The plan outlines policies to reach the target of net zero emissions by 2045, including targets on a 10% year-on-year increase in peatland restoration, aiming to repair and restore over 400,000 hectares by 2040. The policies prioritise the protection, management, and restoration of Scotland's peatlands and recognises the importance of functional peatlands to the nature and climate crises.

To facilitate the delivery of the Climate Change Plan, The Peatland ACTION Five Year Partnership Plan 2025-2030[43], the first in a series of rolling five-year plans, outlines the strategic roadmap for accelerating peatland restoration in Scotland. The Plan focusses on upscaling the industry, building delivery capacity and stability in the sector, establishing pipeline projects that secure long-term economic and environmental benefits and ensuring that peatland restoration brings benefits for climate, nature and people.

Alongside these two plans, the UK Peatland Code, managed by the IUCN UK Peatland Programme, has been developed. This is a voluntary standard that ensures restoration projects deliver tangible climate change mitigation and environmental benefits. Protection, conservation and transition, stated as key aims of World Heritage are closely aligned with Scotland's peatland restoration aims, which directly includes all the peatlands of the wider Flow Country.

Restoring peatlands is one of the most effective ways of locking in carbon and re-starting sequestration, offering a clear nature-based solution to the twin climate and biodiversity crises. The wider Flow Country area, including blanket bog within the WHS boundary, is already benefitting and will continue to benefit from this ongoing and extensive programme of restoration.

Culture

Scotland's Culture Strategy (Scottish Government, 2020)[44] has three overarching ambitions: strengthening culture, transforming through culture, and empowering through culture. Although The Flow Country is a World Heritage Status on the basis of its natural attributes, there is a long history of cultural interaction with the peatlands, both while the peatlands were expanding during prehistory (e.g. Tipping et al, 2007) and in more recent times, as a resource and for inspiration (e.g. Below the Blanket, 2019). This deep cultural history is recognised in the Site Dossier, and the inscription of the Site will strengthen these cultural links. Furthermore, the culture and history of the region will form an important part of the visitor experience and transmission of the region's value.

***World Heritage*:** Scotland's World Heritage is considered in the Scottish Government's Arts, Culture and Heritage Policy[45]. As a signatory of the United Nations World Heritage Convention the UK has promised to identify sites which could be nominated for World Heritage Status and to protect our national heritage (both cultural and natural). Scottish ministers report to the UK Government on any for aspects relating to Scotland's World Heritage Sites.

Tourism: Scotland Outlook 2030: Responsible Tourism for a Sustainable Future[46] is the national tourism strategy. It was developed through an equal partnership between the Scottish Tourism Alliance, Scottish Government, VisitScotland, Scottish Enterprise, HIE and Skills Development Scotland. The strategy focuses on four key priorities: Our Passionate People, Our Thriving Places, Our Diverse Businesses and Our Memorable Experiences. Responsible tourism, inclusivity and use of data, digitalisation & technology are key commitments.

The national tourism strategy has the vision to take Scotland forward as the World leader in 21st century tourism with sustainability, responsibility, innovation and technology at its core, and a full commitment to

[42] Scotland's Climate Change Plan: 2026–2040 - gov.scot
[43] Supporting documents - Peatland ACTION five year partnership plan 2025 – 2030 - gov.scot
[44] https://www.gov.scot/publications/culture-strategy-scotland/
[45] https://www.gov.scot/policies/arts-culture-heritage/
[46] https://scottishtourismalliance.co.uk/scotland-outlook-2030-overview/

contribution to net-zero by 2045. These aims are aligned with aspirations for tourism across the Flow Country and wider Highland area.
The Highland Council's Sustainable Tourism Strategy 2024-2030[47] states that "Sites such as the Flow Country in Caithness and Sutherland which now has UNESCO World Heritage Site status is a great opportunity to drive visitors to the east coast of Highland, but this must come with a sustainable approach to planning and management.

4.4 Highlands, specifically Caithness and Sutherland

Geography and demographics

The World Heritage Site is entirely within the Highland Council administrative area, and at a more granular level it lies within the counties of Caithness and Sutherland. The Highland Council area has a population density of just nine people per sq. km, and the area within the boundary of The Flow Country WHS is significantly lower than that, in fact containing very few dwellings at all[48]. The population of the wider area is subject to significant fluxes across the peak tourist season, but the isolation of the Site means that under current circumstances it is less likely to suffer the negative effects of mass tourism that other World Heritage Sites face.

***Physical environment*:** The Flow Country sits at the heart of Caithness and Sutherland, with many of the area's riverine arteries flowing from and through the peatlands. These historic counties are characterised by a varied landscape, topography, climate and geology - all of which provide for a variety of ways of life across the area, from the rolling farmlands of northeast Caithness to the fishing communities that line the rocky sea lochs in the west of Sutherland. The mountain belt which runs north-south in the west of the region catches much of the moisture brought in on the prevailing westerly winds and records annual average rainfall figures between 1500 and 2500 mm (spread over up to 220 wet days per annum). This contrasts markedly with the east where average annual rainfall ranges between 650 and 1000 mm (with up to 160 wet days per annum). Average annual temperatures are cool across the region (8°C) with slightly elevated temperatures recorded in the west.

***Population and demographics*:** The physical environment has a great impact on the habitation pattern of the area. The population is largely concentrated around the coastal regions, in part for historical reasons (e.g. the Highland Clearances), and in part due to the distribution of cultivatable and fertile land. The population of Caithness and Sutherland was 38,246 in 2020, which was down 3.9% from 2011, against a national picture of rising population. This ongoing rural decline is projected to continue. Some of the larger settlements on the periphery of The Flow Country include Thurso, population 7,426 in 2022; Wick, 6,913 in 2022; Lairg, 881, in 2022; Halkirk, 950 in 2022; Helmsdale, 764 in 2011; Tongue, 564 in 2011; Bettyhill, 492 in 2011.

Employment: Employment in the more *sparsely populated* areas is dominated by crofting agriculture, forestry and fishing (but this makes up only 2.8% of total employment in the region) alongside tourism. The top three employment sectors overall in the region are human health & social work (18.8%), accommodation & food services (15.6%), and wholesale and retail (12.5%), highlighting the importance of the tourist industry (all figures from HIE 2020). Caithness and Sutherland contain four data zones in the most deprived 20% in Scotland (SIMD 2020): totalling approximately 0.5% of the most deprived areas in Scotland. These are concentrated in urban coastal areas. However, it should be considered that, in 2012, 85% of income- and employment-deprived people lived outwith areas recognised as containing concentrations of deprivation. Furthermore, geographic access almost universally ranks at the highest levels of deprivation throughout the sparsely populated regions. However, the limitations of the SIMD report include that it identifies deprivation in more dispersed communities where more well-off people may live alongside the more deprived. It is expected that the WHS will bring some opportunities for employment and entrepreneurism in the area to counter some of this disparity. Figure 4.2 shows the deprivation indices within the wider Flow Country area.

[47] https://www.highland.gov.uk/downloads/download/2449/sustainable_tourism_strategy_2024-2030
[48] This will not be an issue for any dwellings in the Site as they do not contribute to OUV.

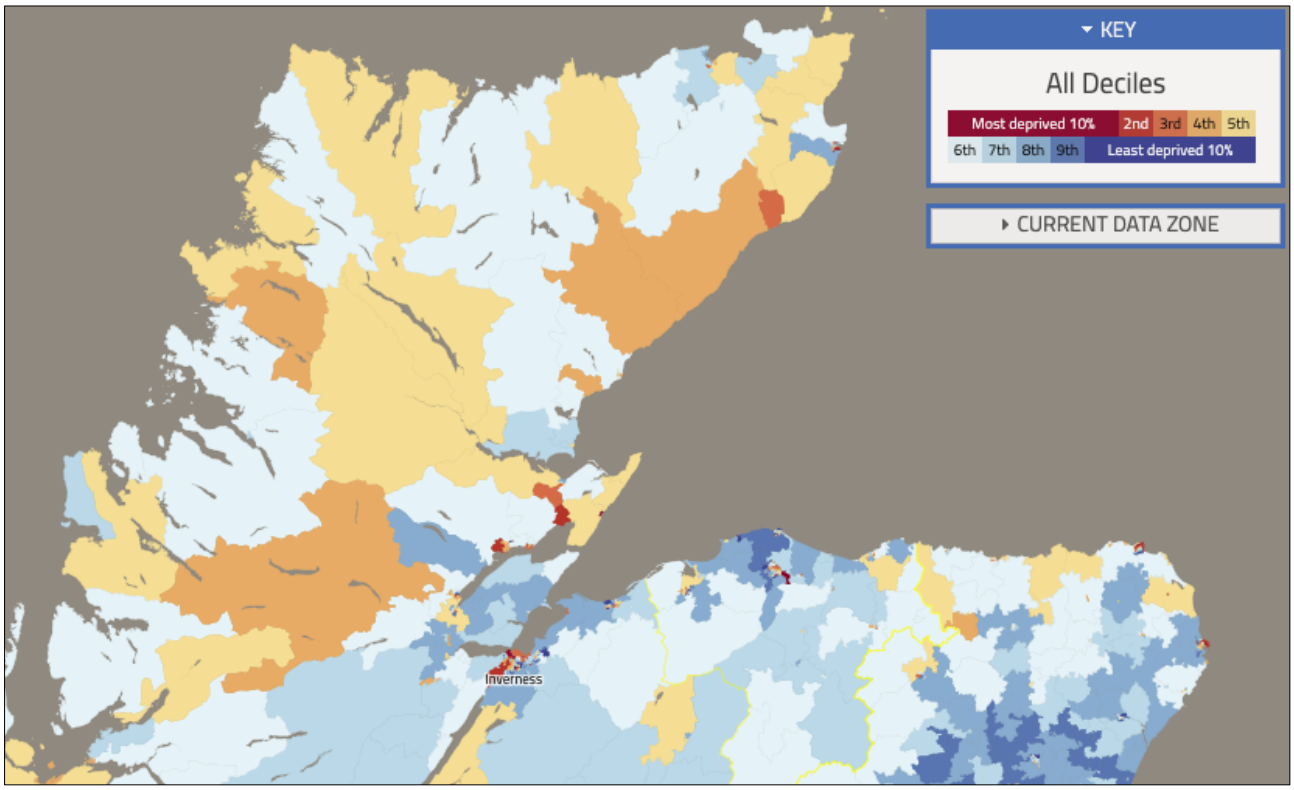


Figure 4.2 Map of Scottish Index of Multiple Deprivation 2020[49]

Environment

Peatland policy and strategy:

The peatlands of the Highlands are recognised as important for nature conservation, archaeological interests and carbon sequestration (The Highland Council, 2012). As such, policies laid out in the Highland-wide Local Development Plan (The Highland Council, 2012, Policy 55)[50] provide protection for all of the region's peatlands, as shown in Box 4.1.

These policies outline the importance of the conservation of peatlands and, where disruption is unavoidable, management plans to minimise and mitigate issues should be put in place. This protection is further reinforced in the Caithness and Sutherland Local Development Plan[51] which recognises the vital role of peatlands as a carbon store and the area's transition to a low carbon economy.

> *Policy 83. Peatland is a vital carbon store and Caithness and Sutherland's peatland resource is of international importance. Through the policies in the Highland-wide Local Development Plan (HwLDP) we can help safeguard important peatland resources.*

[49] From www.simd.scot
[50] Source: https://www.highland.gov.uk/planning-area/highland-wide-local-development-plan p105
[51] Source: https://www.highland.gov.uk/planning-area/caithness-sutherland-local-development-plan P24, Para 83

Box 4.1 Policy 55 of the Local Development Plan

Policy 55

Development proposals should demonstrate how they have avoided unnecessary disturbance, degradation or erosion of peat and soils.

Unacceptable disturbance of peat will not be permitted unless it is shown that the adverse effects of such disturbance are clearly outweighed by social, environmental or economic benefits arising from the development proposal.

Where development on peat is clearly demonstrated to be unavoidable then The Council may ask for a peatland management plan to be submitted which clearly demonstrates how impacts have been minimised and mitigated.

New areas of commercial peat extraction will not be supported unless it can be shown that it is an area of degraded peatland, which is clearly demonstrated to have been significantly damaged by human activity, has low conservation value and as a result restoration is not possible.

Proposals must also demonstrate to the Council's satisfaction that extraction would not adversely affect the integrity of nearby Natura sites [now called European Sites] *containing areas of peatland.*

A further mark of the importance of the region is the development of *The Peatlands of Caithness and Sutherland Management Strategy* 2021 - 2030 (PCSMP)[19]. Whilst there is considerable overlap and consistency of approach between the PCSMP and the World Heritage Site Management Plan, the latter also has to satisfy the requirements of World Heritage Site Management. The PCSMP vision is:

> *"Our vision for the peatlands is one of a revitalised, sustainably managed landscape, with extensive sweeps of hill and bog intersected by fertile straths and forests. These straths and coastal strips support a mosaic of productive crofts and farms, rivers, forestry and native woodland. Above and between the straths lies the open landscape of the world-renowned peatlands of Caithness and Sutherland, which, together with their lochs and lochans, support a spectacular assemblage of birds, plants and other wildlife, including internationally important numbers of raptors, waders and waterfowl. The straths, bogs, hills, lochs, rivers, woodlands and forestry are managed together for the wide range of services they provide and interests they support. Different land management objectives and uses are integrated and support each other, with everything underpinned by a healthy environment, at the centre of which is the great peatland of the north. Everyone who lives, works in or visits the area values the peatlands, which are an exemplar of good management and an inspiration to all."*

Climate emergency:

In 2019 The Highland Council declared a climate and biodiversity emergency in recognition of the serious and accelerating changes to the world caused by climate change. In making this declaration The Highland Council has made it a central consideration in every decision they make. This commitment is borne out in the wide support given to The Flow Country World Heritage Site and the recognition of its importance in both tackling climate change and maintaining biodiversity.

Biodiversity:

It is now widely recognised that there is also a biodiversity emergency, and that both climate and biodiversity emergencies should be viewed as interconnected.

Under the Nature Conservation (Scotland) Act 2004 (Scottish Government 2004), The Highland Council, NatureScot, and all other public bodies in Scotland, are required to further the conservation of biodiversity when carrying out their responsibilities. The Wildlife and Natural Environment (Scotland) Act (Scottish Government, 2011), further requires public bodies in Scotland to provide a publicly available report, every three years, on the actions which they have taken to meet this Biodiversity Duty. As outlined above, the importance of this work

has never been more necessary in the context of the declared climate and biodiversity emergency and is relevant as supporting context for OUV.

Both The Highland Council and NatureScot have underlined their commitment to tackling the climate and biodiversity emergency by signing the Edinburgh Declaration. The Edinburgh Declaration on Biodiversity arose out of the Edinburgh Process under the auspices of the Convention on Biological Diversity (CBD) in the run up to CoP15. It is a key milestone in the formal recognition of contributions by subnational governments (including cities and local authorities) to the achievement of global biodiversity goals and targets. It sets out the aspirations and commitments of the Scottish Government, Edinburgh Process partners, and the wider subnational constituency of the Convention on Biological Diversity, in delivering for nature over the coming decade.

The Highland Council's own Ecology Strategy and Action Plan set out their approach to tackling the ecological emergency and contributing to Scotland's target to be nature positive by 2030 and to have restored and regenerated biodiversity by 2045. The Strategy outlines a suite of actions that will see The Highland Council manage the Council estate more effectively for biodiversity; influence others through the implementation of policy and guidance; and work with communities, regional and national partners and stakeholders to engage in collective action to tackle the ecological emergency.

Access and Transport

Scotland has long been proud of its access rights, as outlined in the Scottish Outdoor Access Code[52] and legislated under the Land Reform (Scotland) Act 2003 (Scottish Government, 2003)[53]. This provides guidance for responsible access to the outdoors based on three principals:

- respect for the interests of other people
- care for the environment
- taking responsibilities for your own actions.

The Highland Council delivers services, including information and path networks throughout The Highland Council area, through their Access Team. Access to The Flow Country is key in transmitting its value, and the Scottish Outdoor Access Code supports this through promoting responsible access.

High Life Highland has a team of Countryside Rangers who run many events and guided walks across the north which aim to help raise awareness and encourage appreciation of the scenery, wildlife and heritage of the Highlands. Their wide range of events and activities is aimed at local communities and visitors alike.

The area is remote and served by very few roads, many of which are a single track with passing places. There is only one railway line in this part of the Highlands - the Far North line from Inverness to Thurso and Wick. This goes through the World Heritage Site, but has relatively limited services, and is seen as the slow option. In terms of cycle paths, there is a Walk Wheel Cycle Trust route Inverness to John O'Groats which links with National Cycle Network routes 1 and 7 [54],Cycling UK's The Great North Trail that runs from the Peak District to John o' Groats (or alternatively to Cape Wrath which route borders the WHS boundary)[55] along with various bikepacking trails that utilise the area There are no recognised long-distance footpaths through the boundary area, although access through forestry and estate tracks is available.

In partnership with the Highlands and Islands Strategic Transport Partnership (HITRANS)[56], The Highland Council is developing a series of masterplans across the region with the aim of establishing a network for walking, cycling and access to public transport. This network will support sustainable transport solutions throughout the region.

[52] https://www.outdooraccess-scotland.scot/
[53] https://www.legislation.gov.uk/asp/2003/2/contents
[54] https://www.walkwheelcycletrust.org.uk/find-a-route-on-the-national-cycle-network/national-cycle-network-routes-in-north-and-north-east-scotland/
[55] Great North Trail full route | Cycling UK
[56] https://hitrans.org.uk/

Tourism

The Highland Council's Sustainable Tourism Strategy 2024-2030[57] aligns with the UNESCO guidance for sustainable tourism. It recognises that managing visitor movements and influencing visitor behaviour are critical aspects of developing sustainable tourism. Furthermore, this sets out that by managing visitors, a destination can minimize the negative effects on the host community and maximize the opportunities for them to benefit whilst creating a superb visitor experience.

A partnership approach is recognised as key in achieving these goals, with the wide range of stakeholders that are likely to influence the behaviour of visitors. The role of The Highland Council within this partnership is to address the provision of some of the underlying infrastructure and associated services as well as informing and educating visitors on responsible behaviour.

Venture North[58] acts as the Destination Management Organisation for tourism in Caithness and Sutherland and aims to promote sustainable and responsible tourism throughout the region. Their values align well with the transmission and presentation of The Flow Country World Heritage site.

Cultural heritage

The Flow Country and wider environs contain a rich and extensive cultural history stretching back to the earliest habitation by humans during the Mesolithic. The Highland Council has recognised the importance of the cultural heritage of the region in its Highland Historic Environment Strategy (The Highland Council, 2013)[59]. Key priorities within this strategy are to protect, conserve, preserve, interpret and promote the historic environment and to raise awareness of it and its full potential as a social, cultural and economic resource. The distinctiveness of the historic environment is also considered an important characteristic. Within the Flow Country many of the influences on this distinctiveness arise from the natural environment in which it developed, from the integral importance of the peat for building and fuel, to the global exports of the quarried Caithness flagstones. This influence is set out in the Site Dossier and reflected in the Policy Framework, Chapter 7.

Health and wellbeing

Scotland's natural environment is recognised for its importance in health and wellbeing, through enjoyment of nature, outdoor activity, inspiring landscapes amongst other reasons. It is promoted through the Green Exercise Partnership (GEP) which is backed by the Scottish Government's health and environment portfolios. The main purpose of the GEP is to promote better health and quality of life for Scotland's people by encouraging physical activity in the outdoors and greater contact with nature. Therefore, there is understanding and considerable support for the importance of areas such as the Flow Country for public health. This is also reflected in the Policy Framework of this Plan.

4.5 Summary

This chapter set out to show the policy context within which the World Heritage Site will be managed at both local and national levels. Although the UK currently lacks primary legislation relating to World Heritage, at each of the UK national, Scottish and Highland levels, the necessary policies are already in place and integrated within the planning and strategic frameworks of the relevant authorities.

More detail concerning the specific measures of protection are provided in Chapter 5. Given the details outlined above, there is confidence that the World Heritage Site sits within a supportive policy context. Now the Site is inscribed, and if needed, appropriate policy changes in relation to the World Heritage Site can be made locally via the local authority or nationally via the Scottish Government.

