

Developing a Sustainable Giant at the Causeway



Introduction & Rationale

For several centuries the iconic Giant's Causeway has attracted visitors from around the world to see its curiously shaped rocks, spectacular landscape and hear its ancient stories of myths and legends. In 2017 it received over a million visitors from 160 different countries and generated nearly £500 million for the regional economy (National Trust, 2019).

In 1986 the Giant's Causeway and Causeway Coast (GCCC) was inscribed as a UNESCO World Heritage Site (WHS) on account of its exceptional natural beauty (Criterion vii) and spectacular geological significance (Criterion viii), with this described in detail in the Statement of Outstanding Universal Value (OUV) as follows:

Criterion (vii): The cliff exposures of columnar and massive basalt at the edge of the Antrim Plateau present a spectacle of exceptional natural beauty. The extent of visible rock sections and the quality of the exposed columns in the cliff and on the Causeway combine to present an array of features of considerable significance.

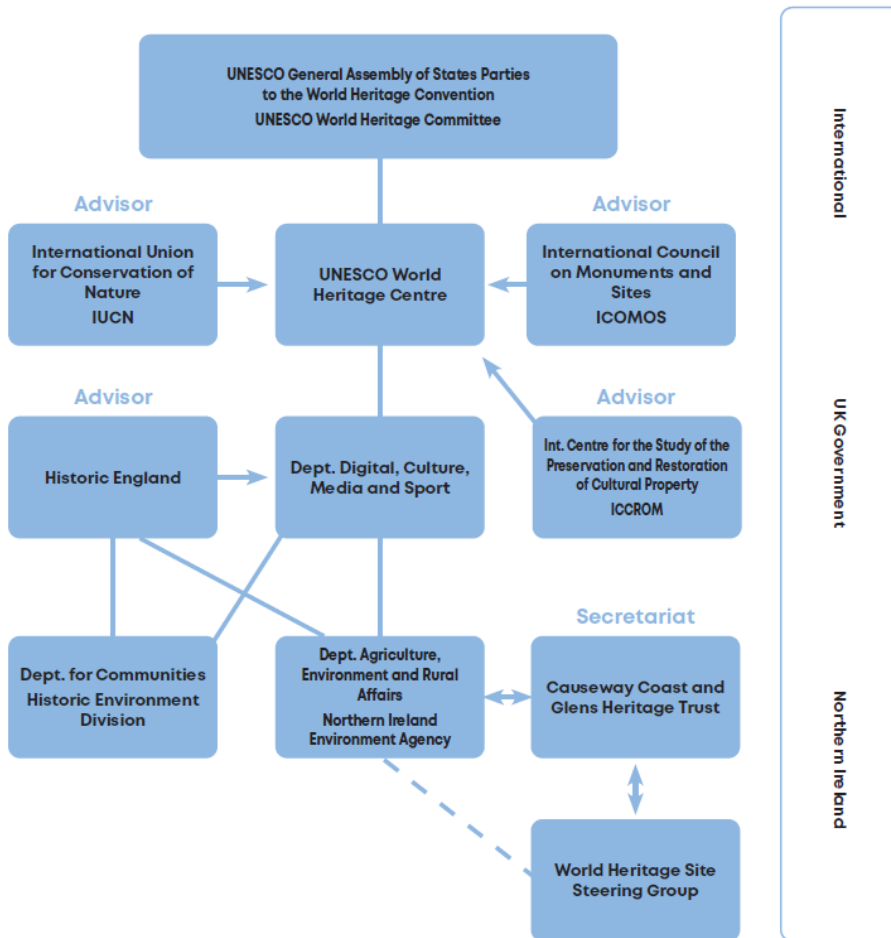
Criterion (viii): The geological activity of the Tertiary era is clearly illustrated by the succession of the lava flows and interbasaltic beds which are in evidence on the Causeway Coast. Interpretation of the succession has allowed a detailed analysis of Tertiary events in the North Atlantic. The extremely regular columnar jointing of the Tholeiitic basalts is a spectacular feature which is displayed in exemplary fashion at the Giant's Causeway. The Causeway itself is a unique formation and a superlative horizontal section through columnar basalt lavas.

Criteria (vii) and (viii) relate to geology and landscape and therefore confirm the GCCC WHS designation is based on the international significance of its natural heritage. This WHS covers 160 hectares of sea and 79 hectares of cliffs and coastal landscape which is intrinsically linked with the surrounding area and is the only WHS in Northern Ireland.

In 2015 the United Nations (UN) established a blueprint for addressing the social, economic and environmental challenges of the world through 17 Sustainable Development Goals (SDGs), which break down into 169 accompanying targets. The 17 Goals were adopted by all 193 UN member states as part of the 2030 Agenda for Sustainable Development. UNESCO adopted a policy of integrating these 17 SDGs within World Heritage. This research seeks to identify which of the 17 SDGs and their accompanying targets are most relevant for the GCCC WHS Steering Group to champion.



The GCCC WHS Steering Group consists of representatives from organisations with a vested interest in the Giant's Causeway and supports efforts to protect and promote the OUV of the Property and to encourage policies and practices within the WHS that sustain the World Heritage status.



Members of the GCCC WHS Steering Group:

- Causeway Coast and Glens Heritage Trust (including WHS Project Management role as Secretariat)
- Causeway Coast and Glens Borough Council.
 - Coast and Countryside team
 - The Planning Department
 - One elected representative
- The Crown Estate
- Northern Ireland Environment Agency (NIEA) – part of Department of Agriculture, Environment and Rural Affairs (DAERA)
- Department for the Economy (DfE), represented by the Geological Survey of Northern Ireland (GSNI)
- Department for the Economy (DfE), represented by Tourism NI
- Independent member, currently also representing the Council for Countryside Council for Nature Conservation and the Countryside (Chair)
- The National Trust
- Private Landowner
- Queen's University Belfast

A Management Plan has been produced in collaboration with the Steering Group and NIEA which articulates the vision, aims and objectives for the property along with an accompanying Action Plan that identifies specific actions to deliver on these objectives. The Management Plan notes the Steering Group's intention to further understand and support the SDGs (Page 58) which is then expressed in Action 1.35.

Giant's Causeway and Causeway Coast Action Plan 2021 – 2023 (Page 9)

"1.35 Support UN Sustainable Development Goals

Review UN Sustainable Development Goals and ensure activities contribute to them where possible.

The Secretariat will provide and share a summary report of how activities contribute to UNSDGs and World Heritage Sustainable Development Policy."

This research paper is taking forward Action 1.35 by identifying relevant policies and reports that apply to SDGs at WHSs along with considering the specific circumstances that apply to the GCCC WHS with a view to recommending which are the most relevant SDGs for the Steering Group to champion.

Literature Review

The seminal policy about Sustainable Development and support for SDGs within WHSs is The World Heritage Sustainable Development Policy, WH-SDP (UNESCO, 2015). It is an overarching policy for sustainable development of World Heritage that provides a framework within which to consider this research question. Papers, strategies, journals and plans which support, discuss, and attempt to implement this Policy and the SDGs are considered below.

World Heritage Sustainable Development Policy (WH-SDP)

In 2015 the WH-SDP (UNESCO, 2015) was adopted within the World Heritage Convention and encourages the conservation of World Heritage alongside a commitment to foster peace and security within an equitable balance of three essential elements of WH-SDP, namely:

1. Environmental sustainability
2. Inclusive social development
3. Economic development.

WH-SDP recognises the inherent potential of WHSs to contribute to all dimensions of sustainable development for the benefit of the whole of society. This policy encourages all World Heritage stakeholders to work collectively to deliver sustainable development at WHS properties to then feed into a wider area far beyond their boundaries.

The three essential elements of WH-SDP alongside peace and security and their relevance to the GCCC WHS are outlined as follows:

1. Environmental Sustainability

WH-SDP acknowledges that sustainable development at WHSs requires acting at a much larger scale than the property itself. The Giant's Causeway has attracted over a million visitors a year. Visitors travel by ships, planes, cars and buses from across the planet causing an environmental impact far beyond the WHS.

The GCCC is the most identifiable place in the region with its distinctive tessellating hexagons often featuring in international marketing campaigns and are even reflected in the branding of the regional Government Departments.



The three main categories of visitors to the Giant's Causeway are solo travellers, coach trip travellers and cruise ship passengers (Sabine Panzer-Krause, 2020), with the greatest awareness of sustainability issues amongst solo travellers and the least concern for sustainability amongst those travelling by cruise ship.