[57] https://www.highland.gov.uk/downloads/download/843/sustainable-tourism-strategy
[58] https://www.venture-north.co.uk/
[59] https://www.highland.gov.uk/downloads/file/11047/highland_historic_environment_strategy

Chapter 5. Protection

UNESCO states that the "*Protection and management of World Heritage properties should ensure that the Outstanding Universal Value, the conditions of integrity and/or authenticity at the time of inscription, are sustained or enhanced over time*." Outlining that each WHS has a duty to ensure the identification, protection, conservation, presentation and transmission of cultural and natural heritage for future generations.

This chapter outlines how this will be undertaken for The Flow Country, as a World Heritage Site. Protection arrangements will consider both the area within the Site boundary, and areas outwith the boundary – in the setting – that may have an impact on OUV within the Site, or the way in which the Site is presented.

5.1 Geographic framework

The geographic framework for a World Heritage Site, comprises Site *boundaries*, *setting*, and in some cases *buffer zones*. These are all set out here.

Site boundaries

The boundaries of the seven sections of the site are fully described in Chapter 3. The definition of the boundary is based on the highly protected area of the Caithness and Sutherland Peatlands SAC/SPA/Ramsar, which are in turn based on numerous SSSI designations. These areas are largely designated for the exceptional quality of the blanket bog features they hold and the species they support.

In some instances, the boundary has been extended beyond the designated areas in order to include previously afforested and/or historically drained areas that are being or have been restored to actively accumulating blanket bog. In other areas, the boundaries extend beyond the original designated sites in order to ensure they reflect the hydrological boundaries of the patchwork of blanket bog elements that comprise the 'blanket bog landscape'. Sometimes these elements will be obvious on the ground such as a watercourse but otherwise there will be less obvious features on the ground.

Restoration has proved extremely successful with peat forming processes returning quickly to most restored areas, some of which already demonstrate the characteristics of healthy blanket bog systems[60] and which it is anticipated will be added to the existing designated areas in due course. Whilst the timescale for restoration is very dependent on site and condition, 20 years is a reasonable estimate for restoring a bog from previous forestry land to active accumulating peat with no sign of prior forestry.

Setting

The setting is discussed in detail in Chapter 2 of this Plan. It needs no additional information here other than to reiterate that it is a complex arrangement that is not reliant on a line on a map, but more on the functional and experiential understanding of what the setting of a World Heritage Site means. The Setting Definition Study will help to form the basis of the Site's approach to proposed developments within the Setting. The Setting Definition Study as well as guidance on how this Study should be approached can be found on the Flow Country website at www.theflowcountry.org.uk.

[60] Marshall et al. (2021), Bradley et al. (2021)

Buffer zone

UNESCO states that "*For the purposes of effective protection of the nominated property, a buffer zone is an area surrounding the nominated property which has complementary legal and/or customary restrictions placed on its use and development to give an added layer of protection to the property. This should include the immediate setting of the nominated property, important views and other areas or attributes that are functionally important as a support to the property and its protection...*".

They also add: "*Where no buffer zone is proposed, the nomination should include a statement as to why a buffer zone is not required*."

In Scotland, a World Heritage Site buffer zone is not a statutory designation and so brings with it no specific legal protection. The Scottish Government actively discourages the use of buffer zones around natural spaces. Instead, existing national and international designations (SSSI, Ramsar, SPA, SAC) set their boundaries such that they already include a level of protection for the designated natural features from actions outwith the site which would lead to them being negatively impacted.

The setting, as mentioned above and discussed in more detail in Chapter 2, is best protected – if necessary – through the use of existing conservation legislation and the planning system. This is normally done either through: a) using existing policy; b) adopting the policies in the Management Plan, or c) through developing supplementary planning guidance.

If existing protection arrangements for the setting are sufficiently robust, UNESCO considers that a specific buffer zone is unnecessary, and the argument in favour of this for the Site is set out in the rationale below. The role of the local planning authorities, their Local Development Plans and Scottish Government's National Planning Framework 4 (NPF4[61]) is crucial with respect to protection of the setting.

Our statement in terms of the Buffer Zone is as follows:

Buffer zone rationale

The Flow Country World Heritage Site has no buffer zone for the following reasons:

- There are no specific legislative or existing Planning Policy instruments to protect a buffer zone for a natural property, so one would have no basis in planning law, and adequate provisions exist in NPF4 to protect the Site.

- Whilst most existing cultural World Heritage properties in Scotland have buffer zones, they are not encouraged by Scottish Government for natural Sites.

- The European level designations, and national and local planning policies, provide protection for areas outside of their boundaries where any actions might impact upon the designated features within the boundary. In some instances, this will include some of WHS setting.

- Additional local planning policy will be developed *if necessary* to reflect the requirement to protect the setting as defined within this document, or within any further setting study.

- The use of an unfamiliar and non-statutory additional layer of environmental designation - Buffer Zone – will add a level of confusion to the local population in respect of their interaction with the Site.

5.2 Planning framework

The Flow Country World Heritage Site is protected through plans, policies and strategies within the Scottish planning system and other regulatory regimes covering agriculture, forestry and water environment. The

[61] NPF4 was adopted and published by the Scottish Government on 13 February 2023, at which point it became part of the Development Plan in law. This was after submission of The Flow Country Nomination Dossier to UNESCO. This Management Plan has therefore subsequently been updated to reflect the adopted NPF4.

planning system provides a framework for consideration of proposals for "development". The term development here broadly refers to construction, engineering, mining or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land in the circumstances specified in law, all subject to certain exceptions specified in law. The Scottish Government oversees the national planning system and is responsible for the preparation and implementation of legislation. The legislation sets out:

- requirements for the preparation of development plans, the purpose of which is to manage the development and use of land in the long-term public interest
- which developments are 'permitted development' i.e. not requiring a planning application to be made and granted (by reference to type, scale and circumstance) and by doing so enabling identification of developments that do require a planning application to be made and granted before they may proceed – and the framework of the application and determination process; and
- the powers and processes for enforcement.

Scottish Government is also responsible for the preparation and implementation of national planning policy. The Highland Council is the planning authority covering The Flow Country and is responsible for administering three main parts of the planning system:

- local development plans – setting out how places should change in the future using plans
- managing development – receiving and making decisions on planning applications and other related consents, with decisions on planning applications having to be guided by policies in the development plan
- enforcement – making sure development is carried out correctly and taking appropriate action when it is not.

The determination (decision) of the planning application is, unless material considerations indicate otherwise, to be made in accordance with the Development Plan.

The Development Plan is critical in respect of current and future protection of the WHS, and comprises:

- Current (May 2026): the statutorily adopted National Planning Framework (NPF4 onwards), current Local Development Plan(s) and Supplementary Guidance for the area.
- Future: with effect from around 2027-28: Statutorily adopted National Planning Framework (NPF4 onwards) and new Local Development Plan(s) that will be prepared for the area.

It is worth noting that that under Scottish law there is a right of appeal against refusal of planning permission, so the ultimate determination of a planning application may, in some cases, be made by a Scottish Government appointed reporter, rather than by The Highland Council.

National Planning Framework

National Planning Framework 4 (NPF4[62]) was adopted by Scottish Ministers in February 2023, applies to all developments in Scotland and is legally binding. In respect of the World Heritage Site's protection, it can be seen in the following ways.

World Heritage policy

This protection through the Planning System includes, first and foremost, the protection of World Heritage and its setting in its own right. NPF4 states in Policy 7l).: "*Development proposals affecting a World Heritage Site or its setting will only be supported where their Outstanding Universal Value is protected and preserved*". Despite Policy 7 referencing cultural assets (and WHS designated for their cultural significance), Scottish Government have provided reassurance this policy also incorporates WHS inscribed for natural attributes. This allows for non-impactive development, which is needed for areas in which people live, but clearly recognises the Outstanding Universal Value (OUV) of the property, including its integrity.

NPF4 has replaced previous policies NPF3 and Scottish Planning Policy 2014. Due to changes in the Scottish Planning System, for the first time, the National Planning Framework policies, including Policy 7l to protect and preserve OUV of World Heritage Sites, are now being used directly in the assessment and determination of planning applications, as the NPF now forms part of the Development Plan. The Development Plan (which now comprises the NPF4, the current Local Development Plans and associated Supplementary Guidance) is accorded specific legal status within the Scottish Planning System, it is the prime consideration and has to be used as a whole. NPF4 also provides a framework for the new Highland Local Development Plan (HLDP) to be prepared, that will further guide planning in the area covering the WHS and will be used alongside NPF4.

In essence, this is stronger and clearer protection through the planning system Scotland has had to-date and specifically references both OUV of the Site and potential impacts on the setting.

Protected Areas

The protection of World Heritage in its own right, through the Planning System, is not dependent upon the protections afforded to the existing, statutorily designated sites; it applies to 100% of the boundary area, not just the 73% that is designated under natural environment legislation. However, the existing designations also have relevant planning policy in NPF4 for their protection and will further bolster the protection of the Site.

They sit under the wider Policy 4a) which states that "*Development proposals which by virtue of type, location or scale will have an unacceptable impact on the natural environment, will not be supported*." Specifically, Policy 4b) states that "*Development proposals that are likely to have a significant effect on an existing or proposed European site (Special Area of Conservation or Special Protection Areas) and are not directly connected with or necessary to their conservation management are required to be subject to an "appropriate assessment" of the implications for the conservation objectives*.". An appropriate assessment presents a very high test of potential impact and is an excellent tool for considering threat to OUV, in addition to the Heritage Impact Assessment (HIA) tools that have been put in place locally.

Finally in relation to the designations, Policy 4c) states that "*Development proposals that will affect a National Park, National Scenic Area, Site of Special Scientific Interest or a National Nature Reserve will only be supported where: i. The objectives of designation and the overall integrity of the areas will not be compromised; or ii. Any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social, environmental or economic benefits of national importance. All Ramsar sites are also European sites and/ or Sites of Special Scientific Interest and are extended protection under the relevant statutory regimes.".*
However, on 9 July 2025 Scottish Government updated its policy on protecting Ramsar sites[63], whereby listed Ramsar sites in Scotland should be treated as if they were European sites for the purposes of land use change decision making. Compliance with this policy means that any plan or project which could affect a Ramsar site will involve undertaking a Habitats Regulations Appraisal to determine whether the proposal is likely to have a significant effect on the notified natural features of the site.

[62] https://www.gov.scot/publications/national-planning-framework-4/
[63] https://www.gov.scot/publications/updated-scottish-government-policy-protecting-ramsar-sites/

A key principle to note is that in respect of both World Heritage Sites and statutorily protected areas, the Planning System considers the effects of development proposals irrespective of whether they are located within or outside the property or protected areas. This point is further explained in at the end of this section below.

Other policies

NPF4 also includes policy statements that apply when considering all development proposals and state that significant weight will be given to the global climate and nature crises (Policy 1) and that development proposals will be sited and designed to minimise lifecycle greenhouse gas emissions as far as possible (Policy 2a). Additionally, there are further, general planning policy provisions in NPF4, that are used alongside policies in the Highland-wide Local Development Plan (HwLDP). This includes policies that intend:

- to protect biodiversity, reverse biodiversity loss, deliver positive effects from development and strengthen nature networks (Policy 3)
- to protect, restore and enhance natural assets making best use of nature-based solutions (Policy 4) with the policy including that the precautionary principle will be applied in accordance with relevant legislation and Scottish Government guidance (Policy 4e)
- to protect carbon-rich soils, restore peatlands and minimise disturbance to soils from development (Policy 5)
- to protect and enhance historic environment assets and places, and to enable positive change as a catalyst for the regeneration of places (Policy 7)
- to protect and enhance blue and green infrastructure and their networks (Policy 20).

There are also areas of landscape within or near parts of The Flow Country that are of types that are identified for safeguarding and consideration of effects, including National Scenic Areas (NSAs), Wild Land Areas (WLAs) and Special Landscape Areas (SLAs) (Policies 4c, d and g). Whilst these landscape protections do not directly relate to the OUV, the blanket bog features are components of the landscape safeguarded. NPF4 also includes policies for guiding energy developments (Policy 11), rural developments (Policy 29) and tourism developments (Policy 30). These are all used alongside policies in the HwLDP.

Regional (Highland) level planning considerations.

Whilst The Flow Country is the first World Heritage Site within The Highland Council area, there is considerable existing experience within Highland of assessing and considering effects on protected areas, including effects from development proposed outside their boundaries. This includes considerable experience where the protected interests are peatland habitats and species. Within Scotland and the UK there is experience with the protection and preservation of World Heritage.

Planning decisions on development proposals that require consent are made by The Highland Council as Planning Authority or otherwise by Scottish Government appointed Reporters or Scottish Ministers. Both The Highland Council and Scottish Government supported the nomination and have reflected the bid within the Delivery Programme for the Local Development Plan and the Indicative Regional Spatial Strategy for Highland, and within NPF4, respectively.

The Development Plan now comprises: NPF4, the HwLDP, the Caithness and Sutherland Local Development Plan and a suite of Supplementary Guidance documents associated with those Local Development Plans. The Highland Council as Planning Authority takes seriously the role it has now and that it will have in the future in protecting The Flow Country. The Council recognises the property's value and understands the imperative to protect this specific property as inscribed. This is evidenced through the Council's preparation and approval of a Planning Policy Statement (May 2023) and subsequent publication of its Heritage Impact Assessment (HIA) toolkit and updating of both in June 2025 to reflect inscription.

Notwithstanding pressures for other beneficial uses, the clear Management Plan priority for the property is the contribution it makes through its OUV. The Highland Council is currently at the first stage of work on a new Highland Local Development Plan (HLDP). Once it is adopted, the Development Plan will comprise NPF4 and the HLDP. The Council will also formalise its Highland Regional Spatial Strategy although that is dependent upon the statutory provisions for Regional Spatial Strategies being commenced nationally. There will also be national and local planning guidance on a range of topics or places. The Highland Council will reflect the acknowledged value

of The Flow Country within its new HLDP and embed into that Plan the protection of it as a World Heritage Site, including lending weight to the Management Plan for the Site. This is discussed more below.

Local Planning Framework

The Flow Country lies within the Caithness and Sutherland area of Highland. As at May 2026 the Highland-wide Local Development Plan (HwLDP), which came into force in April 2012, sets out the overarching vision statement, spatial strategy and general planning policies for the whole of The Highland Council area.

Its 'Vision for Caithness and Sutherland' area states that by 2030, Caithness and Sutherland will be a place of outstanding heritage: safe in the custody of local people – and that The Flow Country will have been inscribed on the World Heritage Site List and enjoy the support of local communities, land managers and visitors alike.

A review of the Highland-wide LDP, preparation of a new Highland Local Development Plan to replace it, commenced in May 2023 in the context provided by NPF4 (2023) and this Management Plan can be updated through its future review to reflect any changes from that. The current policies and details of supplementary guidance that relate to the WHS designation, be it generally or specifically, will be available to be considered for inclusion in the new Plan, subject to review.

The Caithness and Sutherland Local Development Plan (CaSPlan) was adopted in August 2018 and operates alongside the Highland-wide LDP. Its vision for 2035 is expressed as four outcomes, including an outcome for *Environment and Heritage*: high quality places where the outstanding environment and natural, built and cultural heritage is celebrated, and valued assets are safeguarded.

CaSPlan's associated strategy includes protecting and enhancing the unique natural environment and recognising the value of the peatland resource as a vital carbon store. The associated Action Programme included advancing the application for World Heritage status for The Flow Country. The Highland Council's continued commitment to this – and to recognising the carbon benefits of our peatlands – was further evidenced by the Indicative Regional Spatial Strategy for Highland (IRSS)[64], that was prepared and submitted to Scottish Government to inform the NPF4. The IRSS will be formalised in due course (subject to commencement of statutory provisions enabling that) and in any case inform review of the Local Development Plan.

Non-statutory Plans

There are a wide range of plans that relate to the area in terms of peatland management, visitor management, cultural strategies and other related issues. These are all listed in the Site Dossier bibliography. Some of these are material considerations in planning law whilst others are not. Any that will have a significant bearing on the protection of the WHS will have their policies already reflected within the Local Development Plan where they preceded it, but there are three plans worth highlighting here, Scotland's Climate Change Plan: 2026–2040, Peatland ACTION Five Year Partnership Plan 2025 – 2030 and the Peatlands of Caithness & Sutherland Management Strategy, 2022 (PCSMS).

Implementing effective protection through the planning system

The whole area of the Site is protected through the system of planning regulation for Scotland. There is specific planning policy at national level in relation to both natural places (including Protected Areas and other areas) and areas of peatland that would afford effective protection from development proposals that might have an impact on the OUV. There is also specific planning policy at national level in relation to inscribed WHS and, whilst the current policy of NPF4 is under the heading of Historic Assets and Places, the policy wording represents the appropriate approach to considering the effect of development proposals on all WHS – be they cultural, natural or mixed. Inscribed WHS are capable of being counted as a material consideration in planning terms (the decision maker determining a planning application comes to a view on what is a material consideration in the case being handled). Now the Site is inscribed, regional/local planning policy and guidance will be prepared as appropriate to complement the national policies.

[64] https://www.highland.gov.uk/downloads/file/2196/highland-indicative-regional-spatial-strategy-to-2050

There are already regional/local policy safeguarding peat and soils, the water environment, a range of species and habitats and the extensive and numerous sites already designated for nature conservation. This means that the Planning Authority (generally The Highland Council, or otherwise Scottish Government) is already experienced at considering the impacts of development proposals on peatland habitats, species and bog systems – including the consideration of potential connectivity and the impact of proposals located outwith protected areas, on those sites. World Heritage inscription will now bring an additional focus (based on the Site and OUV) and framework, and that builds on an already well-practiced approach to consideration of development proposals and protection of valued natural assets, including those of international importance.

Peatlands, as a significant carbon sink, also attract protection through policies relating to climate change reduction, although there can be tensions here in respect of the national strategy to increase the number and size of onshore wind farms as renewable energy generation capacity solutions and develop energy storage, transmission and distribution networks. These tensions are addressed via process set out in planning legislation and in local/regional and national planning policy. The planning policies are also taken into consideration in cases involving the largest wind farms which are considered through the consenting process under electricity legislation. The Planning Authority is experienced in considering the potential impacts of wind farms on peatlands, in Caithness and Sutherland and across the wider Highland area.

The Highland Council's Flow Country WHS Planning Position Statement 2 (June 2025)[65] provides an introduction to and overview of the 'new' consideration, being the first World Heritage Site in Highland and Scotland's first to be inscribed only under 'natural' criteria (not 'cultural' or 'mixed' criteria). It sets out the Council's position on how World Heritage should be factored into the consideration of proposed developments for which effects on the inscribed Site are likely to be a consideration. This is relevant from the earliest stages of a developer considering site selection and design for their proposal, including requirements for assessment, and through the planning and development process. Timely use of the accompanying Impact Assessment Toolkit – with reference also to UNESCO's Guidance and Toolkit for Impact Assessments in a World Heritage Context – is promoted in order that any likely effects of proposed development on the Site are understood and that such assessment informs development applications and decisions.

Within the Scottish planning system, extensive Permitted Development Rights (PDR) exist, as defined under 'classes' within The Town and Country Planning (General Permitted Development) (Scotland) Order 1992[66], as amended. The Highland Council is preparing an Article 4 Direction under the Order, to restrict certain PDR within some or all of the Site, the effect being that a planning application would be required. This will ensure a more consistent approach to the management of the Site across its entirety, thereby removing ambiguity and stakeholder uncertainty, and ensure that consideration is given to World Heritage specifically.

The Town and Country Planning (Natural Criteria World Heritage Sites) (Scotland) Consultation and Notification Direction 2025[67], which came into force on 25 July 2025, set out the arrangements for consultation and notifying planning applications where development may affect a WHS with natural heritage value. The Direction sets out a requirement for planning authorities to consult with NatureScot on development, other than householder development, which may affect a WHS with natural heritage value before granting or refusing an application for planning permission. The Direction also introduces a new requirement to notify the Scottish Ministers, restricting the granting of planning permission for development which is subject to an objection by NatureScot on WHS grounds. These requirements apply to both new planning applications and any being considered when the Consultation and Notification Direction came into force.

Summary

The absence of primary legislation for World Heritage Sites in the UK means that the range of statutory designations and planning policies are those that afford legal protection for the features within Site boundaries. The designations are discussed in Section 5.3, but from National Planning Framework down to Local Development Plan level, the development plans that apply to the wider Flow Country area and The Flow Country WHS are all positive in respect of affording protection, of various types, for the WHS.