The same marketing which has successfully attracted over a million visitors from 160 countries could help project a strong message of environmental sustainability of the GCCC WHS which the solo travellers would be most receptive to.

2. Inclusive Social Development

WH-SDP encourages natural WHSs to be a central part of the life of the community, and the values and local knowledge of the host community to be recognised, respected and included within the management of the WHS (UNESCO, 2015).

WH-SDP suggests that WHSs are uniquely placed to improve wellbeing and opportunities for all, irrespective of age, sex, disability, ethnicity, religion, but particularly for local communities through strengthening their involvement and participation in decisions around World Heritage Properties (UNESCO, 2015).

Prior to Covid-19, the population of NI had approximately 25% higher rate of mental ill-health compared to the rest of the UK. The Covid 19 pandemic has been a source of psychological distress that has further compounded these existing mental health problems. (HSC, 2020).

Recent research (Sofaer et al, 2021) concludes that visits to outdoor heritage properties have significant positive outcomes on mental health of visitors by increasing happiness and reducing anxiety. Thus, the Giant's Causeway could be an important asset that positively supports the mental health of the surrounding communities and visitors.

3. Inclusive Economy

WH-SDP intends management of World Heritage properties to foster inclusive local development, particularly in respect of tourism, that is compatible with protection of the OUV and enables decent local employment and sustainable livelihoods - a balance of benefit amongst the various stakeholders, but with local communities as the primary beneficiary (UNESCO, 2015).

Tourism should complement other economic opportunities to strengthen local economic resilience. according to WH-SDP, which suggests socio-economic impact assessments for proposed tourism projects associated with WHSs (UNESCO, 2015).

Close to £500 million was generated for the NI economy by tourism related to the Giant's Causeway in 2018, with the National Trust employing 75 full-time staff whose wages contributed £1.5 million for the local economy (CCGHT GCCC Management Plan, 2021). However, the nearby village of Bushmills suffers significant deprivation with average household income in the lowest 7% of NI (NISRA, 2017) suggesting the need for further efforts to support SDG 8 at GCC WHS.

4. Peace and Stability

WH-SDP suggests using World Heritage to promote and maintain peace within State Parties, acknowledging cultural diversity and adopting cross-culturally sensitive approaches to the interpretation of World Heritage Properties (UNESCO, 2015). GCCC is in North Antrim in Northern Ireland which is a post-conflict society and therefore communication about the history of the property requires sensitivity to the various traditions of the area.

Global Progress with Sustainable Development UNESCO

The World Heritage Committee (WHC) accepted a report (UNESCO, 2021) confirming widespread progress in the mainstreaming of the WH-SDP within World Heritage. It highlighted many positive actions occurring in support of the following SDGs:



WHC responded to this report by calling on State Parties to “take a systematic and holistic approach to mainstreaming the WH-SDP into their national and local policies, processes, and initiatives related to the implementation of the Convention and to development in and around World Heritage properties”, reinforcing the need for GCCC WHS to translate the global SDGs into local actions.

Sustaining Development by IUCN

International Union for Conservation of Nature (IUCN) is the most significant global network of environmental scientists and provides essential support to the management and monitoring of natural WHSs. IUCN recognises the need to support the 2030 Sustainable Development Agenda and its accompanying 17 SDGs to protect the natural world and has identified (IUCN, 2017) the following SDGs most supported by its work:



IUCN supports the management of green spaces that help people connect with nature, thereby improving their mental and physical well-being (SDG3). This links closely with supporting the needs of sustainable communities (SDG 11) to have access to green spaces on land (SDG 15) and clean marine environments (SDG 14), and robust ecosystems that are resilient in the face of natural challenges such as extreme weather patterns resulting from climate change (SDG 13).

Healthy Parks, Healthy People (Europarc, 2021) is a European programme supported by IUCN that enables protected areas, including WHSs, delivering better outcomes for the health of people and nature, aiming to improve public health and well-being for all, protecting biodiversity and responding to the climate emergency.

Heritage Conservation And The Sustainable Development Goals by INTO

International National Trust Organisations (INTO) represents 70 separate National Trust organisations around the world. It conducted a survey (INTO, 2019) amongst its members to find out which SDGs were being supported by heritage conservation practices at its various properties. This report acknowledged the interconnectedness of all 17 SDGs and found clear evidence of 14 of the 17 different SDGs being supported by INTO members, including the following:



National Trust at the Giant's Causeway

Most of the terrestrial part of the GCCC WHS is owned by The National Trust, who opened a new visitor centre in 2012. Since then, visitor numbers have risen significantly to beyond one million per year, posing a threat to the conservation of the property, causing the visitor experience to deteriorate, and impacting on the quality of life of the local community (Murphy, 2021). In recognition of these threats, the National Trust appointed a Responsible Tourism Manager in 2018 and initiated a Sustainability Survey in 2019. Both actions support a deeper engagement with the local community and the various stakeholders to improve the conservation of the property and support the health and well-being of visitors and locals, thus supporting SDG 3 (Health And Well-being), SDG 11 (Sustainable Communities) and SDG 15 (Life On Land).



UNESCO Supporting Local Communities and Well-being

Since 1994, UNESCO has made numerous revisions to the Operating Guidelines that describe the conservation policies of the World Heritage Convention applicable to WHSs. Detailed analysis of their evolution (Jang & Mennis, 2021) reveals that since 2005 there has been a significant increase in emphasis on the involvement of local communities leading to “Enhance the role of Communities in the implementation of the World Heritage Convention” being adopted as the fifth strategic objective of the Operational Guidelines, according to decision **WHC-07/31.COM/13A** (UNESCO, 2007), thereby placing human needs at the centre of conservation of World Heritage. Since 2019 a focus on well-being has emerged within the Operation Guidelines which suggests an increasing role of SDG 3 and SDG 11 within World Heritage.

Operation Guideline 119 (UNESCO, 2021)

“Properties may support a variety of ongoing and proposed uses that are ecologically and culturally sustainable and which may enhance the quality of life and well-being of communities”

Conservation of heritage sites has often had a positive effect on the well-being of visitors through physical exercise and mental restoration, but the protection of heritage areas has sometimes had negative effects on the well-being of local communities (Jang & Mennis, 2021).

The lockdown implemented in March 2020 to reduce the spread of Covid-19, restricted most people’s access to most heritage sites in UK. The easing of restrictions that restored access to outdoor heritage sites against the backdrop of pervasive public health messaging around well-being throughout the pandemic has resulted in a wider recognition of the value of heritage sites and their role in supporting well-being (Sofaer et al, 2021).



Regional Government to Improve Well-being



NI Executive is the regional government of Northern Ireland, and its primary stated aim is to improve the well-being of all its citizens (NI Executive, 2021). This aim drives all NI public sector bodies, including those represented on the GCCC WHS Steering Group, which suggests that SDG 3 (Health and Well-Being) is a key SDG to be championed by the Steering Group.



Well-being can be considered within two separate categories – **hedonic** well-being which is about an immediate sense of happiness and enjoyment and **eudaimonic** well-being which relates to a sense of purpose, connection and meaning (Sofaer et al, 2021). Time spent at GCCC can result in hedonic well-being from the immediate pleasure of looking at an attractive landscape, but also eudaimonic well-being through understanding and connecting with an ancient heritage. A complete sense of well-being requires hedonia and eudaimonia, underpinned by individual and social practices.

Council Strategy

Causeway Coast and Glens Borough Council (CCGBC) has identified 5 strategic priorities (CCGBC, 2020) namely:

1. Cohesive Leadership
2. Local Economy
3. Improvement and Innovation
4. Healthy and Engaged Communities
5. Climate Change and Our Environment

This language does not align precisely with the SDGs, but there is a strong suggestion of a number of relevant SDGs, eg Local Economy suggests support for SDG 8 (Decent Work And Economic Growth)



Northern Ireland Environment Agency (NIEA) Purpose and Priorities

NIEA are an agency within the Department of Agriculture Environment and Rural Affairs (DAERA) and are the devolved State Party representative for the GCCC WHS and are therefore responsible for working to hold, monitor and maintain the WHS designation.