[65] https://www.highland.gov.uk/downloads/file/2228/flow-country-candidate-world-heritage-site-planning-position-statement-2-june-2025
[66] https://www.legislation.gov.uk/uksi/1992/223/contents
[67] https://www.gov.scot/publications/natural-heritage-chief-planner-letter-and-notification-direction-september-2025/

There may always be challenges to the planning documents, and differing interpretations of phrases such as 'significant protection', but the array of policies to draw on is robust. Of particular significance is that the policies discussed above are *additional* and *irrespective of* the statutory and non-statutory feature-based designations (e.g., SACs) that afford the legal protection that World Heritage relies on in the UK and so cover the areas of the property that are outside of these designations, and the setting.

5.3 Conservation designations

Statutory designations

Approximately 73% of the Site is afforded statutory protection through environmental designation, and the majority of this area by the highest levels of protection that UK law can provide. These designations are summarised below, listed in Table 5.1 and their extent is illustrated in Figure 5.1:

The following designations protect the *core criterion and integrity values* of The Flow Country OUV:

> **Sites of Special Scientific Interest** (SSSI) are the bedrock of the UK environmental designation system and cover sites of biological and / or geological interest. There are 35 complete SSSIs within the boundary and parts of a further six.
>
> **Special Areas of Conservation** (SAC)[68] were originally designated via the Habitats Directive whilst the UK was still a member of the EU. The level of protection has been retained, and they are now called European Sites and protected through UK domestic legislation. They cover important species and habitats, and there is one, very large SAC (with multiple component areas) within the WHS boundary. Along with SPAs they provide the highest level of protection that the UK offers to a natural area.
>
> **Special Protection Areas** (SPA) were also originally designated via the EU Birds Directive whilst the UK was still a member of the EU. As with SACs they are retained, also called European Sites and protected through UK domestic legislation. They cover specific habitats important for birds. As with the SAC, there is one SPA (with multiple component areas) within the Site area and largely sharing the same boundary as the SAC.
>
> **National Nature Reserves** (NNR) are areas of land set aside for nature, and include the best sites for wildlife, to promote their conservation and enjoyment. There is one NNR in the property - Forsinard Flows - which is designated primarily for its peatland interests.

The following designation protects the *landscape value* of parts of the Site, relevant for experience, presentation and setting:

> **National Scenic Areas** (NSA) are a Scottish statutory designation for areas "of outstanding scenic value in a national context". The designation's purpose is both to identify the finest scenery through specific landscape qualities, and to ensure its protection from inappropriate development.

Although these are statutory protected areas, it is through the planning system set out above that protection is achieved. Any proposal for development is considered and tested in relation to its potential impact on any of these designations (even if the proposal is outwith the protected area), with all tests relating to the specific properties of the protected features. Certain designations also restrict types of permitted development within their areas. Each SSSI has a list of specific activities which NatureScot consider may cause damage to its special qualities. These activities are known as Operations Requiring Consent and they set out the parameters for permitted development within the SSSI.

[68] In addition to national legislation, there are international obligations for safeguarding these sites through the Bern Convention, as components of the Emerald Network - https://www.coe.int/en/web/bern-convention/emerald-network

International designations

Ramsar Sites are wetlands of international importance designated under the Ramsar Convention on Wetlands. The UK has ratified the Convention, but like World Heritage, this does not provide statutory protection per-se. However, Scottish Government's policy update of 2025[69] indicates that listed Ramsar sites in Scotland should be treated as if they were European sites for the purposes of land use change decision making. There is one Ramsar Site with multiple component parts within the boundary, and its boundary matches that of the SAC / SPA. The Ramsar Site helps to protect some of the core values of the Flow Country at an international level.

Non-statutory designations

There are additional important designations within/near the property, all of which carry a degree of protection within the planning system. Whilst these do not directly protect the blanket bog interests including the OUV, they are a consideration for and do constrain development and hence have some reducing effect on sources of potential risk, which is to the benefit of the Site.

Wild Land Areas. Large areas of Scotland, chiefly in the north and west, have semi-natural landscapes that show minimal signs of human influence. These may be for example mountains and moorland, undeveloped coastline, or peat bog, and they have distinct and special characters, which is increasingly rare, and therefore merit protection. These areas are considered to be nationally important and are protected through the planning system. They cover close to 50% of the area of the WHS. Policy 4g in NPF4 only supports development proposals in Wild Land Areas where the proposal will support meeting renewable energy targets, or is for small scale development directly linked to a rural business or croft, or is required to support a fragile community in a rural area. Proposals in Wild Land Areas must be accompanied by a wild land impact assessment. Effects of development outwith wild land areas will not be a significant consideration.

Local Landscape Areas – LLAs – (formerly known as Special Landscape Areas) is a designation applied to regionally valuable landscapes to protect and enhance landscape qualities and promote their enjoyment. They are confirmed through the local development plan – and do not overlap with NSAs.

The following table summarises how these designations apply to the WHS.

Table 5.1 Summary of the designations covering the WHS

Designation	Purpose	Sites - Number and list	
A. Site of Special Scientific Interest (SSSI)	The notified features of interest for these notified SSSI as they relate to the WHS are Blanket bog; breeding bird assemblage; and several individual bird species, also included in the assemblages - dunlin, Eurasian greenshank, golden plover, common scoter, black-throated diver and wigeon; and the beetle *Oreodytes alpinus*.	**35 full sites**: A'Mhoine Bad na Gallaig Badanloch Bogs Ben Griams Ben Loyal Blar nam Faoileag Carn a' Mhadaidh Cnoc an Alaskie, Coir' an Eoin Coire na Beinne Mires Druim na Coibe Druim nam Bad Dunbeath Peatlands East Halladale Forsinard Bogs Knockfin Heights	Rumsdale Peatlands Shielton Peatlands Skelpick Peatlands Skinsdale Peatlands Sletill Peatlands Strath Duchally Strathmore Peatlands Strathy Bogs Syre Peatlands Truderscaig West Borgie West Halladale West Strathnaver **7 sites partly included**: Armadale Gorge Ben Hope

[69] https://www.gov.scot/publications/updated-scottish-government-policy-protecting-ramsar-sites/

Designation	Purpose	Sites - Number and list	
		Loch Caluim Flows Loch Meadie Peatlands Lochan Buidhe Mires Lon a' Chuil Mallart Oliclett	Ben Klibreck Morven and Scaraben Berriedale Water Langwell Water River Borgie
B. Special Area of Conservation (SAC)	Blanket bog, associated surface features, wet heath, transition mires and quaking bogs, otter, marsh saxifrage, dystrophic, oligotrophic and mesotrophic lochs. The water quality of associated riverine habitats that support otter, Atlantic salmon and freshwater pearl mussel.	4: Caithness and Sutherland Peatlands, River Thurso, Berriedale and Langwell Waters, River Naver, River Borgie	
C. Special Protection Area (SPA)	Bird assemblage, specifically populations of Red-throated diver, Black-throated Diver, Hen harrier, Golden eagle, Merlin, Golden plover, Wood sandpiper, Short-eared owl, Dunlin, Common scoter, Greenshank and Wigeon.	1: Caithness and Sutherland Peatlands	
D. Ramsar Site for wetlands conservation	Blanket bog and wetland plants and animals under Criteria 1, 2, and 6. Supports one of the largest and most intact areas of blanket bog in the world; supports a number of rare species of wetland plants and animals; and holds internationally important population levels of Dunlin.	1: Caithness and Sutherland Peatlands	
E. National Nature Reserve (NNR)	Nature conservation and enjoyment of nature. Interest here is the blanket bog ecosystem and its wildlife, especially birds.	1: Forsinard Flows	
F. National Scenic Area (NSA)	Landscape, coastal and settlement – Kyle of Tongue presents: - An ever-present backdrop of mountains - The Kyle – a link from an inhabited coast to a wild, moorland - Scale, from domestic to monumental - The constantly changing character of the Kyle - Rich variety of coastal scenery - Distinct pattern of settlement	1: Kyle of Tongue	
G. Wild Land Areas	Wild Land Areas (WLAs) are the most extensive areas of high wildness. Large areas of Scotland – chiefly in the north and west – have largely semi-natural landscapes that show minimal signs of human influence. These may be mountains and	4: Ben Klibreck – Armine Forest, Causeymire – Knockfin Flows, Ben Hope – Ben Loyal, East Halladale Flows	

Designation	Purpose	Sites - Number and list
	moorland, undeveloped coastline or peat bog.	
H. Local Landscape Areas	Areas of high Local landscape value, but not covered by NSAs	5: Eriboll East and Whiten Head; Farr Bay, Strathy and Portskerra; The Flow Country and Berriedale Coast; Bens Griam and Loch Nan Clar; Ben Klibreck and Loch Choire.

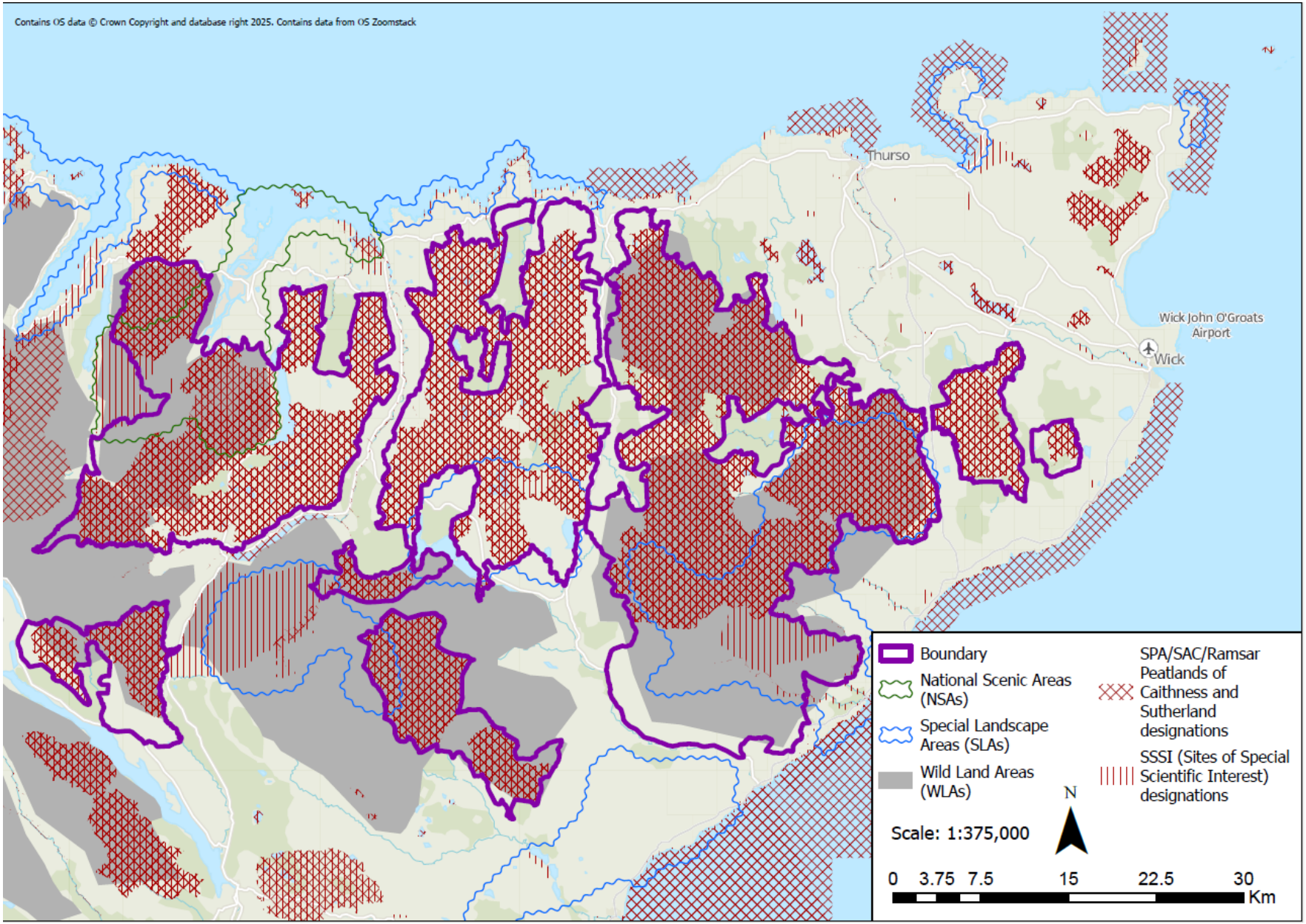


Figure 5.1 Map of the Site boundary against the boundaries of the other designations discussed in this chapter.

Historic environment

In addition to its natural qualities, the area of the property is home to a high number of Scheduled Monuments[70], as protected by the Historic Environment Scotland Act (2014). Whilst these are not part of OUV, they help to tell the story of human occupation of the property and provide valuable insight into the changes that have occurred over the last 8-10,000 years. It will also be important to ensure that any peatland restoration works take account of any Scheduled Monuments.

5.4 Summary

The protection of peatlands in Scotland has been transformed over the last 20 years and through designation and policy, currently affords a comprehensive range of approaches to safeguard OUV. Whilst there will always be concerns, particularly around complex issues such as non-designated areas or developments such as wind farms in the setting, the system is robust.

In IUCN's recommendation to UNESCO, they "*Strongly encourages the State Party to further strengthen the protection of the nominated property and its wider setting through the expansion of or through additional statutory protection designations;*". This particularly relates to the 27% of the Site not in the SAC. However, the provisions in NPF4 are robust and strong for this purpose. Whilst the Scottish Government will take this encouragement into consideration, there are no current plans to expand the SAC.

Finally, the Site has no buffer zone, but as with the areas within the Site without designations, provisions in NPF4 allow for effective protection of the Site. The strive for 'net-zero' and tackling the biodiversity emergency will also give added incentive to ensure the area is fully protected.

[70] https://www.historicenvironment.scot/advice-and-support/listing-scheduling-and-designations/scheduled-monuments/

Chapter 6: Issues affecting management of the World Heritage Site

6.1 Introduction

This chapter reviews current and historical land management in and around the Flow Country WHS and identifies the main threats, or challenges, and opportunities facing the OUV. Understanding these issues is key in promoting and carrying out sustainable land management that maintains and enhances the nationally and internationally important areas of peatland, the associated habitats and species, and the wide range of ecosystem services they provide.

Understanding these issues is also important when considering the area as a living landscape, impacted by people over the last 9,000 years during which the bog has been forming. Despite this human interaction – and there is nowhere in the world now that is not exposed to the impact of people – the boundary area defines a fully functioning blanket bog landscape, and one that is, for the most part, in excellent condition.

Despite this, a number of threats for OUV and integrity exist, including forestry edge effects, conifer regeneration from woodland creation, drainage, grazing, trampling and wildfire damage. These are explored below and provide the backdrop to the policies that follow in Chapter 8. It is also important to consider that many of the challenges and opportunities discussed have their roots outside of the Site boundary and therefore provide context for the setting as set out in Chapter 2.

The issues discussed in this section are all interlinked and together highlight the complexity of a landscape which has provided a resource for the communities that have lived there for generations and, for the most part, has retained its natural state. Traditional land-uses do not detract from the Site's overall OUV. However, continued careful management has the potential to improve its condition, as any direct negative human influences will be reduced in scale and scope over time, in line with conservation aspirations[71].

Whilst some areas still suffer negative effects from historical land management decisions, national and local policies and people's understanding of blanket bogs' importance are all moving firmly in the direction of an expanded and healthier Flow Country over the next 50-100 years. Key to this direction of travel is collaboration between public, private and third sector organisations, which is well reflected in the governance of the Site (see Chapter 8). Within this wide partnership, landowners and tenants play an important role, and their influence – in the context of the regulatory framework in which they operate – will be significant. The discussion in this document is with this collaboration in mind.

The chapter starts with global climate change, which is outwith the control of those having a role in Site management. However, we can help to mitigate its impacts by working collaboratively to protect and restore the ability of the bogs to sequester and store carbon into the future; and we can promote the value of the bogs in this role through education and world class research. The seven issues that follow are all potentially significant and can have interlinking impacts on Site management especially where they may cause a drying effect.

[71] The Conservation Advice Package for the SAC is available at https://www.nature.scot/doc/about-conservation-advice-documents-european-sites-scotland

6.2 Climate change

Background

Climate change is emerging as one of the key drivers of environmental change across Scotland. It is noted that Scotland's climate is moving from one of cool summers and mild winters, with rainfall throughout the year, to one with hotter, drier summers and warmer, wetter, winters, with more frequent extremes (Scotland's Environment, 2021). These changes will have a range of impacts, but most likely, and most problematic if the models hold true, is the drying out of the bogs through drier periods, and the commensurate reduction in bog growth.

Negative impacts on the Blanket Bog

The Climate Vulnerability Index (CVI)[72] process was used in 2022 to provide a 'quick assessment' of the potential effects of climate change on The Flow Country. Eight key values were identified for the area, drawn from the attributes defined for the Site. Assessments of the current condition of these key values revealed that all were considered to be in good condition, although concerns for some values were raised regarding the effects of recent climatic related trends. By considering a standardised list of climate stressors used in the CVI process, those most likely to impact each key value were identified as the long-term trends in temperature and precipitation, which together also influence the risk of wildfire.

Environmental conditions considered ideal for bog formation are annual precipitation of at least 1000 mm spread over at least 160 wet days (> 1 mm), and average temperature in the warmest month less than 15°C. Historical values for the central Flow Country (1300 mm, 200 days and 12°C, respectively) indicate there is a good degree of buffer in the system and that climate risks to the key values from changing conditions are likely to be low in the medium term. However, regions towards the eastern extremities of the Site may be more vulnerable due to their lower levels of precipitation.

The principal threat therefore is from **drying**. This will not only slow or stop peat accumulation but will also increase the risk of wildfire, both of which are dependent on the combined factors of temperature and precipitation. Drying would in turn impact upon the structure of the peat, through exposure. This not only harms the ecosystem and biodiversity but also accelerates the emission of stored carbon. If climatic conditions reach the point that blanket bog can no longer be sustained, in particular, if *Sphagnum* mosses are unable to grow and thrive, then increasing levels of erosion through oxidation, physical removal of particulate peat and increased release of heavy metals, organic compounds and nutrients into watercourses can also be expected.

The release of huge quantities of carbon stored in the peat along with other greenhouse gas emissions would further accelerate climatic warming, and currently 20% of Scotland's carbon emissions come from degraded or damaged peatlands[73]. Scotland's peatlands contain c.1,620Mt of carbon[74], and it is vital that any carbon loss is reduced, halted and reversed. Now that The Flow Country has WHS status, it should be able to become a powerful tool in promoting best practice in peatland management globally.

Climate change is also likely to affect the plants and animals found in the peatlands. For example, most of the characteristic bird species are normally northerly breeders near or at the southern edge of their range. They would, therefore, be expected to be particularly vulnerable to any changes in the climate. Changes to marine and coastal habitats as a result of climate change may also affect peatland bird species that use these areas for feeding.

Further negative impacts from the changing climate in respect of the peat could include a further increase in wildfires throughout the year; the movement of certain species into different climatic zones, including losses of those that cannot adapt sufficiently fast to new conditions; and the agricultural intensification of land at the margins of the WHS.

[72] See: https://cvi-heritage.org/
[73] Salisbury *et al*, (2015); Evans *et al*, (2017)
[74] https://www.researchgate.net/publication/227790279_Carbon_stocks_in_Scottish_Peatlands

Management

Good management of peatlands can have a positive impact on climate change, ensuring that they are able to act to their maximum capacity as a carbon sink. Balancing this, with other climate mitigation approaches, such as renewable energy developments will be critical over the coming years. Therefore, it is key to ensure that the peatland is in good condition, reducing the dangers of erosion and carbon loss from the system. A particular priority is to reduce any artificial drainage to help mitigate the predicted increase in summer drying and to reduce winter run-off. It will also be important to reduce areas of bare peat in order to decrease the likelihood of erosion.

Summary

Challenges

Threat to OUV is primarily from the potential for increased drying of the blanket bog. This may affect not only the fabric and structure of the bog, but also its biodiversity. Secondary impacts such as increases in wildfires and species' responses to changing climate are also potentially a problem.

Opportunities

It is difficult to see opportunities from anthropogenically induced climate change if the modelling[75] proves correct, however, there is a window of time to accelerate peatland restoration opportunities through Scottish Government funding, developer funds or green finance. There are also significant opportunities in terms of education around renewable energy and the climate change story, and WHS status for The Flow Country should now allow it to become a powerful tool in promoting best practice in peatland management globally.

6.3 Conifer forests

Background

Conifer forest creation is a complex and sometimes contentious issue. The Flow Country blanket bog ecosystem has evolved naturally over the last 8,000 years to one largely devoid of large stands of trees.