The primary purpose of the NIEA (NIEA Business Plan 2020-21) is to:

- Protect and enhance Northern Ireland's environment
- Deliver health and well-being benefits
- Support economic growth

This language easily links with four SDGs, eg Protecting the Environment aligns with SDG 14 (Life Below Water) and SDG 15 (Life On Land),

Five key priorities of NIEA (NIEA Business Plan 2020-21) are:

- Promotion of environmentally sustainable development and infrastructure
- Good habitat and landscape quality with species abundance and diversity
- A fully compliant regulated industry
- Freshwater and marine environment at "good status"
- A compliant crime free waste sector

These key priorities of NIEA suggest alignment with three additional SDGs so the following seven SDGs are supported by the primary purpose and key aims of NIEA:



Crown Estate

Crown Estate owns the 160 hectares of the seabed in the GCCC WHS, representing about two thirds of the property. The overall purpose of The Crown Estate is to create lasting prosperity for the nation and (Crown Estate Environmental Review, 2021) identifies its support of SDG 7, SDG 11, SDG 12, SDG 13, SDG 14, SDG 15



Geological Survey of Northern Ireland (GSNI)

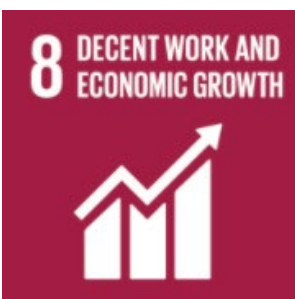
(Northern Ireland's Geodiversity Charter 2021–2024, 2021) acknowledges the role of geological science in understanding, monitoring, protecting, managing and enhancing the natural environment that is critical to the support of many of the SDGs. GSNI is represented on the Steering Group. The WHS and its Management Plan along with other key documents and groups are referenced in the Charter, however it does not identify specific SDGs, but the Charter's vision and GSNI's work suggest support for SDG 11, SDG 12, SDG 13, SDG 15.



Tourism NI

Tourism NI, alongside its sister organisations Tourism Ireland and Fáilte Ireland, has successfully marketed the Giant's Causeway for decades. Tourism NI's current marketing campaign is centred around 'Embrace a Giant Spirit' which continues a legacy of using the WHS property to market the region to the world. The effective marketing of the Giant's Causeway has resulted in the property becoming the most popular attraction in NI which brings economic benefits, but social and environmental challenges.

The corporate objectives of Tourism NI (Tourism NI – 2020/21 Operating Plan, 2020) focus on economic development and include mention of innovation and collaboration.



Methodology

This research was desk-based, it involved identifying key policies, strategies and comparative examples, engagement with UNESCO UK and WH:UK and involved many discussions with the GCCC WHS Projects Manager which shaped the direction and form of the research.

Decision matrices were used to clearly present which SDGs each document referenced, or in the absence of a direct reference the text was interpreted to select the most relevant SDGs.

The purpose of this research is to identify which SDGs the GCCC WHS Steering Group should champion, as it is not feasible for them to effectively champion all 17. This research employs a three-stage selection process (Mullur et al, 2003).

1. **Feasibility Judgement** - identify those SDGs which are central to the GCCC WHS and the Steering Group and also those SDGs which have little or no relevance. This is a common-sense approach which takes in to account the geography, context, and scale of the WHS along with the capacity of the Steering Group.
2. **Screening for Decision Matrix** – select suitable reports, policies, strategies and case studies which relate to Agenda 2030, SDGs in a World Heritage context and the GCCC.
3. **Scoring for Decision Matrix** – use the matrix format to indicate if an SDG is mentioned or the text aligns with that SDG. Two matrices have been used due to the number of documents selected and the nature of the monitoring reports for the GCCC which do not lend themselves to being included in the document review matrix.

1. Feasibility Judgement

The GCCC WHS is a natural WHS made up of land and sea which clearly suggests the relevance of SDG 14 (Life Below Water) and SDG 15 (Life On Land) and the accepted climate crisis strongly points towards SDG 13 (Climate Action).

The only specific mention of heritage within any of the SDGs is within SDG 11 Sustainable Communities, target 11.4, “Strengthen efforts to protect and safeguard the world’s cultural and natural heritage” indicating it is a necessary selection.

The NI Executive is the devolved government in Northern Ireland where the GCCC WHS is located. The NI Executive operates under a Programme for Government which states, “The Executive is united in its aim to improve the well-being of all of our people.” (NI Executive 2021). Therefore, all public sector bodies involved at the GCCC WHS should be guided by this aim to improve the well-being of citizens, strongly indicating the inclusion of SDG 3 (Good Health and Well-being).