In the 1970s and 1980s, the UK government encouraged the draining of peatlands to establish conifer forests of mainly non-native conifer species, including Sitka spruce and lodgepole pine, for commercial wood production. This has contributed to what is a valuable part of the rural economy in the Highlands, with forestry providing important jobs and income for the region. However, in the Flow Country many of these forests were established on peatland of similar quality to that subsequently designated as SSSI, leading to a direct negative impact on blanket bog and associated habitats, and poor tree growth.

Impacts of woodland

Conifer forests in the Flow Country have a detrimental impact on underlying and adjacent peatland habitats and species, and on the carbon stored in the peat. In some instances, non-native trees are also regenerating from these forests onto adjacent areas of open peatland, which will cause further damage. Regeneration occurs across land ownerships, and co-ordination is needed to ensure the resulting trees are removed as soon as possible and in the correct manner, so that both damage and costs can be minimised.

The establishment of conifer forests on peatlands has a major impact on the hydrology of these ecosystems. When conifer forests are established on peatland the water level is lowered through drainage works, water extraction by tree roots and through the interception of rain and snow by growing trees. This causes the peat under and adjacent to the trees to dry out and subside. This, in turn, has a net overall negative impact on carbon sequestration, despite the growth of trees. Furthermore, woodlands established adjacent to the peatlands can contribute to the 'edge effect', referring to detrimental impact mature trees can have on surrounding open-ground habitats. The edge effect can have a negative impact on bird populations of the Flow Country, most notably on golden plover and dunlin, which nest on the ground in open peatland habitats.

Management

[75] There are a range of different models for this, not all of which agree with each other.

In light of the knowledge and understanding we now have of the significance of blanket bog, both for biodiversity and as a carbon store, there has been a shift away from forestry in the deep peat regions of the Flow Country, as laid out in the Highland Forest and Woodland Strategy (The Highland Council, 2018). There is a presumption against new planting on peatlands where peat depth is greater than 50cm[76], and planting design should ensure long-term protection of deep peat areas. This policy, alongside the statutory protection given to large parts of the area post 1980s, means that there is no *new* commercial forestry being undertaken on protected blanket bog, nor on areas of deep peat (>50 cm) without statutory protection.

As outlined in Scottish Forestry guidance[77], restocking is also now not appropriate where the woodland is identified as having a significant negative impact on peatland habitats and species. Within areas of the WHS boundary that encompass European Sites, Ramsar Sites, SSSIs or NNRs, restocking is not permitted where it would have a negative effect on any of the designation's qualifying species. On areas of the WHS boundary that are out with European Sites, Ramsar Sites, SSSIs or NNRs, restocking is also not permitted where a negative impact would be present on a qualifying feature of the UK Biodiversity Action Plan [since superseded by Scottish Biodiversity Strategy[78], supported by the Scottish Biodiversity List[79]] blanket bog or where restocking is likely to adversely affect the functional connectivity of an adjacent Annex 1 habitat or a habitat associated with one.

In addition, advice and guidance produced by Forestry Commission[80] (now Scottish Forestry) is available for the preparation of Forest Plans for these forests within the Caithness and Sutherland Peatlands SAC and SPA, outlining how to avoid undesirable effects of the qualifying features such as degradation of blanket bog and the edge-effect impact on breeding bird assemblages. These themes should also be applied to areas where restoration was undertaken to avoid continued impacts from non-native tree regeneration and the potential for edge-effect.

Any proposed woodland creation outside of the boundary, in the setting, should not be an issue unless it directly impacts negatively on peatlands within the Site, in which case it will most likely fall under the regulations surrounding SACs and SPAs. If the area in question is not a European Site, Ramsar, NNR or SSSI, Scottish Forestry will make a decision based on their policies and national guidance.

Peatland Restoration

Since 2013, the Scottish Government has funded the Peatland ACTION[81] project which promotes and supports peatland restoration across Scotland. In February 2020, the Scottish Government committed a further £250 million funding for peatland restoration over the subsequent 10 years. Restoring peatlands is one of the most effective ways of ensuring that the carbon they store is not released, and that they continue to draw down CO_2 from the atmosphere. Restoration of bog offers a clear nature-based solution to both the climate crisis and biodiversity loss helping the UK and Scottish Governments reach net zero and restore nature. Along with their natural resource, peatlands can also be rich in archaeological significance and paleoenvironmental records owing to their unique preservation qualities. To ensure the protection of this archaeological resource whilst undergoing peatland restoration, *Guidance for Peatland Restoration and the Historic Environment in Scotland*[82] outlines an approach to ensure the protection of heritage and historic environment features within peatland restoration projects.

Whilst there are currently some issues with upscaling restoration, related to the availability of the appropriately skilled workforce, these are being addressed, and restoration is seen as part of a new growth of skilled nature-based industries. This will become increasingly important and complex as the carbon offsetting market grows and may include significant employment opportunities in project development, site monitoring and management. As highlighted in national policies such as Scottish Government's *Scotland's Climate Change Plan:*

[76] https://www.forestry.gov.scot/forest-bog-restoration
[77] https://www.forestry.gov.scot/sites/default/files/pub-documents/PDF_Guidance_Soil_Management_Options_for_Afforested_Deep_Peatland_2015.pdf
[78] Scottish Biodiversity Strategy to 2045 - gov.scot
[79] Scottish biodiversity: list - gov.scot
[80] https://www.forestry.gov.scot/sites/default/files/pub-documents/Peatland-guidance-caithness-and-sutherland.pdf
[81] See: https://www.nature.scot/climate-change/nature-based-solutions/peatland-action-project
[82] ALGAO-Peatland-Restoration-Historic-Environment_2022.pdf

2026–2040[83] these employment opportunities will look to prioritise and support local supply chains and local contractors that will maximise community benefits around Caithness and Sutherland.

There are areas within the boundary that still retain commercial forestry, but once felled, those planted on blanket bog will not be restocked and rather be encouraged to undergo peatland restoration in order to enhance the peatland habitat and its surrounding connectivity. Peatland restoration techniques within felled areas include the installation of dams to block historic drains and gullies, installed to reduce the water table and improve growing conditions along with ground reprofiling techniques, such as the inversion of leftover stumps and woody material and reducing the slope of disturbed ground which, in turn, promotes revegetation of peat forming species. Once restored, the area requires regular monitoring and management such as the control of deer and livestock pressure along with long-term control of seedling regeneration from the surrounding seed source.

Areas of felled commercial forestry within the site boundary that do not carry a presumption to restore, will undergo an assessment including its Ecological Site Classification, General Yield Class and site condition to determine the appropriate outcome for the site. The assessment will determine whether the site will be restocked with either native or conifer woodland, used to create peat edge woodland or undergo peatland restoration. Each site will be assessed on a case-by-case basis and will follow the guidance outlined by Scottish Forestry[77].

Summary

Challenges

The threats to blanket bog from existing conifer forests include the damage caused during establishment, the ongoing uptake of water by the trees, the impact on blanket bog biodiversity, notably on habitat and important bird species. An additional challenge is the natural regeneration of non-native tree species adjacent to forested areas, and in some poorly restored parcels of bog where post-restoration maintenance has been neglected. There will be no new conifer forests planted within the boundary, and over time, it is likely that due to the presence of blanket bog and the increasingly emphasis on the importance of peatland and protected area policy, all restocking of plantation woodland on peatland within the boundary will eventually stop.

Opportunities

The rate and quality of peatland restoration following the felling of commercial forestry is increasing and with more investment and the heightened recognition of the natural value of the blanket bog, this will almost certainly continue to accelerate. World Heritage status will now provide further impetus for this and will lead to both improved ecosystem health and an increase in skills and awareness across the Highlands. There is also an opportunity for the establishment and natural regeneration of native woodland in appropriate areas such as alongside burns (small streams), in small, incised valleys and within non-peatland habitats i.e. grasslands that exist within the boundary, which are important for biodiversity.

6.4 Deer, livestock and game management

Deer and game

Grazing by herbivores has always been part of the Flow Country peatland ecosystem. Within the last 5-8,000 years, this would have included aurochs, wild horses and deer, each favouring their own part of the ecosystem. There is still some livestock grazing now but deer are the dominant herbivores in the area.

Primarily managed for sport, the presence and behaviours of deer are part of the natural processes of the area, and the lack of an apex predator means that management is required to control the deer population. Much of the open ground in the peatlands is managed for deer stalking, with a significant proportion being in the ownership of a small number of large estates. Whilst not of major significance it is useful to note that the different types of deer are Red, Roe and non-native Sika, with Red deer being in the majority. Whilst they all affect the ecosystem slightly differently, it is more the impact of large numbers that can cause problems.

[83] scotlands-draft-climate-change-plan-20262040.pdf

Deer management is undertaken by individual landowners and is coordinated by the area Deer Management Groups (DMGs). There was a rise in deer numbers from the 1960s to the 1980s. During this period, the traditional deer range was reduced with the widespread afforestation, and concomitant fencing, of the 1970s and 1980s and the associated fences to protect the young trees. The Scottish Government, under the Natural Environment (Scotland) Act 2026, have implemented benchmark targets to reduce numbers to 10 red deer per km^2 as an upper limit across upland ranges. Some estates have made significant efforts to reduce deer numbers, but densities remain high over much of the area.

The main issues that arise from deer, livestock and game management include grazing, trampling and some elements of management practices, such as all-terrain vehicle (ATV) use. These issues are outlined below.

Grouse moor management

Grouse shooting is restricted to the east of the Site. In terms of issues, the challenge is associated more with the associated muirburn and ATV (see below) use than the trampling and overgrazing that is associated with deer.

Grazing

Due to slow vegetation growth and poor nutritional quality, blanket bogs can only support low densities of grazing animals. Sheep and deer have been active grazers, in recent years, on most of the peatlands, with the impacts of the two being difficult to distinguish. However, sheep numbers on peatland have reduced significantly over the past 15 years, with stock largely kept on better 'in-bye' ground.

Cattle grazing takes place on a few areas at the peatland margins, and limited summer cattle grazing can be beneficial to biodiversity by creating a more diverse vegetation structure, which in turn can benefit moorland birds and other wildlife. However, cattle grazing has to be carefully managed as it can lead to excessive trampling and the erosion of the fragile peat soils.

Deer have moved into the vacuum left by sheep on open ground and the increased availability of artificial feeding provided by land managers has led to higher deer productivity, exacerbating problems of grazing and trampling.

Trampling

Trampling can have a more significant impact than grazing, particularly in the wetter areas, as grazing is only attractive in these areas for a short period during the early winter and spring. Excessive trampling can damage and kill off bog mosses and other plants leaving bare peat. Deer fencing and particularly wet areas can form a focus for this problem when deer movements are channelled or re-directed. Overgrazing and excessive trampling can lead to erosion with the slow growth of vegetation, and the cool wet climate slowing or preventing vegetation recovery.

ATV use

Alongside the impact of deer and livestock, some elements of associated management practices can also damage the peatlands. The use of all-terrain vehicles (ATVs) and quad bikes, which are now seen as an essential tool for both sporting and agricultural work, can damage the fragile plant communities, especially on wetter ground. Recovery of the damaged ground can either be very slow, or result in active erosion of the peat, or both. Whilst the scale of this is very small overall, it is an issue that needs collaboration and a consensus on the approach taken to be agreed.

Management

In light of the issues outlined above, landowners and managers, public bodies and conservation organisations are now working together at a national level to promote and deliver sustainable deer management, which can provide a range of benefits, including healthy ecosystems. This is expressed as a vision, with priorities for future work, in 'Scotland's Wild Deer, a National Approach, including 2015-2020 priorities' (Scottish Government, 2014) which is a review of the 2008 edition and outlines a 20-year vision for wild deer management extending to 2028. Part of this process has involved a national Deer Working Group[84], which has resulted in a set of

[84] This link sets out recommendations of the national Deer Working Group: https://www.gov.scot/publications/deer-working-group-recommendations-scottish-government-response/

recommendations for change, including creating new, modernised Deer Management legislation; giving stronger regulatory powers to NatureScot; creating a new code of practice and a new series of best practice guidance notes.

Deer Management Groups (DMG) have also been established as forums for Government agencies, conservation organisations and land managers to discuss and address the issues highlighted supported by evidence on habitat condition monitoring and deer numbers. There is a recognition that DMGs need to engage wider community interests in their work and deliver public benefits such as contributing to the management of areas of countryside, that are not protected, to improve their condition.

Deer numbers are monitored across the peatlands, but to get an accurate figure is difficult because they are widely dispersed over a large area. There is now more emphasis on analysing trends, rather than absolute numbers, and monitoring the impacts of deer and other grazing animals on habitats. Best practice guidance has been developed to enable deer managers to carry out Habitat Impact Assessments using a standardised monitoring methodology[85].

Drier parts of the moorland in the east of the Flow Country peatlands are managed for grouse, although this is restricted in extent, including, in recent years, through reductions in numbers. A range of factors have led to this, including changes in land use and burning practice.

Summary

Challenges

The challenges within the boundary are mostly from excessive grazing and trampling, and to a lesser extent from ATV use and grouse moor management. The latter activity is linked to vegetation burning (see 6.5). These risks are recognised and acknowledged by land managers and are being addressed through multi-stakeholder initiatives.

Opportunities

Increased collaboration between landowners and managers, public bodies and conservation organisations has led to improved understanding of the importance of the blanket bog and the issues that affect it. The development of the Management Plan for the World Heritage Site provides the opportunity to continue and expand engagement with landowners, residents and visitors and to address the issues identified. There is great potential to review the effective use of in-bye land for domesticated stock, and evidence-based methods for the reduction of negative impacts from deer. It should also be acknowledged that appropriate levels of grazing are important in maintaining certain habitats and reducing the spread of conifer regeneration originating from plantations.

6.5 Burning and wildfire

Background

'Muirburn' is the name given in Scotland to the land management practice of burning moorland, including peatland, to promote new vegetation growth and so increase the amount and quality of food available for livestock, deer or grouse. Muirburn is declining, and at the same time, wildfires have become an increasing concern across rural Scotland, with a general increase in the number of recorded fires year on year. It is unclear whether there is any link between the reduction of muirburn and the increase in wildfires, or if the increase is mainly due to other factors, such as the influence of drier periods caused by climate change.

Muirburn

The Wildlife Management and Muirburn (Scotland) Act 2024,[86] , introduces strict licencing for muirburn on all Scottish peatlands at any point in the year, with enhanced restrictions for deep peat. The Act introduces increased regulation of muirburn to ensure it does not negatively affect sensitive and protected habitats. The Muirburn Code will be updated to reflect changes made by the Act.

[85] Methodology found at: https://bestpracticeguides.org.uk/impacts/
[86] Wildlife Management and Muirburn (Scotland) Act 2024

Historically, extensive and uncontrolled burns have occurred within the Site boundary, some causing severe and long-lasting damage which takes many years to regenerate or restore.

However, muirburn, other than that on the more intensively managed grouse moors which do not occur in The Flow Country, is generally carried out less regularly now than in the past, as the number of people with expertise has fallen and the requirement for stock management has reduced. The resultant tall leggy heather and purple moor grass litter can lead to fires spreading more quickly over larger areas than intended. Some habitats are extremely sensitive to burning and many of the rare and sensitive plants and animals found in peatlands cannot survive frequent fires or fires that eliminate them entirely from their specialised range. The impacts on and responses of species and habitats to burning vary and depend on a variety of factors involved. However, it is clear that poorly managed muirburn can lead to habitat degradation and erosion.

Wildfire

Wildfires can be caused deliberately by wilful fire raising or through carelessness e.g. via sparks from unmanaged garden fires, campfires and barbeques, residual heat from unextinguished bonfires, casually discarded litter including glass bottles and cigarette butts, stray sparks from specialist charter steam trains, or by inappropriate or badly managed muirburn. They are particularly concerning on drier peatland because the fires can smoulder within the peat long after they are thought to have been extinguished.

Wildfires can cause significant damage to biodiversity as well as agricultural, forestry, recreational and sporting interests and can threaten infrastructure, property and life. There are significant costs and risks to firefighting and disruption to communities and transport during the event. They release carbon dioxide; damage the capacity of peatlands to sequester carbon and the smoke produced can affect air quality and human health.

Management

Muirburn is regulated by The Wildlife Management and Muirburn (Scotland) Act 2024,[86] and is to be guided by the updated Muirburn Code. The Act tightens muirburn legislation and aims to ensure that muirburn avoids damage to sensitive habitats and ecosystems, helping prevent out of control muirburn leading to wildfire.

The Environmental Research Institute (ERI) has developed Earth Observation techniques to assess fires that have taken place. Research has shown that wetter, intact bogs, were less affected and should recover sooner than drained or otherwise damaged bogs. This research has concluded that not only will peatland restoration efforts lock up more carbon, but they will also help to limit the amount of carbon released during wildfire events (Andersen *et al.* 2021).

The Scottish Wildfire Forum[87] aims to raise awareness of the work being undertaken across Scotland in relation to minimising the impacts of wildfire and is working with the Scottish Fire and Rescue Service (SFRS) to develop training for land managers in wildfire response. The SFRS has a Community Asset Register on its website, where people can register equipment and skilled practitioners who could help with a wildfire. The creation of local fire partnerships and plans could also help SFRS and individual estates to access additional equipment and personnel to jointly tackle wildfires on the peatlands.

Summary

Challenges

Muirburn is a reducing challenge for the Site as the practice is slowing, and the Muirburn Code clearly sets out that bogs and protected areas should be avoided. However, the threat from wildfires is increasing with a changing climate, increased levels of visitors, and the limited resources available to manage planned muirburn.

Opportunities

There is a significant opportunity for education in respect of burning. World Heritage status brings a renewed profile to the bogs and will support the encouragement of alternative, and collaborative, means of management for areas affected. It will also give greater impetus to encourage education about the dangers of wildfires.

[87] https://www.scottishwildfireforum.co.uk/

6.6 Agriculture

Background

The decline of sheep farming means that agriculture is currently active in very little of the WHS area, largely comprising small areas utilised as hill or rough grazing[88]. However, croft land (crofting is a form of land tenure usually defined by small scale food production) and larger farms border the peatlands throughout the wider region, and these provide important feeding habitat for many of the bird species found in The Flow Country. Crofting tenure predominates in the north and west, coexisting with large sporting estates and larger farms are found in the fertile straths, and to the east on the plains of Caithness.

Recent years have seen a reduction in the number of active crofters, with a few running a greater number of holdings in some areas. The financial support schemes for crofters have changed significantly over the past 5-10 years and may yet change again following the exit of the UK from the European Union. Any future scheme must now consider the area more strongly in terms of protection of the peatland, for both biodiversity and helping the nation meet net zero targets.

The key threats to The Flow Country through agricultural practices are historic drainage, in-bye[89] management and stock management. The latter activity was outlined in section 6.3 and will therefore not be repeated here.

Drainage

Through the 1950s and 1960s, financial incentives were provided for the draining of agricultural land, as part of a post-war policy to promote food production. Whilst there was considerable uptake, in reality these drains did little to improve agricultural output in most areas of the peatlands, and they are detrimental to the nature conservation interest and to water quality and carbon storage. Historically, drainage attempts happened across about half of the designated areas within the Site with approximately 22% of that being more intensively affected. Drainage of blanket bog is detrimental to the nature conservation interest and to water quality and carbon storage.

Although this impact may seem severe and extensive, it does not mean that the Site does not demonstrate OUV. Blanket bog is both resilient and once rewetted is able to bounce back to a natural state relatively quickly; indeed, many drains on very flat ground infill naturally, without intervention. Moreover, the areas affected by drains show a spectrum of degradation from places with minimal impact to those with severe erosion, the latter being in the minority.

Some drains dug on the gentlest of gradients tend to gradually and naturally infill over the years, but on steeper slopes, some drains have experienced erosive scouring due to increased flow, which has increased their size and capacity. The silt carried into streams and rivers by these drains may have negative effects on fisheries and on drinking water supplies, as well as loss of carbon and reduction in the water retention capacity of the bog. Periods of high rainfall exacerbate the problems of erosion and lead to increased flows in adjacent watercourses.

Restoration through drain blocking has been undertaken across extensive areas of the Flow Country, beginning in the 1990s through funding from the EU Life Programme. Since then, restoration has been undertaken through schemes such as forest-to-bog restoration, and there is great potential for this to be extended further. Alongside government funded restoration via PeatlandAction and Agri-Environment Climate Scheme (AECS), the potential for green finance to play a major role in the area is beginning to be realised and is discussed in Section 6.10, with the first projects via green finance initiated in 2024.

In-bye management

A further opportunity augmented by the World Heritage Site is for improvement of management practices for in-bye land. This can play an important role in supporting many of the bird populations that inhabit the peatlands. Species making use of farmland close to the peatlands include dunlin, golden plover, snipe, curlew, hen harrier, short-eared owl, merlin, greylag goose and lapwing. Active management can help to ensure that

[88] Definition of 'active' to be confirmed with RPID

[89] See https://www.ruralpayments.org/topics/all-schemes/agri-environment-climate-scheme/management-options-and-capital-items/organic-farming--conversion/guidance-for-organic-farming/organic-description-of-land-categories/

the conditions are right to provide plenty of food and, for some species, nesting sites. Further interaction with crofters to help farm in a way that is better for nature is something that is being supported at a national level.

Summary

Challenges

The threats from agriculture have reduced significantly in recent years. The biggest existing pressure for the bog is the historic, and as yet unrestored, drains, with their corresponding negative impacts on the blanket bog habitat and the associated flora and fauna.

Opportunities

The biggest opportunity to improve the already strong OUV is the ongoing national campaign aiming to protect and restore Scottish peatlands. It is anticipated that there will be continued funding for peatland restoration, and this is likely to be from several sources linked to carbon credits and landscape finance.

6.7 Renewable energy and other national or major developments

Background

Renewable energy generation is complex in relation to our peatlands. There is a clear policy from the Scottish Government to increase the amount of onshore wind turbines to move towards net zero by 2050. It states that '*Deployment of onshore wind is mission-critical for meeting our climate targets. As an affordable and reliable source of electricity generation, we must continue to maximise our natural resource and deliver net-zero in a way that is fully aligned with, and continues to protect, our natural heritage and native flora and fauna*[90].' Moreover, in 2019 The Highland Council declared a climate and ecological emergency with an aspiration to meet net zero emissions by 2025.

Undoubtedly renewable energy generation is a vital aspect in being able to reduce the impacts of climate change, not only here but around the globe. It should, however, not be at the expense of the significant carbon sequestration capability of our peatlands.

The wind regimes of Caithness and Sutherland combined with low population densities, proximity to electricity grid and availability of grid capacity make the area particularly attractive to wind farm developers, and a significant number have been developed or consented to in the region. However, no wind farms exist within the Caithness and Sutherland Peatlands SAC, or within the WHS boundary[91]. Nonetheless, the potential negative impact of wind farms on peatlands, particularly where directly adjacent to the Site should be considered alongside other types of national and major developments that may potentially negatively impact the WHS include hydroelectric schemes and a satellite launch facility. Both are also considered here.

Challenges

The following list identifies a number of potential challenges to OUV and associated values from a range of development types that would need to be assessed and managed in any development project:

- Habitat loss, damage or fragmentation and impacts on species either through land take, hydrological disruption (during construction or decommissioning operations), through peat slides, or when infrastructure is renewed in the future.
- CO_2 emissions from peat disturbance both during and after construction.
- Risk of concentrations of suspended solids or contaminants entering watercourses during construction, during facility operation or as a result of a peat slide.
- Potential cumulative impacts

Potential impacts on archaeological and historic sites, on access and recreation and on the landscape.

The level of impact would depend on the location, design and management of the development. The cumulative impact of developments on, habitats, species and wider ecosystems also have the potential to be a significant issue for the wider Flow Country as well as on the OUV of the Site.

[90] Source: https://consult.gov.scot/energy-and-climate-change-directorate/onshore-wind-policy-statement-refresh-2021/

[91] Any that might have been considered were excluded from the boundary

As an example, the siting and design of wind farms has to be mindful of peatland resources, which vary in quality. However, successful co-existence can bring about not only renewable energy generation benefits, but also specific peatland restoration opportunities, which taken together are aimed at combating the global Climate Emergency. Some new wind farm schemes are being established that will remove commercial woodland and restore the peat in all but the specific areas where the turbines and access roads are sited.

Management of Developments in relation to the WHS

Appropriately sited development can provide opportunities to implement habitat management and peatland restoration, and developments such as wind farms can provide a source of finance to support the restoration of degraded habitats. Environmental Impact Assessments, Habitat Management Plans and Construction Environment Management Plans are all tools that can help to substantially reduce negative impacts. However, if developments within the WHS, such as wind farms, are constructed on peatland or bog, the immediate footprint of the development (at a minimum) is likely to be negatively impacted and its restoration potential lost, notwithstanding that the development may deliver peatland restoration on other parts of the windfarm site or elsewhere. If this negative impact were on the Site, development would cause a negative impact on the WHS; the irreplaceability of World Heritage implies that any negative impact on OUV in one part of the property would be seen as a negative impact on OUV of the whole property. Cumulative impacts on bird species, while not included as part of the OUV but still an important supporting value of the WHS, are also a factor in managing developments in relation to the WHS. NatureScot's guidance 'Cumulative collision impact modelling on bird species of Caithness and Sutherland Peatlands Special Protection Area (SPA) – within the context of the Proposed World Heritage Site[92] conducted collision and displacement risk modelling for a number of vulnerable qualifying species of the SPA to better inform future planning decisions in the region.

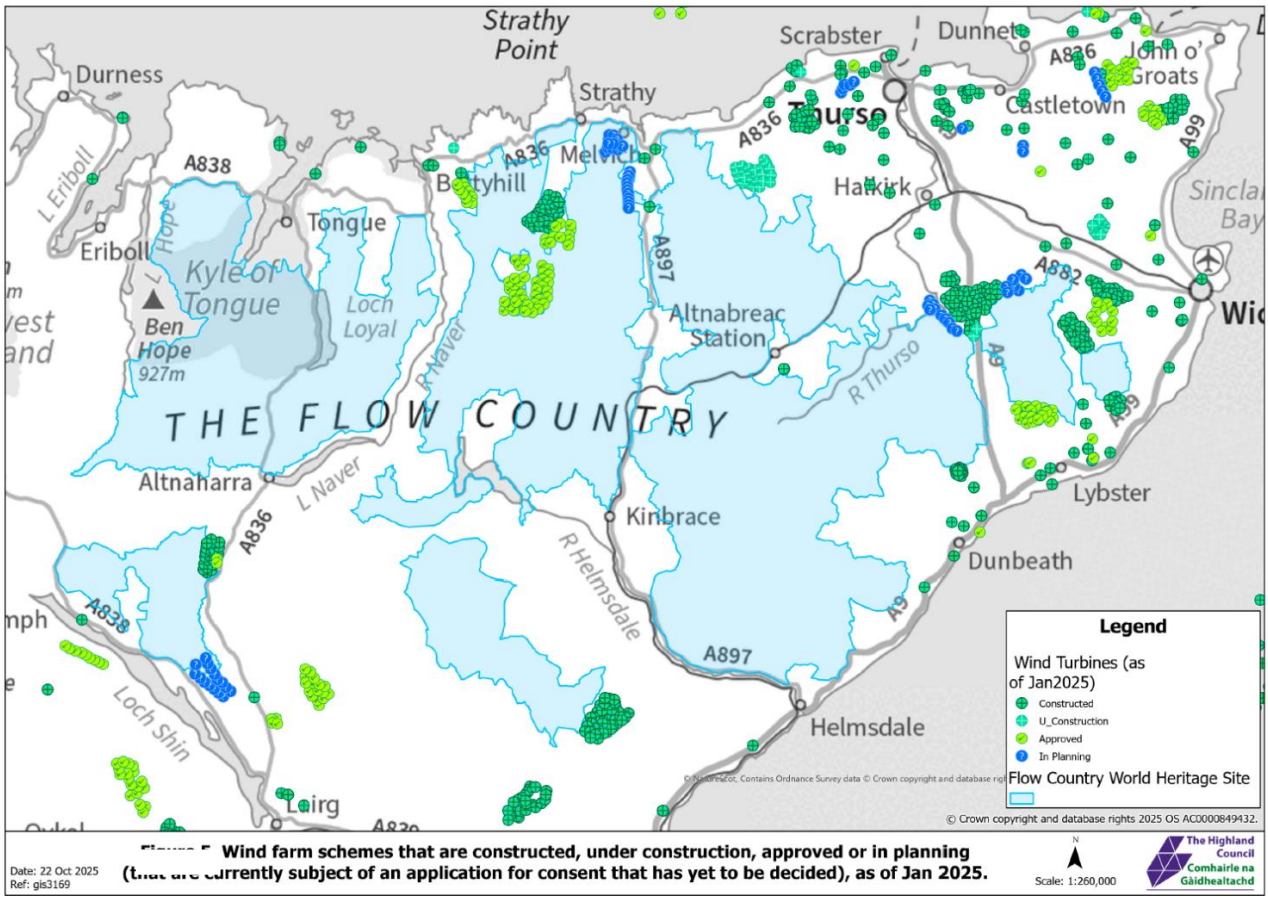
The Scottish Planning System is such that any development may be proposed by an applicant in any location – and as long as the application is valid, it has to be considered and determined on its merits (be it consented or refused). For wind farms there is nonetheless a strong steer provided by NPF4 Policy 11b that "*Development proposals for wind farms in National Parks and National Scenic Areas will not be supported"*; NSAs cover a part of the Site, but it is not a National Park. For development proposal on peatland, carbon-rich soils and priority peatland habitat, NPF4 Policy 5d sets out the few exceptional development types that will be supported. Those include the *"generation of energy from renewable sources that optimises the contribution of the area to greenhouse gas emissions reductions targets"*, although a detailed site-specific assessment will be required which *"should inform careful project design and ensure, in accordance with relevant guidance and the mitigation hierarchy, that adverse impacts are first avoided and then minimised through best practice"*.

However as seen above, NPF4 also states that (4a) "Development proposals which by virtue of type, location or scale will have an unacceptable impact on the natural environment, will not be supported". NPF4 (7l) states that "*Development proposals affecting a World Heritage Site or its setting will only be supported where their Outstanding Universal Value is protected and preserved*", and, whilst that is a policy under the heading of Historic Assets and Places, its test for the consideration of impacts on World Heritage is the appropriate test to apply for natural sites such as The Flow Country, for example through the application of Policy 4a. so the ultimate test is in respect of damage to the OUV as set out in the SOUV and attributes using the UNESCO Guidance.

In practice, the Local Planning Authority and statutory consultees (for World Heritage: Historic Environment Scotland and NatureScot) seek to provide early guidance and advice on considerations for development and the suitability of proposals. This is illustrated for example by The Highland Council's publication of a pre-inscription Planning Position Statement (revised and retained post-inscription) referenced elsewhere, and applications that are not likely to pass the relevant tests might be discouraged from being taken forward.

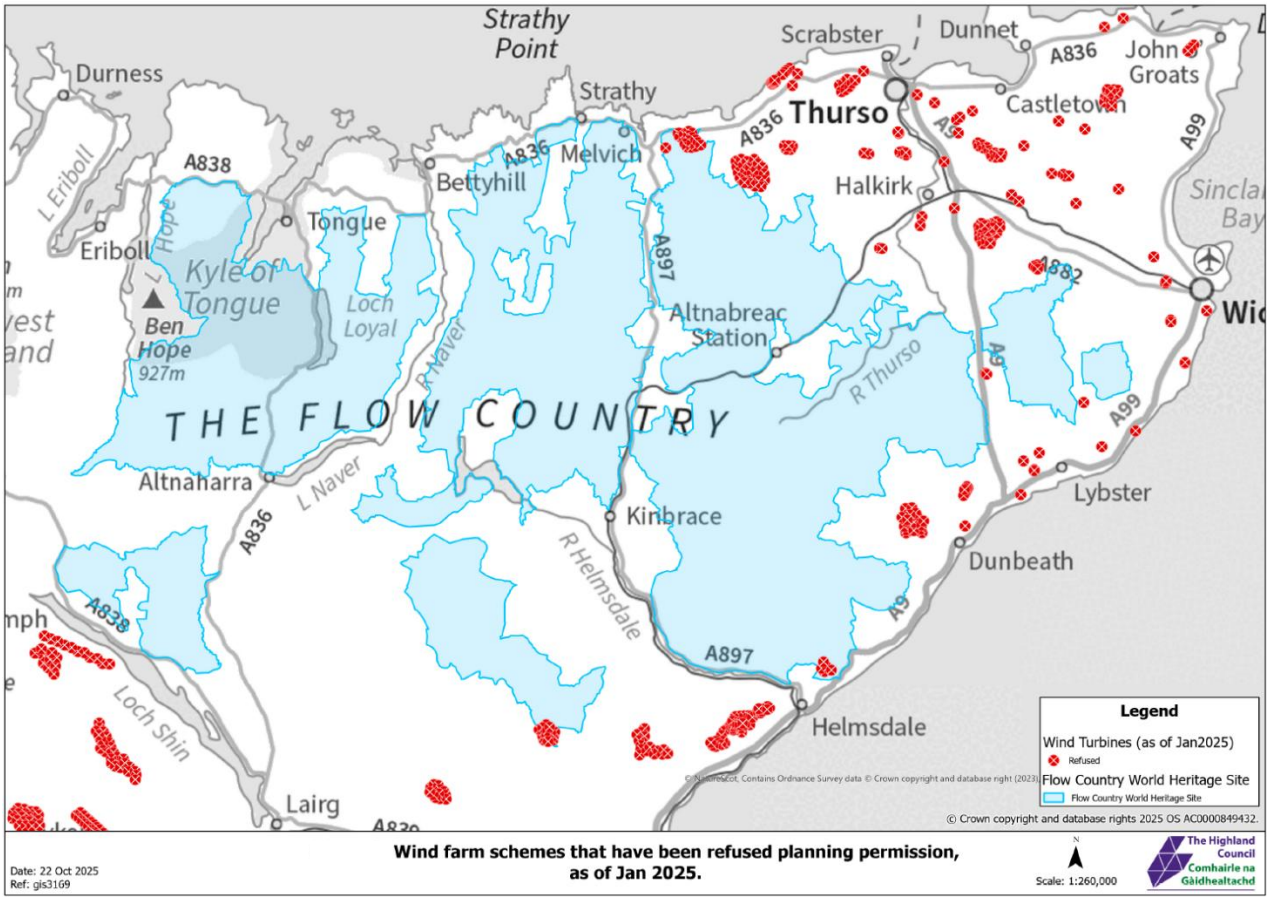
Specifically in relation to the Flow Country, it is an area in which there are existing, rejected and proposed wind farms around the Site. The maps below show turbines that have been proposed and their planning status.

[92] NatureScot Research Report 1350 - Cumulative collision impact modelling on bird species of Caithness and Sutherland Peatlands Special Protection Area (SPA) – within the context of the Proposed World Heritage Site | NatureScot



Wind farm schemes that are constructed, under construction, approved or in planning (that are currently subject of an application for consent that has yet to be decided), as of Jan 2025.

Figure 6.1 Schemes that are Constructed, Under Construction, Approved, or in Planning (as at 2025)



Wind farm schemes that have been refused planning permission, as of Jan 2025.

Figure 6.2 Schemes refused permission (as at 2025)

In IUCN's Technical Evaluation document, they said:

- *[IUCN] Requests the State Party not to approve any wind turbines that are proposed to be constructed within the property and to ensure that any proposed developments in proximity of the nominated property that may impact on its Outstanding Universal Value (OUV) are assessed for their potential impacts, in line with the Guidance and Toolkit for Impact Assessments in a World Heritage Context, prior to making any decision that would be difficult to reverse;*

Although this was in response to a *specific part* of the supplementary information[13] provided to IUCN, the implication was that wind farms were being singled out. In response to this, the Site team set out that '**all**' development proposals must be assessed for their potential impacts, not just wind farms. This was agreed with by IUCN[15] so that no sector is perceived differently to others.

Effectively, whilst NPF4 is firmly and proactively in support of renewable energy, and NPF4's policies does not *preclude* wind farm developments within the property boundary, it does raise the bar which developers will need to pass for them to be allowed to progress, with OUV being used to define the 'qualities' of the area chosen against which developers will need to prove no negative impact. More details on the approach to assessment used by UNESCO, in particular the no-offset mitigation rule, see the *Guidance and Toolkit for Impact Assessments in a World Heritage Context*[93].

Hydroelectric Schemes

Other potential developments in the region include small-scale hydroelectric power schemes on rivers, for which there is renewed interest, with several schemes having consent in the west of Sutherland (The Highland Council, 2018). As well as potential water quality issues, there may be impacts from access tracks and pipe installation. These will be considered on a case-by-case basis and are likely, but not necessarily, to be outside of the Site itself.

Satellite Launch Station

There is currently a consented proposal to erect a satellite launch station on the Melness Crofters Estate on A'Mhoine peninsula, North Sutherland. Launch related infrastructure will include a launch operations control centre, launch site integration facility, launch pad complex, antenna park, access road, fencing, services and associated infrastructure. This project has already received planning approval from The Highland Council and is outside of the boundary due to the poorer quality of the peatland habitat, but it is clearly within the setting.

Summary

Challenges

Potential negative impacts on the blanket bog within the boundary from major new developments are low. Damage to deep peat and/or the biodiversity that depends on that peat is a negative impact on OUV, which would likely be an unacceptable impact on the natural environment and would not align with the protection and preservation of OUV. However, there is potential for a greater impact on bird populations – not part of OUV but an associated value - and the way the Site is experienced, should the numbers of wind farms, or other developments, increase around the Site's boundary area. This is notwithstanding the acknowledgement that windfarms are already present within parts of the wider setting.

Opportunities

The principal opportunities from development schemes that do progress are through leveraging developer funds both to undertake peatland restoration and species recovery within, and adjacent to the World Heritage Site area or in the setting as well as contribution to wider community benefit funds within the local area. There are also significant opportunities in providing large-scale monitoring schemes as well as educational benefits specifically around energy generation and the contribution towards combatting climate change, one that is illustrated by the adjacency of renewable energy developments and blanket bogs. New developments also provide accessible outdoor access in the utilisation of wide and well-maintained access tracks.

[93] https://whc.unesco.org/en/guidance-toolkit-impact-assessments/

6.8 Visitor management

Background

The influx of visitors to the North Highlands through very successful marketing campaigns such as the North Coast 500 (a motor touring route around the north coast of Scotland) has brought much needed income and jobs to the area, but this has not been without its challenges to both local services and fragile ecosystems such as the peatlands. Although there had been steady growth in tourism until 2019, the reopening of tourism following the COVID-19 travel restrictions brought a change to the market, most notably an emphasis on domestic visitors with many choosing to come by motorhome or camping and caravanning. This trend has remained popular for both national and international travellers suggesting the numbers visiting in this way will likely continue to stay high. While the vast majority of overnight visitors and day-trippers will behave responsibly, the sheer volume of visitors, allied to inappropriate behaviour by some, can create some pressures on rural destinations notably:

- Many roads in Caithness and Sutherland, including most crossing the Flow Country, are single track with passing places and the increased use by vehicles can cause road edge and verge / vegetation damage as some vehicles attempt to pass without using formal passing places.
- Increased congestion on these single-track roads can cause disruption and frustration for local residents
- Increased numbers of “wild” camping in tents or informally overnighting in motorhomes or cars with roof tents causes erosion of some sites, particularly as the same sites can often be used night after night
- Lack of toilet and waste disposal facilities at some of these locations has led to indiscriminate toileting / human waste issues
- Litter being left in or alongside roadsides or within bins which in rural areas are not emptied as frequently. This not only looks unsightly and is unhygienic, but it can also pose a hazard to wildlife and the environment. Windy weather often exasperates the issue by spreading litter further around the area.

Management

Part of the promotion of the World Heritage Site is to encourage people to visit, learn and explore the Flow Country and wider area, deepening their appreciation of the unique landscape, wildlife and culture. With this increase in visitor numbers, it is therefore important to ensure the correct messaging around stewardship and protection of the Flow Country is conveyed to anyone visiting the area. Visitors should be encouraged to be mindful the sensitive nature of the peatlands and the potential impact they can have on the area.

Some improvements in infrastructure are required, such as enlarged parking areas at locations likely to receive more visitors or provision of public toilets in an area that currently has very limited provision, and some of this is already happening. A team of Access rangers are present in the area to educate and inform visitors about appropriate and responsible behaviour. Currently, the Access rangers focus on existing hotspot areas experiencing the most significant pressures, additional Ranger presence may need to be reviewed if certain areas of the WHS increase in popularity. Some one-off infrastructure provision such as additional parking could be provided relatively easily with funding support, but it is recognised that the sensitive nature of the location would require appropriate location, design and materials. Other services to help cater for and manage visitors such as the operation of public toilets and additional waste collections have ongoing revenue costs that would require consideration.