Through various discussions with the GCCC WHS Projects Manager, SDG1 (No Poverty) and SDG 2 (Zero Hunger) were judged to fall outside the remit of the Steering Group.

2. Screening for Decision Matrix

Context and understanding developed through researching online resources including World Heritage Centre's official UNESCO webpage, UNESCO UK and WH:UK. The GCCC WHS Management Plan was reviewed along with various UK WHS webpages for references to 2030 Agenda for Sustainable Development, the SDGs or WH-SDP (UNESCO, 2015).

WH-SDP (UNESCO, 2015) is a critical policy document for this research as it sets out an overarching policy framework for mainstreaming sustainable development in the management of World Heritage, however it doesn't mention specific SDGs and was published at the start of the 2030 Agenda for Sustainable Development. At the 44th Session of the World Heritage Committee (2021), a report on mainstreaming WH-SDP was presented (**WHC/21/44.COM/5**). This uses more up-to-date language including specific references to SDGs and therefore accurately represents an assessment of which SDGs are most relevant to World Heritage in 2021.

Three further documents were selected to provide an international perspective on the application of SDGs at WHSs;

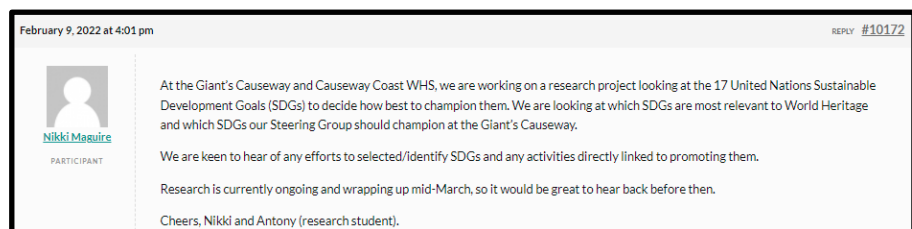
- Sustaining Development - IUCN and the Sustainable Development Goals (IUCN, 2017)
- Heritage Conservation and The Sustainable Development Goals (INTO, 2019) and
- The Role of Local Communities and Well-Being in UNESCO World Heritage Site Conservation: An Analysis of the Operational Guidelines, 1994–2019 (Jang & Mennis, 2021).

IUCN provide comprehensive scientific advice about natural World Heritage, while the INTO includes the National Trust who manage the terrestrial part of the site, and so these two international reports both give relevant context to the GCCC WHS. All WHSs must adhere to the WHC Operational Guidelines which were analysed by Jang & Mennis.

The next step in the research involved looking at the UK context, followed by focusing on the WHS and Steering Group to draw on some regional context. There is a significant overlap between the international, UK and regional documents in terms of their approach to sustainable development which serves to confirm the effectiveness of the WH-SDP policy.

UK Context

The GCCC WHS Projects Manager posted a message about this research on the WH:UK members forum, resulting in no formal responses, but led to two online meetings with Matthew Rabagliati, Head of Policy, Research and Communications at the UK National Commission for UNESCO. Matthew suggested Cornish Mining WHS and Lake District WHS as relevant case studies and that **Periodic Reporting** and **State of Conservation reports** for the GCCC WHS would provide useful local context.



WHS and Steering Group

The GCCC WHS Management Plan (CCGHT, 2021) sets out the vision, aims and objectives (VAO) of the Steering Group, so was included in the Decision Matrix. The Steering Group consists of representatives from ten organisations, but to effectively inform the research and in view of the time constraints, the aims, strategies and reports of the main landowners, the holder of the designation, the local authority and the secretariat have been reviewed:

- Causeway Coast and Glens Council Corporate Strategy 2021 – 2025
- NIEA Business Plan 2020 – 2021
- National Trust Strategy 2020 – 2025
- Crown Estate Environmental Review 2021
- Causeway Coast and Glens Heritage Trust Aims

While the Crown Estate Environmental Review 2021 identified specific SDGs the other documents required interpretation in identifying SDGs.

Case Studies

Jurassic Coast WHS in England was inscribed as a WHS in 2001 on account of its world-renowned geology, palaeontology and geomorphology (Criterion viii). It has integrated the World Heritage Sustainable Development Policy (WH-SDP) within their Jurassic Coast Partnership Plan: 2020-2025 Appendix 4 (JC WHS, 2020), endorsing each of the three key thematic elements of WH-SDP, namely environmental sustainability, inclusive social development and inclusive economic development, but have yet to identify individual SDGs that are being supported through their actions.