Increased tourism can provide challenges in visitor management, especially in areas already experiencing the effects of increased popularity. It is therefore essential to ensure the correct messaging surrounding the sensitivities of the peatlands and the responsibility people have to ensure their protection, is portrayed to every visitor. In turn, increased tourism can provide a boost in local economic development, job retention and growth of local skills and knowledge.

Summary

Challenges

The challenges posed to the Site from tourism pressure are real, and visitor infrastructure and amenities can be few and far between. These restrictions can lead to inappropriate and damaging behaviour and negative associations with increased tourism, especially from local residents. The management of visitors over such a large area as the WHS will remain a challenge and the promotion of correct messaging and responsible behaviour will be an ongoing job.

Opportunities

Despite the challenges, the opportunities arising from the promotion of World Heritage status from careful, responsible, slow and even regenerative tourism could be proportionally important for the area. Benefits to the local economy, job creation and the retention of people to the area are all possibilities if promotion of World Heritage status is handled well over the initial 5-10 years.

6.9 Water catchment management

Background

Water is fundamental to a high-quality blanket bog, so its properties within the catchments are of critical importance. Erosion, water-table levels and the potential impact of climate change has been mentioned elsewhere so this section is focused on water and biodiversity.

The peatlands of the Flow Country cover a vast swathe of Caithness and Sutherland, and their management influences the water quality in burns, rivers and lochs both within the peatlands and throughout their entire catchments. This, in turn, affects the biodiversity and ecosystem health of the blanket bog, and hence the OUV of the Site. There is an intimate link between management of the peatlands and fisheries, with fish spawning areas and juvenile habitats often found in the smaller tributaries of the peatlands, and care needs to be taken to ensure their protection.

Fish and other freshwater species

Atlantic salmon, sea trout and brown trout are important species, not just for a thriving ecosystem but also to the economy of the area. Atlantic salmon and sea trout populations have declined markedly through most of their ranges over recent decades, due to a combination of factors including higher mortality at sea and changes in land and river management both here and abroad. Populations have, however, remained strong over much of north and east of Caithness and Sutherland compared to other regions of Scotland. This is perhaps in part due to the naturally high productivity of the rivers, resulting from the underlying geology. The Rivers Thurso, Berriedale, Langwell, Borgie and Naver have their origins in the blanket bogs of Caithness and Sutherland and are all SACs for nature conservation interests that include Atlantic salmon. Some rivers of the Flow Country also support freshwater pearl mussel populations, the life-cycle of which is dependent on the presence of salmonids and very high-water quality, with their international importance reflected by SAC status.

Brown trout are found in lochs and rivers across the area. Their populations are generally healthy and reflect the productivity of the waters – high productivity in areas where carbonate rich lithologies[94] feature in the geology, and low where peat predominates in dubh lochans, limiting the influence of the underlying bedrock.

Management for fish and other freshwater species

Negative pressures on the fish are currently regarded as moderate, with the main impacts currently being from low and irregular water levels, especially during summer, reduction in native riparian tree cover, increasing water temperatures, and silt transport from deep and eroding drainage ditches. Such pressures will also impact on freshwater pearl mussel populations and the salmonid fish on which they depend. Illegal pearl fishing also remains a particular threat for the freshwater pearl mussel. Impacts on salmonids will affect the globally threatened Atlantic Salmon which these waters support and also on sport angling. Lowering of the water table may also have an impact in terms of groundwater retention and burn feeding, but these are likely to be minor.

Summary

[94] Such as the Caithness Flagstones

Challenges

Challenges affecting the freshwater resource of the Flow Country and related OUV of the WHS can arise from, for example, historical drainage, afforestation, wildfire and the associated run-off and erosion that can occur. Climate change, however, is the biggest direct challenge, in that hot, dry summers have resulted in very low water levels in some Flow Country rivers putting strain on some species populations, but a thriving peatland can help maintain local microclimates and also store water allowing for its steady release over the drier months.

Opportunities

Restoration of the peatlands through blocking drains and forest-to-bog restoration is the biggest opportunity to improve the quality of freshwater catchments throughout the Flow Country as well as the associated OUV.

6.10 Other issues

Peat cutting

Peat cutting for domestic fuel is a long-standing traditional practice in the Flow Country, and more widely across Scotland, governed by Turbary rights[95]. However, it is much less intensive than it once was, and now only affects a few areas on the fringes of the bog, as part of crofts or adjacent to in-bye areas. On peatland with a statutory conservation designation domestic peat cutting is subject to discussion and approval under SSSI procedures. No commercial peat cutting for fuel, horticulture or whisky production takes place within the European sites, and because of the small-scale nature of domestic use, peat cutting is not seen as a significant risk to the WHS.

Land tenure

As introduced in Chapter 2, the majority of the Site is in private ownership. Landowners and managers were contacted as part of the 2019 and 2022 public consultation exercises and the overwhelming majority of those who responded were supportive of the bid. Many private owners are represented by Scottish Land & Estates (SLE) who sit on the stakeholder Partnership. SLE is a membership organisation for landowners, rural businesses, and rural professionals, and have developed a series of commitments to which members subscribe, setting out the principles and responsibilities of modern land ownership[96]. They have also instigated a Wildlife Estates Scotland initiative[97] in line with principles of the EU Wildlife Estates label, in which members commit to agreed standards of management which are compatible with maintaining the interests of areas of blanket bog and other important natural habitats.

About 12% of the Site (23,000ha) is owned by RSPB Scotland and Plantlife Scotland. These organisations have management plans that focus heavily on peatland restoration and management, thus enhancing OUV. Both organisations liaise and engage with local communities regarding reserve management.

The complexities of land ownership in The Flow Country WHS are challenging but not a significant issue. The approach towards peatland management has changed for the better in the last 30 years and although there are likely to be some continuing issues, the structures are in place to resolve problems that are encountered. Having an engaged and supportive group of landowners is seen as an opportunity and current movements towards green finance will incentivise their engagement.

As set out in the introduction to this chapter, the involvement of landowners, and their representative body (Scottish Land and Estates), in the wider stakeholder partnership, which is responsible for overseeing the WHS, is critical. Moreover, the process of compiling the Nomination Dossier for World Heritage status has provided opportunities to engage more strongly than ever before with landowners across the region.

Carbon markets and green finance

There is increasing interest in The Flow Country, and natural space in Scotland more widely, in respect of the carbon trading market. Corporations are starting to buy land for carbon off-setting, trading or to 'land bank' areas for this purpose in the future. Whilst it is in its infancy, trading on the voluntary carbon markets is governed by a number of verification schemes and the 'industry' is developing at pace.

[95] Turbary is the ancient right to cut turf, or peat, for fuel on a particular area of bog (https://en.wikipedia.org/wiki/Turbary)
[96] https://www.scottishlandandestates.co.uk/about-us/landowners-commitment
[97] https://www.scottishlandandestates.co.uk/wildlife-estates-scotland

In relation to peatland, the situation is complex in that currently it can only be the recipient of carbon-related funds if the land is degraded and under restoration[98], rather than under effective stewardship or management. Moreover, the system is such that land needs to be of a certain size in order for it to benefit from the schemes, leaving the many smaller landowners locked out. Land holding and tenure adds further complexity.

The Flow Country blanket bog stores over 400m tonnes of carbon and is therefore attractive for investment as part of efforts to reach net zero through retention and sequestration of carbon in the peat and removal of carbon from the atmosphere. It is too early to say how any of this may affect the World Heritage Site but work in these areas is being led by the Flow Country Partnership on a Green Finance Initiative[99] that will also have a significant role in the resourcing and management of the Site in the long term. This work aims to establish a highly ethical, locally managed and transparent carbon investment proposition for the landscape that secures large-scale peatland restoration alongside wider biodiversity benefits. In addition, this work will also bring about local community and economic benefits as highlighted within Scottish Land Commission's *Community benefits from natural capital investment good practice guidance*[100], that looks to maximise positive, multi-functional benefits for local communities. Ensuring and maintaining active carbon sequestration and maintaining carbon storage in the blanket bog will protect the OUV and is therefore considered more positive than negative for the WHS, but only if managed well.

Site growth and peat management capacity building

One significant opportunity is in terms of the potential for Site growth. Around 73% of the boundary area is within protected areas (see Chapter 6), and the challenges noted above notwithstanding, is for the most part in good and improving condition. However, with increasing restoration incentives from government and green finance, there is scope for a wider area of more degraded peatland to be effectively restored and potentially gain designated status, and over a 25+ year timescale be proposed for inclusion in the WHS.

Subject to public consultation, it is hoped that The Flow Country World Heritage Site could become one of the few in the world that may be able to expand. This will only be in areas of blanket bog that are shown to be on track to reverting to a natural ecosystem, and that meet OUV.

Finally, there are also opportunities to expand on the global centre of excellence for peatland restoration and science that this area is already and something which World Heritage status could aid going forward. Working with landowners, government and the University of the Highlands and Islands, there is real scope for training and skills development in this field, potentially helping to build the capacity of other key locations around the world.

6.11 Summary

This chapter highlights the complexity of the Flow Country as an exceptional blanket bog landscape, but one that is also a living landscape. Like almost anywhere in the world, the Site is not untouched by human influence and has been subject to significant pressures and policies with sometimes, in the past, unfortunate consequences.

However, it is a place of great opportunity and optimism. The international, national and local communities and policymakers have recognised the value of peatlands, and this robust and exceptional example of the blanket bog landscape will only increase its ability to demonstrate why it has OUV in respect of ecosystem processes and biodiversity.

The policies in Chapter 7 set out how, as a Partnership, the challenges and opportunities[101] expressed above will be addressed, and there is a confidence that although many changes will take time, there is nothing that cannot be tackled with the right expertise and resources.

[98] https://www.iucn-uk-peatlandprogramme.org/peatland-code
[99] https://theflowcountry.org.uk/green-finance/
[100] https://www.landcommission.gov.scot/downloads/67f626a7a454d_Community-benefits-from-natural-capital-investment-Route-Map.pdf
[101] A Site-wide risk register will be developed to summarise these issues between submission of the nomination to UNESCO and the decision of the World Heritage Committee in 2024.

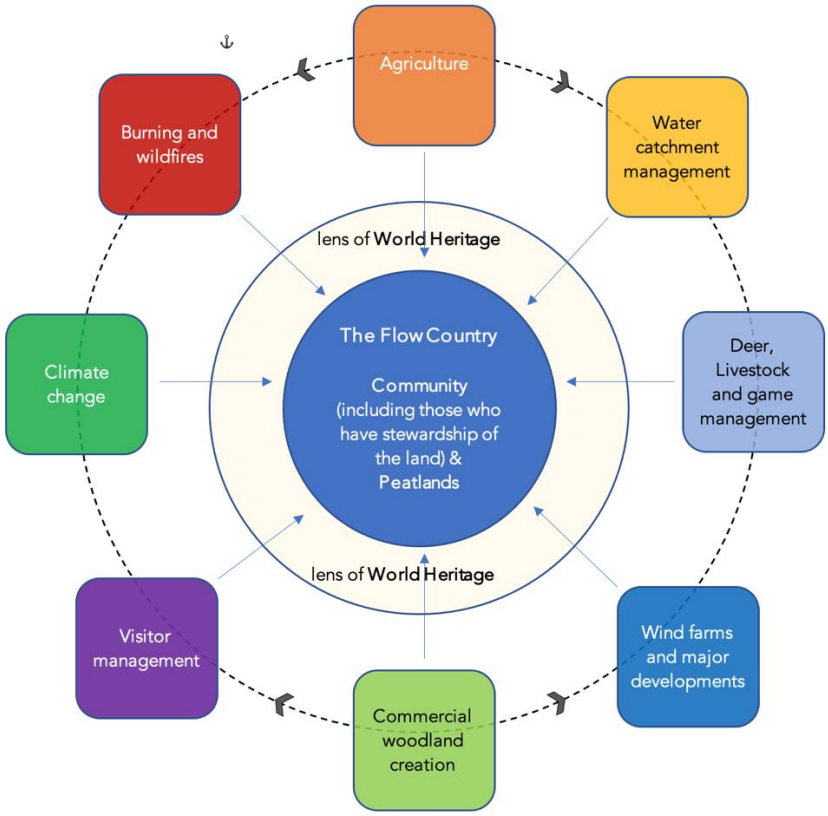


Figure 6.1 Schematic showing the various issues that impact on the Flow Country, and on each other, with the added lens of World Heritage Status

PART 3

Chapter 7. Strategic framework

This chapter sets out the vision and aims for the World Heritage Site. It allies closely with The Peatlands of Caithness and Sutherland Management Strategy (PCSMS) but needs to be distinct from that Plan due to the international expectations set out by the UNESCO designation.

This chapter first highlights the international context in which World Heritage sits and the Sustainable Development Goals (SDGs) which need to be addressed within this document. It then identifies the **strategic framework**, including **vision, themes, aims and policies**, working through each of the themes in turn. It sets out **priority objectives** for each theme but does not attempt to define actions; these will be set out in a separate document to accompany this Management Plan.

7.1 International context

World Heritage Convention

As set out in Chapter 2 the starting point for any World Heritage Site is the Articles of the Convention, most notably 4, 5 and 27. They are the 'legal' basis for any work done in the name of UNESCO and underpin this strategic framework.

The key text in Articles 4, 5 and 27 are:

4. **Identify, protect, conserve, present and transmit to future generations** the natural heritage, with the State doing "all it can to this end, to the utmost of its own resources"

5. i) "adopt a general policy which aims to give the cultural and natural heritage **a function in the life of the community**"

5. iii). "develop **scientific and technical studies and research**, and to work out such operating methods as will make the State capable of counteracting the dangers that threaten its cultural or natural heritage"

27. The States Parties to this Convention shall endeavour by all appropriate means, and in particular by **educational and information programmes**, to strengthen appreciation and respect by their peoples of the cultural and natural heritage defined in Articles 1 and 2 of the Convention.

Sustainable Development Goals

In addition, in 2015 the World Heritage Committee agreed a policy to integrate the global Sustainable Development Goals into the implementation of the World Heritage Convention. The SDGs are set out in Figure 7.1 below, and the policy[102] adopted by UNESCO uses the following four categories:

- Environmental Sustainability
- Inclusive Social Development
- Inclusive Economic Development
- Fostering Peace and Security

[102] https://whc.unesco.org/en/sustainabledevelopment/



Figure 7.1 The Sustainable Development Goals[103]

Whilst some of these are more pertinent, and indeed urgent, for countries in the Global South, than for a highly developed nation such as the UK, all the SDGs have relevance to society overall. In creating this document, we have considered how each policy area relates to the SDGs and have used the graphic emblems above to show which are most relevant. Some will be more relevant than others and the move from policy to action – in a different document – is where the real test of SDG implementation is enacted.

In terms of development and implementation of the plan, however, the following SDGs are very broad guiding principles or approaches to which we intend to work:



[103] Find out more at https://sdgs.un.org/goals

UNESCO Mission

UNESCO's overriding mission is that of seeking "*to build peace through international cooperation in Education, the Sciences and Culture*".



Figure 7.2 Expression of peace in UNESCO's mission[104]

UNESCO notes that *"sites are also spaces for sustainable development and reconciliation".* Building peace comes in many forms, and whilst not in a conflict zone, The Flow Country can contribute in two ways, both of which link to the climate change agenda:

1) Through **effective stewardship of a vast and outstandingly important peatland as a carbon sequester and store**. This is part of the wider UK contribution from the UK to reduce conflict that might arise through climate change.
2) Through **international collaboration, skill sharing and dissemination of research** to help peatland restoration globally.

This is something that we will be exploring over the lifetime of this Management Plan for inclusion in delivery plans and future revisions of this document.

[104] https://unesdoc.unesco.org/ark:/48223/pf0000217786

7.2 Policy framework

Vision

Our vision is that World Heritage Status for The Flow Country will ensure that its world-class blanket bog, associated biodiversity and carbon storage ability is protected and enhanced, that it is an unparalleled and accessible natural resource for education and well-being, and that the status is beneficial both for our vibrant communities and our visitors.

Themes

The Aims, Policies and Priority Objectives for the World Heritage Site are broken down into themes. Whilst inevitably there are crossovers and ambiguity in respect of which policy fits where, it is helpful to look at it in this way. The themes are:

1) **A sustainably managed blanket bog, for peat, biodiversity and carbon.**
2) **Peatlands as a living landscape.**
3) **An educational and research resource of unparalleled value.**
4) **A well-managed and supported World Heritage Site and status.**

Each of these is explained in more detail below. There are also two themes cutting across many of the policies within the main themes. They are:

1) **Improved access and infrastructure for all, including policies that relate to Equality, Diversity, and Inclusion (EDI).**
2) **Actions to support Climate Change mitigation and adaptation.**

It is important at this stage to recognise that although the Site was not inscribed under criterion x, for biodiversity, that biodiversity is an integral part of the blanket bog. So, whilst the Site's fauna and flora is not *explicitly* within OUV, the nature of the blanket bog is such that it is *implicitly* part of the ecosystem. Therefore, the policies that relate to criterion x in the pre-inscription Management Plan are still every bit as relevant here.

Policy Framework

Within each of the main themes there is a set of **aims** which give a strategic direction. Below that, there is a set of **critical success factors**, or 'hoped-for outcomes' which set out what the theme and its aims mean in practice, and in very real terms tries to show what success would look like.

These are followed by a set of **policies**, grouped by sub-theme. These are a mixture of *passive policies*, which states the partnership's position if a specific action was to arise, and *active policies*, which state a position that would need actions in order to bring it about. Not all policies will result in actions, nor will they all be able to be addressed over the life of this Plan, but they do set a clear line in the sand as to the position of the World Heritage Site should opportunities arise.

The context to policies is set out in Chapters 5, 6 and particularly 7. Please refer to these sections for more detail. When interpreting policies, it is best to see them as introduced by the phrase ***"The Partnership will…"***, referring to the WHS Partnership as represented by its Steering Group and as identified in Chapters 1 and 8. The organisations identified in the third column of the tables are those members of the partnership or wider stakeholder group for whom there is either a statutory or expected responsibility to have role(s) in the implementation of the policy.

At the end of each section there is a set of **priority objectives** which set out the key priorities for the period of the Plan. Whilst it is important to consider all areas of work as equally important, with a scarcity of resources there has to be prioritisation, and whilst it does not mean other policies will not be addressed, it enables the stakeholder Partnership to have a clearer vision about Plan delivery.

The delivery of this Plan is set out in Chapter 7, but as actions change based on available resources and priorities, these will be set out in a rolling Action Plan managed by the Flow Country WHS Team (FCT).

Table 7.1 Acronyms of organisations mentioned in the policy tables

CC	Crofting Commission
CoCo	Community Councils
DMG	Deer Management Group
DT	Development Trusts
ERI	Environmental Research Institute (part of UHI)
FCP	Flow Country Partnership
FCT	Flow Country Team
FLS	Forestry and Land Scotland
HIE	Highlands and Islands Enterprise
NHC	North Highland College
NMS	National Museum of Scotland
NR	Network Rail
NS	Nature Scot
RSPB	Royal Society for the protection of Birds
SEPA	Scottish Environmental Protection Agency
SF	Scottish Forestry
SFRS	Scottish Fire and Rescue Service
SG	Scottish Government
THC	The Highland Council
VN	Venture North
VS	VisitScotland
UHI	University of the Highlands and Islands

A glossary of peatland terms can be found at the end of the document.

Theme 1: A sustainably managed blanket bog, for peat and biodiversity

This theme addresses Article 4 of the Convention, and supports all criteria, integrity and protection and management pillars of OUV. It also addresses the following Sustainable Development Goals:



Introduction

First and foremost, this theme is about the maintenance of existing high quality blanket bog and associated ecosystems within the boundary, and the associated biodiversity. In all circumstances, whether the bog is in good condition or not, this is achieved through the prevention of harm, through the planning system and other regulatory regimes, and land management practices such as deer management. Prevention of harm is also helped by statutory protected areas, something that covers c.73% of Site area.

This prevention of harm also relates to areas outside the Site boundary – in the setting – that might have a negative impact on the OUV within. This might include, for example, the potential impact of developments on water that flows into and through The Flow Country. The setting is discussed in Chapters 2 and 4 and again will be referred to within this section.

In terms of areas of bog included within the boundary in less than pristine condition, this theme will focus on policies relating to restoration[105] which works both for the benefit of the blanket bog and its associated biodiversity. Restoration will benefit from the 'passive' policies of prevention of harm as described above, and from 'active' policies and measures. These might include removal of forestry, blocking of drains, reduction of deer density, use of geotextiles on eroded peat, amongst others. Scotland is fast becoming a world leader in peatland restoration and the techniques used, all of which are long-term, can be shared internationally.

These factors will, when implemented successfully and in parallel, not only lead to sustainable management of the blanket bog and restoration where necessary, but also together will maintain and strengthen its role as a carbon sink and store.

For background information about some of the policy areas discussed in this theme, please refer to Chapter 6.

[105] and *maintenance* of restoration, although this is considered within this document to be part of the restoration process

Aims

The aims for this theme are set out here, along with a means of monitoring them, a broad timescale and a target (if applicable). The policies set out in subsequent pages will address one or more of the aims.

Aim 1.1	To protect existing near-natural[106] bog in good condition.
Aim 1.2	To enhance degraded bog through restoration and/or changes in land management.

Critical Success Factors

Aims are important for giving direction, but how do we know whether the aims are achieving outcomes important for OUV? How will we know we have got it right? The following are the three most important critical success factors for this theme, that relate to the aims above and the theme more broadly:

No.	CSF	Timescale for measurement
CSF 1.1	The area of blanket bog in near-natural[106] condition and under active restoration is increasing	5-6 years
CSF 1.2	Ensure current and restored areas of blanket bog continue to exist as a functional peatland that supports the wider ecosystem, monitored via NatureScot's condition-based assessment.	5-6 years
CSF 1.3	The carbon sequestration role of the blanket bog with The Flow Country is improving.,	5-6 years

Monitoring and Evaluation

The Monitoring and Evaluation of Theme 1 will be based on the methodology of NatureScot's Site Condition Monitoring, that will be used to monitor the blanket bog features of the WHS both within and out with the overlapping SAC and SSSI. This will be in combination with data provided in conjunction with SEPA as well as by remotely sensed monitoring and analysis led by ERI.[107]

[106] Under NatureScot guidance, 'near-natural' condition is the highest quality. See: Guidance-Peatland-Action-Peatland-Condition-Assessment-Guide-A1916874.pdf

[107] Indicators and frequency have to tie in with the monitoring section of the nomination document.

Policies

Guiding principles

Protecting the Outstanding Universal Value (OUV) is fundamental to managing the WHS. While this does not preclude development or activity in or around the WHS, the impact of any future developments on the site's OUV should be properly assessed in the planning stage. In cases where developments are permitted within or around the Site's boundary, avoiding any negative impact on the OUV should be a priority, as any impacts cannot be mitigated or offset. Due to the irreplaceability of World Heritage, any negative impact on OUV in one part of the Site would be seen as a negative impact on OUV of the whole property.

In order to benefit from permitted development rights, peatland restoration itself is required to undergo the Prior Notification process under The Town and Country Planning (General Permitted Development and Use Classes) (Scotland) Amendment Order 2020. Guidance on this process is outlined within the Heads of Planning Scotland (HOPS)'s emerging Guidance on Peatland Restoration Prior Notification[108] that outlines the planning requirements for both those undertaking peatland restoration and planning authorities. This process intends to highlight any issues and mitigation that may be relevant to the planning authority's consideration before the restoration works can begin.

Where the potential effect of an action, or development, on all aspects of OUV is not fully understood (e.g., cumulative impact of deer trampling on bog condition) research that would help inform policy on how best to provide protection will be supported.

Climate statement

The following policies focus on conserving and growing the area of blanket bog, and its biodiversity. These are intrinsically positive policies for carbon sequestration, and include measures such as restoration, reduction in erosion and prevention of burning. It also discourages woodland creation on peat, which, although is itself a carbon sequester, is not only harmful to OUV, but is considered a less secure and shorter-term carbon store than peat. Up to date best guidance will be followed for all peatland restoration techniques (such as Peatland ACTION's Scotland's Peatland Standard[109]) and will continue to be reviewed and updated during the lifetime of this Plan.

Actions arising from policies will be subject to scrutiny in respect of their potential climate impact, which will be reduced where possible.

Note: The Site's management team, the Flow Country Team (FCT) will have a coordination or facilitation role in many of these policies but are only stated specifically when it is their primary job, as opposed to that of another organisation.

No.	Policy	Responsible / influential bodies
Forestry and woodland		
1.1	Support guidance from Scottish Forestry[77] that restricts conifer forestry creation on peat of a depth of 50cm or over, where this would negatively impact OUV.	SF, NS, THC
1.2	Encourage blanket bog restoration, as opposed to restocking of existing plantation woodland on deep peat within the boundary, following Scottish Forestry guidance.	SF, NS, THC
1.3	Evaluate any woodland creation adjacent to the Site boundary in respect of potential impact on the Site's OUV, and challenge if the likely impact is negative.	SF, NS, THC

[108] Guidance and Good Practice Documents – HOPS
[109] Peatland ACTION - Scotland's Peatland Standard | NatureScot

No.	Policy	Responsible / influential bodies
1.4	Encourage and support the removal of any plantation woodland regeneration within the Site boundary.	FCP, SF, THC, RSPB, landowners
1.5	Identify suitable areas for natural regeneration or planting of native woodland for biodiversity benefits where there will be no detrimental effect on OUV.	SF, NS, FLS, FCP
Restoration of peatland and associated habitat		
1.6	Encourage and support the restoration of blanket bog within the Site boundary where commercial forestry, historical land drains, ploughing or other factors have negatively affected it.	NS, FLS, FCP
1.7	Incorporate areas adjacent to the boundary into the Site in future if restoration status allows, and public consultation proves supportive.	CF, SG
National and Major Developments (see Chapter 7 for definition and more details)		
1.8	Assess all proposed national and major developments for impact on OUV within the site boundary or setting. Oppose proposals which would negatively impact OUV	THC, NS, SG
1.9	Support national and major development proposals that would benefit the aims of this Management Plan, the Site's OUV or have related public benefit.	THC, NS
Local developments (see Chapter 7 for definition and more detail)		
1.10	Assess all proposed local developments for impact on OUV within the site boundary or setting. Oppose proposals which would negatively impact OUV	THC, NS
1.11	Support local development proposals that would benefit the aims of this Management Plan, the Site's OUV or have related public benefit.	THC, NS
Crofting and farming		
1.12	Support low intensity grazing practices within the boundary area, ensuring that stocking levels do not increase to a point which starts to negatively affect the OUV.	Landowners, DMGs, Crofters, Farmers, CC
1.13	Support the maintenance of in-bye land on crofts within the setting of the Site to maintain a patchwork of land uses of benefit to the OUV and additional values.	Crofters, CC
Deer management		
1.14	Support low intensity grazing by deer within the boundary area for game, as long as the intensity does not negatively affect OUV.	Landowners, DMGs
1.15	Encourage and facilitate research into, and monitoring of, the impacts of deer populations on the blanket bog landscape, with a view to feeding into deer management decision making.	DMGs, ERI, Landowners

No.	Policy	Responsible / influential bodies
1.16	Manage down the density of deer in areas where excessive grazing and trampling are shown to be negatively affecting OUV.	DMGs, Landowners
1.17	Encourage and facilitate communication between different land-use managers in respect of issues, such as fence lines, that can negatively affect OUV.	FCP, DMGs
Peat cuttings		
1.18	Discourage attempts to establish commercial peat extraction within the boundary or immediate setting.	NS
1.19	Encourage those with turbary right to adhere to peatland management guidance set by NatureScot.	Crofters, CC, Landowners
Burning		
1.20	Promote adherence to The Wildlife Management and Muirburn (Scotland) Act 2024 and the subsequent guidance set out in the Muirburn Code.	NS
1.21	Encourage a revision of the Muirburn Code to respect the World Heritage Site as a designation and recognising the risk of adjacency.	NS
1.22	Prevent, where possible, natural or accidental wildfires on the peatlands through visitor management, educational programmes and awareness-raising[110].	THC, Landowners, SFRS, Police, Tourism bodies, Network rail, Tour operators
1.23	Encourage forestry organisations to fully remove brash[111] after timber extraction in order to reduce potential for fires that might negatively affect the Site.	Confor, FLS
Catchment and fisheries management		
1.24	Encourage communication between peatland restoration and river management bodies in order to avoid any negative impact on fish life cycles.	Fisheries Boards
Conservation designations		
1.25	Seek to enhance the condition of areas within the Site boundary that are *not* currently within conservation designations, so that they might meet criteria to allow them to be included in designations in the future, following favourable public consultation.	Landowners, NS, SG
1.26	Maintain or improve the quality of the natural condition of existing Protected Areas within the Site.	Landowners, NS
Access		

[110] Reference Scottish Outdoor Access Code/Land Reform Act 2003

[111] Unless the brash is used as part of the restoration process, and within guidelines

No.	Policy	Responsible / influential bodies
1.27	Through education and encouragement to follow good practice[112], inform existing users of vehicles for agriculture, stalking or forestry within the boundary of the potential damage caused by vehicle tracking to minimise damage to the blanket bog and associated biodiversity.	Landowners, NS, THC, SEPA
1.28	Oppose new 'private ways'[113] that would negatively affect OUV, either through direct damage to blanket bog, by drainage or animal disturbances.	THC
1.29	Encourage new access arrangements or infrastructure for people to better enjoy, explore and understand the WHS with no negative impact on the OUV[114].	THC, NS, landowners
Visitor management		
1.30	Ensure that any new arrangements to improve the visitor offer for the Flow Country are planned proactively and will adhere to visitor management measures (as outlined within Sustainable Tourism Strategy[115]) to ensure no negative impact on the blanket bog, aims to be carbon neutral, and follows the relevant guidance as set out in the Scottish Outdoor Access code.	Private sector, THC
Policy development		
1.31	Work proactively with the Local Authority, government agencies and businesses to influence strategy and policy in respect of The Flow Country to avoid potential future conflicts.	FCP

Priority Objectives

Key pieces of work for the first 5-6 years need to be identified. These *could include:*

1A. Identify and support the implementation of restoration schemes.

1B. Support research programmes which further our understanding of blanket bog ecosystems.

1C. Develop supplementary planning guidance for those wishing to undertake development in the setting of the World Heritage Site.

[112] https://cairngorms.co.uk/wp-content/uploads/2021/03/CNPA_ATV-Leaflet_web_final.pdf

[113] A private road – in this case across hills or bog

[114] Damage to OUV has a lot to do with scale. A well-built boardwalk will have a slight temporary impact on the peat on which it is built, but overall, there will be no negative impact on the OUV.

Theme 2: Peatlands as a living landscape

This theme addresses Articles 4 and 5 of the Convention and supports the protection and management pillars of OUV. It also addresses the following Sustainable Development Goals:



Introduction

The Flow Country is not a wilderness. The blanket bog is an ecosystem formed by natural processes, but it has been and continues to be impacted by people. This is either at the macro scale, through global or atmospheric changes, or at a local level, through to small-scale agriculture and peat cutting, deer management and tourism.

This does not mean it is in poor condition. As discussed earlier in this document, much of it is in good and/or improving condition, and people will continue to influence the conservation of this site into the future. There are small communities, crofts and farms within and around the boundaries of the Site, many of which struggle with the economic pressures and demands of living and working in such a remote location and often harsh climate. There are many who are active in tourism, a complicated industry affected by the weather and seasonality, but one which has a huge amount to offer. There are also many people who see themselves as custodians of the area and look after their part of it.

There is also an aspiration throughout the Highlands to develop a more circular local economy that is based on the incredible natural assets the area has to offer, for example its peatlands, mountains, sea and sea cliffs, long distance paths, wildlife, dark skies, amongst others. There is also the industry that surrounds peatland conservation itself – research, earth observation, carbon credits, landscape-scale funding grants for heritage and conservation projects, and project management, as well as the physical work of peatland restoration and ongoing maintenance. Sport shooting and fishing have also been an important aspect of the local economy for the last century. These industries are having to adapt to meet changing public perception and policy, such as the introduction of tighter legislation, moreover the emergence of the green economy, carbon credits and landscape finance need to be considered going forward.

As seen elsewhere, World Heritage Status can be a catalyst for responsible and sustainable economic development, job creation and the retention and growth of skills and knowledge, through both the visitor economy and other local industries. To support this in The Flow Country there will be a need for improvements in infrastructure and facilities that are of value to residents and visitors alike.

For background information about some of the policy areas discussed in this theme, please refer to Chapter 7.

Aims

The aims for this theme are set out here, along with a means of monitoring them, a broad timescale and a target (if applicable). The policies set out in subsequent pages will address one or more of the aims.

Aim 2.1	**To encourage sustainable growth of local employment and economy.**
Aim 2.2	**To explore integration of shorter supply chains into nature-based industries.**
Aim 2.3	**To create appropriate and sensitive improvements to visitor facilities and infrastructure, including virtual resources.**

Critical Success Factors

Aims are important for giving direction, but how do we know whether the aims are achieving outcomes important for OUV? How will we know we have got it right? The following are the three most important critical success factors for this theme, that relate to the aims above and the theme more broadly:

No.	CSF	Timescale for measurement
CSF 2.1	The economy is showing signs of diversification and robustness, attributable to the WHS.	5-6 years
CSF 2.2	The local infrastructure and visitor offer is more accessible, informative and wider in scope.	3-4 years
CSF 2.3	Local communities are happy that the World Heritage Site is working for them.	3-4 years

Monitoring and Evaluation

Monitoring and evaluation for this theme will be undertaken through macro-level data such as economic performance and employment, and at a local level through periodic surveys, website analytics and case-studies of gateway communities. At a more granular level, monitoring will be through the usage of existing or new facilities and infrastructure, such as paths, parking, panels, visitor centres, museum displays.

Policies

Guiding principles

World Heritage Status will be used as a catalyst for the sensible, appropriate and sustainable development of the area, promoting use of the World Heritage brand while remaining true to the Site's values and guidelines.

Any commercial enterprises generated by or capitalising on the presence of the WHS inscription must be subject to rigorous scrutiny in terms of risks and benefits, both in terms of OUV and community benefit and engagement.

Climate statement

The following policies acknowledge that the Flow Country is a living landscape, and that people who live in the area need to be able to make a fair living, and in a way that allows for protection and enhancement of the blanket bog area. Its importance as a carbon sink and store is now being recognised more than ever and this will be central to any work done to promote the area and catalyse sustainable local development.

Actions arising from policies will be subject to scrutiny in respect of their potential climate impact, which will be reduced where possible.

Note: The Site's management team, the Flow Country Team (FCT) will have a coordination or facilitation role in many of these policies but are only stated specifically when it is their primary job, as opposed to that of another organisation.

No.	Policy	Responsible / influential bodies
Visitor and destination management		
2.1	Promote the Flow Country and gateway towns as destinations for visitors and residents alike, based on the natural assets, and with a focus on education and exploration.	VS, VN, THC, Attractions, FCP
2.2	Ensure that visitors accessing the Site are made aware of the Scottish Outdoor Access Code and their responsibilities in relation to accessing the countryside, including with respect to dogs and fires/BBQs.	VS, VN, THC, Attractions, Businesses, Landowners
2.3	Support the further development and growth of Scotland's UNESCO Trail to promote and jointly link the North of Scotland's UNESCO designated natural assets	VS, VN, FCP
2.4	Advocate for the principles of responsible, slow, year-round and even regenerative tourism with visitor economy partners linking to The Flow Country, as outlined within the Sustainable Tourism Strategy[115].	FCT, FCP
Working with local businesses; support and training		
2.5	Encourage local businesses and entrepreneurs to develop products or services that promote circular economy approaches and link to the Site's values. Enabling communities to capitalise on the designation and benefit directly from the economic potential that it brings (as highlighted in The Highland Council's draft Community Wealth Building Strategy[116]).	HIE, Businesses, Communities, DTs, CoCo, FCP
2.6	Provide information and training for local businesses in respect of the World Heritage values and global context of the WHS. Increasing local understanding and appreciation of the World Heritage Site and promoting community-led approaches to tourism.	FCT, VN

[115] World Heritage - The Flow Country

[116] https://www.highland.gov.uk/downloads/download/856/community-wealth-building-strategy

No.	Policy	Responsible / influential bodies
2.7	Advocate for businesses linked to the World Heritage Site and its values, to promote and develop regenerative economic practices and local community-led initiatives that support local supply chains and local producers.	HIE, THC, DTs, CoCo
Walking and cycling access		
2.8	Improve access to The Flow Country when walking, through maintenance and upgrading of existing paths, and creation of new routes to allow people to experience accessible areas of the Site close to hand.	NS, THC, VN, SG
2.9	Improve access to The Flow Country when cycling, particularly through promotion and linking to existing recognised routes, such as the Great North Trail, and the National Cycle Network.	THC, VN, Sustrans
Public transport		
2.10	Encourage an innovative and proactive approach to integrated public transport system and multi-modal travel (combining walking / cycling with public transport) across the Flow Country. Linking Gateway Communities and visitors with key access points of the World Heritage Site encouraging low-carbon access opportunities and maximising health benefits.	THC, ScotGov, HiTrans, Transport providers, Rail Partnership, DTs, Network rail
2.11	Support Scotrail to maximise the potential from running a rail service through The Flow Country. If any new transport or visitor infrastructure is proposed, ensure it is designed and constructed as sustainably as possible.	ScotRail
2.12	Engage with Inverness transport hubs to highlight the choices available to access The Flow Country by public transport during early visitor and transport planning. Promote the utilisation of sustainable travel options, slow tourism and the integration of outdoor activities with public transport benefits.	ScotRail, Inverness Airport, THC. Transport Providers
Roads, signage, parking and associated infrastructure		
2.13	Support plans for official campervan stops – 'aires' – to reduce negative impacts on the Flow Country natural environment and pressure on roadside parking, from unauthorised overnight stays.	THC, Communities, VN
2.14	Improve roadside signage sensitively in respect of key access points to the Site and associated attractions.	THC, Attractions
2.15	Support the development of new, appropriate, parking at key access points that facilitate the visitor experience.	THC, Landowners
2.16	Ensure key access roads in the Flow Country are maintained to accepted standards.	THC
2.17	Support The Highland Council's commitment to the ongoing installation and maintenance of EV infrastructure, promoting the Flow Country as accessible by EV.	THC

No.	Policy	Responsible / influential bodies
2.18	Inform vehicle driving visitors about respecting local road users, and driving behaviour and etiquette, through appropriate written and audio-visual products, drawing on or using existing material.	Businesses, Communities, VN, VS, THC, Police Scotland
Cultural heritage		
2.19	Promote the cultural heritage within the Site and wider setting, and its links to the blanket bog landscape.	THC, Museums, FC
2.20	Pursue the provisions of this plan in a way that respects, safeguards and enhances Scheduled Monuments, other cultural heritage interests and sites with archaeological potential.	THC, FCP, FCT
Visitor centres, museums and displays		
2.21	Support the provision and/or upgrade of Flow Country-related material in existing visitor centres and museums within the Highlands, and the National Museum of Scotland where possible.	Museums and attractions, Highlife Highlands, RSPB, NMS
2.22	Maintain and expand outdoor interpretation provision network, to provide a joined-up visitor experience identified through a recognisable and consistent brand.	FCT, FCP, RSPB, THC
2.23	Consider the potential for new visitor facilities and/or a central hub for interpretation of the World Heritage Site[117].	FCT, FCP, HIE
Civic pride and engagement		
2.24	Encourage and support community bodies such as Community Councils to develop appropriate social, economic and cultural aspirations with respect to the WHS.	CoCo, DTs[118]
2.25	Promote heritage volunteering opportunities where appropriate that enhances community engagement with the Flow County, promotes skill development and instils civic pride in the context of the World Heritage Site.	FCT, FCP, RSPB, Communities

[117] As set out in the Flow Country WHS Development Potential Strategy (in development summer 2022)
[118] Including Community-Controlled Bodies within the definition given in section 19 of the Community Empowerment (Scotland) Act 2015)

Priority objectives

Key pieces of work for the first 5-6 years need to be identified. These *could include:*

2A. Audit and improve where necessary the existing physical and virtual interpretation of the World Heritage Site.

2B. Development and funding of a community-led sustainable development masterplan for the wider Flow Country area, including peatland restoration business development, transport, access and visitor infrastructure.

2C. Develop the visitor offer through linking with businesses and entrepreneurs.

Theme 3: An educational and research resource of unparalleled value

This theme addresses Articles 5 and 27 of the Convention and supports criteria and integrity pillars of OUV. It also addresses the following Sustainable Development Goals:



Introduction

UNESCO has at its heart the promotion of peace through collaboration and exchange, and one of the means it expounds to achieve this is through education. Furthermore, Article 27 of the Convention specifically asks that Sites undertake educational work in relation to properties and their OUV. With the importance of peatlands increasingly recognised globally, there is a great opportunity to use World Heritage Status to educate people about the value and importance of peatlands, and to highlight research to understand them better.

At the core of this will be the presentation of information about different aspects of the Site, including the ecosystem as it is now, how it may be impacted by local and global changes, and why it is important to protect and, where necessary, restore and enhance it. Nothing promotes deep learning quite so well as on-site field visits, so the infrastructure necessary for this will be looked at, although given the remoteness of the location, virtual field trips should form a key part of this offer.

In addition to considering the present time, educational work will look at the past, considering the peat as a record of time going back nearly 10,000 years. This incredible 'archive' of life and historical activity over that period can be used to show how the vegetation, climate and people's behaviour has changed over time. The past is the key to the future, and by understanding this past record, we can research and show how future climatic changes may affect the blanket bog.

The Flow Country has been for many years an extraordinary natural laboratory covering all stages of blanket bog development and condition. It has supported international research and with the inception of the Flow Country Research Hub in 2012, coordinated by the Environmental Research Institute (ERI) at the UHI, the area has shown its potential to become *the* leading location globally to better understand how blanket bogs function, and how they will change with our changing climate. World Heritage Status can be used to bring a higher profile to this invaluable exemplar of collaborative, multi-disciplinary research integrating fundamental scientific advances with practical and policy implications.

Aims

The aims for this theme are set out here, along with a means of monitoring them, a broad timescale and a target (if applicable). The policies set out in subsequent pages will address one or more of the aims.

Aim 3.1	**Make a positive contribution to lives of people and communities in the Scottish Highlands and beyond, through educational engagement with the Site.**
Aim 3.2	**To create an enabling and supportive infrastructure for research into global peatlands and its role in climate change.**

Critical Success Factors

Aims are important for giving direction, but how do we know whether the aims are achieving outcomes important for OUV and the planet? How will we know we have got it right? The following are the most important critical success factors for this theme, that relate to the aims above and the theme more broadly:

No.	CSF	Timescale for measurement
CSF 3.1	More people of all ages are engaged and learning about the Flow Country and peatlands.	3-4 years
CSF 3.2	Infrastructure to maintain and encourage education and research is maintained and enhanced where appropriate.	4-5 years
CSF 3.3	The quantity of published research investigating aspects of The Flow Country OUV is increasing.	5-6 years

Monitoring and Evaluation

We will monitor and evaluate progress against the aims of theme 3 through data collaboration with the local schools, colleges across the Highlands, and with UHI. Online analytics will be used to track virtual visits and physical centres and museums will record visitor numbers. Citation indices and other publication tracking databases will be used to monitor publications.

Policies

Guiding principles

Work within theme 3 for the period of the Plan will focus on the biodiversity and climate emergencies, and the roles that The Flow Country can and does play in relation to these. The extra profile that World Heritage Status brings will boost the area for educational and research purposes throughout the Highlands, Scotland, the UK and internationally.

With a view to making learning as accessible as possible, digital options will always be considered. This will run throughout this theme and is also mentioned as part of the cross-cutting elements.

Climate statement

As set out in the guiding principles, polices within this theme will address the climate emergency and use the profile of World Heritage Status to increase awareness and understanding, and advance research opportunities within the Flow Country.

Actions arising from policies will be subject to scrutiny in respect of their potential climate impact, which will be reduced where possible.

Note: The Site's management team, the Flow Country Team (FCT) will have a coordination or facilitation role in many of these policies but are only stated specifically when it is their primary job, as opposed to that of another organisation.

No.	Policy	Responsible / influential bodies
Informal / wider education		
3.1	Promote lifelong learning opportunities for all members of the community to engage with the World Heritage Site, including though involvement of expert volunteers, Countryside Ranger Service and Access Rangers.	High Life Highland, NHC, Community groups, Museums
3.2	Develop new, high-quality interpretation for the Site to promote enhanced understanding, enjoyment and appreciation of the Flow Country blanket bog landscape. Ensure all new interpretation adheres to Equality, Diversity and Inclusion policies as outlined in cross-cutting Theme 1.	FCT, RSPB, NS
Formal education		
3.3	Update and disseminate existing educational resources from the Flows to the Future Project.	FCT, RSPB
3.4	Establish and maintain links with schools through the local education authority to build long-term relationships and mainstream peatland education.	FCT, THC
3.5	Support the development of programmes of further education for skills in peatland restoration and ecology, and other practical skills that support the OUV and community aspirations.	NHC/UHI, NS
3.6	Maintain and further build links with UHI and other Higher Educational organisations for furthering research into blanket bog ecology, biodiversity of the peatlands and the potential threats that could impact OUV and the supporting values.	UHI
Field visits		

No.	Policy	Responsible / influential bodies
3.7	Encourage and provide information and advice for field trips to The Flow Country including promotion of good practice guidance on minimising disturbance to blanket bog habitats, hydrology and heritage assets	FCT, RSPB, UHI, THC
3.8	Explore potential for a diverse range of supporting infrastructure for field visits and research, building on the excellent Forsinard Field Centre example.	FCT, RSPB, UHI, Communities,
Research and infrastructure		
3.9	Support the Environmental Research Institute (UHI) Flow Country Research Hub to grow and realise the added potential that World Heritage Status for The Flow Country can bring.	UHI, HIE
3.10	Encourage global links for research between other blanket bog and peatland landscapes through the World Heritage Site network and Global Peatland Initiative.	FCT, UHI

Priority Objectives

Key pieces of work for the first 5-6 years need to be identified. These *could include:*

3A. Audit existing and develop new interpretation and educational resources in respect of the World Heritage Site.

3B. Further develop virtual tours of The Flow Country and the wider area.

3C. Focus on and support skills development for peatland restoration and ecology.

Theme 4: A well-managed and supported World Heritage Site and status

This theme addresses Articles 5 and 27 of the Convention and supports protection and management pillar of OUV. It also addresses the following Sustainable Development Goals:



Introduction

One of the three pillars of OUV is Protection and Management, and this has to be at the heart of the stewardship of the Site. This does not mean in terms of the statutory management of the protected areas within the Site but rather of the management structure to oversee the maintenance of World Heritage status and all that entails.

This latter aspect of management, often called the coordination or management 'function' of a World Heritage Site relates primarily to the preparation, facilitation, coordination and review of the Management Plan, and the oversight and coordination of the partnership that oversees it. Its role is to focus on the World Heritage Site and that alone, taking on board, but not being led by any other partner interest.

In addition to the function of managing the World Heritage status, the coordination function has a role linked to Article 27 of the Convention in disseminating information about the Site, whether technical or otherwise, to a wider audience. It is also the mouthpiece for everything that World Heritage Status stands for - yet is also able to connect with and listen to the voices of the community.

Aims

The aims for theme 4 are set out here, along with a means of monitoring them, a broad timescale and a target (if applicable). The policies set out in subsequent pages will address one or more of the aims.

Aim 4.1	**To have a clear and sufficiently resourced organisational entity and partnership structure for managing World Heritage Status and the associated responsibilities.**
Aim 4.2	**To create a mechanism by which the Flow Country community can be informed about the Site and engaged with aspects of its management.**

Critical Success Factors

Aims are important for giving direction, but how do we know whether the aims are achieving outcomes important for OUV and the planet? How will we know we have got it right? The following are the most important critical success factors for this theme, that relate to the aims above and the theme more broadly:

No.	CSF	Timescale for measurement
CSF 4.1	A fit for purpose and sufficiently well-resourced coordination function is in place and delivering the Management Plan.	2-3 years
CSF 4.2	An effective multi-stakeholder governance structure is in place.	1-2 years
CSF 4.3	Community perception of and support for the World Heritage Site is increasing.	3-4 years

Monitoring and Evaluation

Governance will be measured through internal systems such as budgets, agreements, minutes of meetings and retention of staff. Monitoring of community perception and support will be carried out through regular community surveys looking at a range of subjects related to the WHS, from environmental awareness and understanding to economic and social benefits. This will be undertaken regularly.

Policies

Guiding principles

Management of the World Heritage Status will be based on the principles of openness, transparency, honesty, partnership and rigorous science. The stakeholder Partnership and coordination function will take on board the input from stakeholders to drive strategy development and decision-making whilst prioritising local involvement and will have a global outlook that befits the status.

In terms of communication, it is recognised that the land within the boundary is owned, used and cherished by many different people for many different purposes. This diversity will be respected at all times through communications and messaging.

Climate statement

Management and communications in respect of the Site will address the climate emergency wherever possible, from minimising its own carbon footprint, to effective messaging and working with projects to ensure that they are aiming to be carbon neutral where possible. Most of all, the blanket bog is a story of climate and climate change, and this will be at the heart of messaging in respect of the Site.

Actions arising from policies will be subject to scrutiny in respect of their potential climate impact, which will be reduced where possible.

Note: The Site's management team, the Flow Country Team (FCT) will have a coordination or facilitation role in many of these policies but are only stated specifically when it is their primary job, as opposed to that of another organisation.

No.	Policy	Responsible / influential bodies
Governance		
4.1	Maintain an effective and fit for purpose Partnership governance structure for the WHS.	FCP
4.2	Show accountability and transparency of decision making which affects the Site.	FCT, FCP
4.3	Maintain a sufficiently resourced coordination function to enable implementation of the Management Plan.	FCP, NS, THC
Financing		
4.4	Ensure sustainable long-term resources in place to enable effective delivery of the Management Plan.	FCP, NS, THC
4.5	Continue to promote regenerative projects in the Flow Country to support both the restoration of peatlands, climate resilience and the management function for the WHS.	FCP, NS
Community Engagement and consultation		
4.6	Ensure communities remain informed of progress in respect of the WHS and have a mechanism by which they can become active agents and contribute to decision-making in the protection and enhancement of the WHS.	FCT
Communications and media engagement		
4.7	Partnership communications should always follow agreed protocols.	FCP

No.	Policy	Responsible / influential bodies
4.8	Promote the WHS, its values and their importance to local, national and global audiences, through multiple platforms.	FCP, THC, VS, VN
Branding		
4.9	Ensure that the World Heritage and UNESCO emblems are used in line with UNESCO guidelines.	FCT
4.10	Protect The Flow Country brand and use it effectively in support of the aims of the Site.	FCP

Priority Objectives

Key pieces of work for the first 5-6 years need to be identified. These *could include:*

4A. Establish a secure and sustainable long term funding mechanism for the World Heritage Site management function.

4B. Also, in respect of 4A, explore green finance projects as possible options for funding.

4C. Establish the community engagement mechanism.

Cross-cutting theme 1: Improved access and infrastructure for all, including policies that relate to Equality, Diversity and Inclusion (EDI)

This theme addresses Articles 4, 5 and 27 of the Convention and supports the protection and management pillars of OUV. It also addresses the following SDGs:



This theme needs to work across all of the relevant policies set out in this Plan. Improvements to access may be, for example, in terms of changes to public transport or boardwalks to access areas of the bogs. It may mean using different languages or using sign language, or voice-over on videos. It may mean ensuring that web resources are not too 'data heavy' so that people in places with poor internet can still access them, and that there are non-web-based options to enable access to information for those unable to make use of computer or smart phone.

There are many different ways to consider this, and many actions that arise from the policies above will be specific access-related projects. However, in order to maintain a level of simplicity, this theme can be considered as a filter between the policies contained here and the actions that will come out of them.

When considering actions that arise from the aims, priority objectives and policies of this Plan, it is essential that the following factors are considered and that the actions take account of them where reasonable and possible:

- Physical access to the blanket bog is increased and improved.
- Access requirements for people with physical, sensory or other impairments in respect of all infrastructure is taken into account at all times.
- Considerations of equality, diversity and inclusion are made with regard to all work being carried out in respect of the delivery of the Plan, be that employment, volunteering, or the way in which information is presented.
- All virtual infrastructure will follow good practice codes of conduct for full accessibility

There are many excellent organisations to work with in respect of equality, diversity and inclusion (EDI) and access issues, including many of the stakeholder Partnership. We will work with them to deliver these actions and will measure how we have responded to this theme through inclusion of appropriate indicators into project delivery.

Cross-cutting theme 2: Actions to support climate change mitigation and adaptation

This theme addresses Article 4 of the Convention and supports the criteria and integrity pillars of OUV. It also addresses the following SDGs:



As with theme CC1 about access and accessibility, theme CC2 applies across all policies set out in this Plan. Climate change actions may range from peatland restoration, to ensuring that any new infrastructure relating to the WHS uses carbon neutral and low carbon materials. It may mean that all non-site-based meetings should be held virtually, and that more climate friendly options are used whenever possible to access in-person meetings or events.

At a broader scale, it means that messaging about the role peat plays in helping to address the climate crisis are emphasised wherever possible, and that all appropriate communications reflect this. It means that every action needs to be considered in terms of its climate implications, and that the learning from the work done on this can be shared elsewhere.

When considering actions that arise from the aims, priority objectives and policies of this Plan, it is essential that the following factors are considered and that the actions take account of them where reasonable and possible:

- Projects, over their lifespan, should aim to have the lowest carbon impact as possible, and in assessing them we will use carbon accounting methods.
- Mitigation will be applied for any expected net positive emissions.
- Work of the coordination function should advocate for the lowest carbon impact at all times.
- Decisions linking to the climate emergency will be based on up-to-date knowledge and research

There are many excellent organisations to work with in respect of climate change mitigation and adaptation, including many amongst the stakeholder partnership. We will work with them on delivery and will measure how we have responded to this theme through putting appropriate indicators into project delivery.

Chapter 8: Implementation, governance and monitoring

This chapter briefly sets out the approach for delivery, governance and monitoring of the Management Plan and Site. More details will follow upon development of the subsequent Action Plan.

8.1 Implementation

Day-to-day management of the World Heritage Site status will be undertaken by a small, dedicated team who will work with stakeholders to facilitate and coordinate work on the Site that is compatible with, and can enhance, OUV. That team is referred to in Chapter 7 as the Flow Country Team (FCT) and will report to the Steering Group for the Site. The FCT will work closely with a wide range of staff and volunteers from across the Steering Group partners; looking after the Site is a shared effort.

It is important to understand that management of the Site means managing the World Heritage status and coordination of the delivery of the Management Plan, rather than management of the inscribed land area itself. The day-to-day management of the physical Site will be carried out by the landowners, land managers and Agency staff. They will follow the guidance set out in this document, all of which draws on established practices for peatland management. In respect of this part of the work, the FCT has an influencing and facilitating role, and is able to coordinate the various parties and projects that need to work together, but it has no executive authority over any of the landowners.

That is not to say that the FCT will not deliver any of the Plan itself. There is much within this document for which the team will need to take a lead. This might include such tasks as education or interpretation development, securing funds and delivering against externally funded projects. It will also include working to monitor progress against this Plan, coordination of the Partnership and communication to all audiences about the work being undertaken.

The following list sets out the roles which are included in a World Heritage Site Management function for a UK Site, but it is neither prescriptive not exclusive and will depend on the Site itself, what is needed and what is available:

- *Management plan, writing, reviewing, monitoring, coordinating, facilitating, and administration*
- *Periodic Reporting*
- *Partnership meetings and coordination, and administration*
- *Direct working with partners*
- *Liaison with Government and UNESCO*
- *Stakeholder & community engagement*
- *Core work in support of above: talks, media, website, information and interpretation of the Site*
- *Financial planning and fundraising*
- *Project Development and delivery*
- *Educational project development, delivery and facilitation*
- *Advice and expertise – particularly with reference to construction and development proposals.*

Staffing this function will be important, so it will be beholden to local agencies and partners within the Steering Group in the first instance to make that happen. The Statement of OUV (SOUV) for the Site states:

> *A key requirement for the management of this property lies in continued strong and adequately resourced coordination and partnership arrangements focused on the World Heritage property and its OUV*

8.2 Governance

Now that the Site is inscribed on the World Heritage List, there is a need for a review of the Governance model, so that it is fit for purpose for delivery, not bid preparation. It is important for all World Heritage Sites in the UK

that the management function can remain relatively independent of any specific organisation. This is so that it can focus its work based on the policies set out in the Management Plan rather than those of any one of the partners' organisations.

With this in mind the Flow Country Partnership is exploring whether the FCT will sit in an independent body outside of The Highland Council or NatureScot, probably as part of the function of the Flow Country Partnership charity. This will be set out more clearly in the Site's Action Plan, but there are key important factors that will form that basis of the new model:

- Partnership and collaboration – the Site can only be managed well with multiple partners involved
- Transparency and accountability – World Heritage Sites are for the whole world
- Communities – the Site needs to be managed by the local community for the global community

8.3 Monitoring

The monitoring and evaluation regime will be established as part of the Site Action Plan, alongside a risk register. Monitoring will aim to be simple and clear so that at a glance, people can see (a) the condition of the Site in relation to its Attributes, and (b) progress against delivery of the Management Plan.

In terms of timescales, UNESCO requires a 'Periodic Reporting' assessment to be done every six years, so data collection needs to lead up to that, again, considered against the Attributes of the World Heritage Site. It is hoped that the local community will be involved in monitoring Site condition through citizen science and other initiatives.

8.4 Contact information

To find out more, please contact info@theflowcountry.org. More information is always available at The Flow Country website https://www.theflowcountry.org.uk/ and through official feeds on Facebook, Instagram and LinkedIn.

Glossary

Acrotelm: the fibrous uppermost layer of the peat where water movement and exchange is rapid and fluctuations in the water table lead to variable moisture content.

Bog: acidic waterlogged ombrotrophic peat forming system.

Blanket bog: rain fed (ombrotrophic) peatland that blankets the topography, often comprised of a number of units, each characterised by their topographic position and morphology (watershed, spur, valley side, saddle, etc.), and that are defined by their hydrological integrity.

Blanket bog landscape: a landscape where blanket bog predominates, larger blanket bog 'catchments' abut, covering extensive tracts of land. These often include elements of fen and raised bog.

Blanket bog ecosystem: the blanket bog considered alongside the biological community that it supports, and that contributes to its development.

Catotelm: the deep peat which underlies the acrotelm. This peat layer is characterised by near constant water content, very slow hydraulic conductivity and no access to atmospheric oxygen.

Dubh lochans: the local name for the pool systems which characterise much of the blanket bog. Their black (dubh) colour comes from the dark, peaty water they hold and the peat substrate which forms the bottom of the pools. Some of these pools are also extremely deep. For 'lochan' see below.

Fen: peatland development associated with ground water run-off. Fens are often mineral enriched, relative to blanket bogs.

Flush: area within a peatland where ground water seeps out resulting in a mineral enriched setting and associated flora.

Loch(an): Scottish term for body of water – lake. Lochan is the diminutive form: small loch.

Mire: a peatland that supports peat forming vegetation.

Ombrotrophic: refers to bogs that depend on precipitation as their water source.

Paludification: rain fed waterlogging of the ground leading to the development of peat forming plants and subsequently to the development of peat.

Patterned ground: this refers to the combination of micro-features, including hummocks, high and low ridges, pools, mounds, hags, etc (illustrated in section 2 of the Site Dossier), that make up the varied surface textures that occur across blanket bogs.

Peat: an amorphous organic rich deposit formed by the steady accumulation of semi-decomposed plant material. Waterlogging prevents complete decomposition of the plant material.

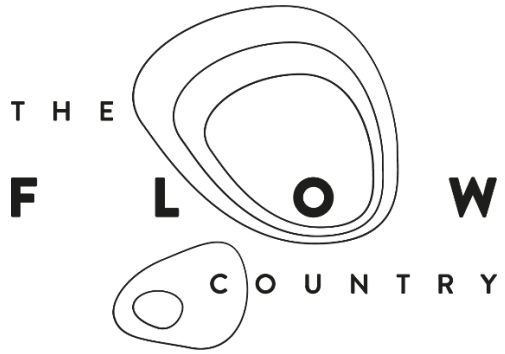
Peatland: a region where the soil is predominantly composed of peat.

Raised bog: peatlands that originate from the infilling of depressions. Continued growth leads to a domed upper surface.

Sphagnum: a genus of moss, often referred to as bog moss or peat moss, which is important in peat formation. It is abundant throughout the Flow Country.

Quaking bog: an area of the bog that quakes with every footfall. This is usually the case due to the high saturation of both the upper fibrous layer (acrotelm) and the underlying deep peat (catotelm), the latter verging on a liquid state. Traversing such areas can be hazardous, even when walking on the ridge systems.

References to cited text can be found in the Site Dossier.


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