Lake District WHS in England was inscribed as a WHS in 2017 on account of its celebrated landscape beauty (Criterion ii), the harmonious beauty of its traditional agriculture (Criterion v) and its role in the emergence of the global conservation movement (Criterion vi). To address the various challenges that have been identified within the Lake District, 5 key actions have been developed and then each of the 17 SDGs have been assessed according to which of the 5 actions they have supported.

Cornwall Mining WHS in England was inscribed in 2006 on account of different aspects of Cornwall's mining heritage, its visual links with the landscape along with its contribution to the industrial revolution (Criteria ii, iii, iv). Within CM WHS Management Plan (CM WHS, 2020) policies are aligned with Strategic Actions, a lead agency is assigned to deliver each Action and relevant SDGs are identified as being supported by each action, indicating a total of 11 of the 17 SDGs being supported



Decision Matrix 1		International Reports				GCCC Steering Group Members Plans/Strategies Etc.					
Sustainable Development Goals		Update Report UNESCO WHC 44 COM/5d	IUCN and the Sustainable Development Goals	INTO case studies	Role of Communities and wellbeing at World Heritage	Steering Group Vision, Aims and Objectives	CCGBC corporate strategy	NIEA Business Plan	NT Strategy 20 -25	Crown Estate	CCGHT Aims
	SDG is relevant										
	SDG is not relevant										
SDG 1 - No Poverty											= 2
SDG 2 - Zero Hunger											= 2
SDG 3 - Good Health And Well-being											= 8
SDG 4 - Quality Education											= 5
SDG 5 - Gender Equality											= 4
SDG 6 - Clean Water And Sanitation											= 3
SDG 7 - Affordable And Clean Energy											= 2
SDG 8 - Decent Work And Economic Growth											= 6
SDG 9 - Industry, Innovation And Infrastructure											= 3
SDG 10 - Reduced Inequalities											= 4
SDG 11 - Sustainable Cities and Communities											= 9
SDG 12 - Responsible Consumption And Production											= 5
SDG 13 Climate Action											= 8
SDG 14 - Life Below Water											= 8
SDG 15 - Life On Land											= 9
SDG 16 - Peace, Justice And Strong Institutions											= 3
SDG 17 - Partnerships For The Goals											= 6
		12	12	14	4	10	7	7	6	6	9

Periodic Reporting and State of Conservation reports

WHSs are subject to two main forms of monitoring and review. Firstly, Periodic Reporting is coordinated by the World Heritage Committee approximately every 7 years, with two cycles have been completed, one in 2005/2006 and one in 2013. This exercise requires Sites to complete a report which can be broken down into key issues impacting the site, both positive and negative. The themes from the 2013 report have been identified and the SDGs most relevant to each theme are presented within **Decision Matrix 2**.

The second involves State of Conservation (SOC) Reports which can be requested or required at any time, usually in reaction to an issue arising. Seven SOC reports have been logged since 2013. The key themes have been identified from the report alongside the Periodic Reporting, and SDGs relevant to each theme presented within **Decision Matrix 2**.

Both Periodic Reporting and State of Conservation Reports have been presented within **Decision Matrix 2**. Some issues raised in these monitoring methods can present threats or negative impacts while others can present positive impacts or opportunities. The exercise provides a more specific look at factors affecting the GCCC WHS and surrounding area.

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Discussion

The process of screening and then scoring via matrix is discussed below. The findings are then identified, which then informs the most suitable SDGs for the GCCC WHS Steering Group to champion.

Firstly, the UK WHS case studies reveal three different approaches to supporting sustainable development, but a shared understanding that support for SDGs is the ultimate goals of actions. The SDGs do not form the language or structure by which the WHS operates, but Lake District WHS and Cornish Mining WHS have established which actions contribute to which SDG that helps to integrate the language of SDGs and make them visible in the work at the WHS.

The international reports of Decision Matrix 1 take a global view with a broad perspective on World Heritage, sustainable development and heritage generally, reflected in the selection of 12 – 14 SDGs for three of the reports, including the SDGs which were ruled out via the Feasibility Judgement. Jang & Mennis, 2021 focused on thematic elements of policy rather than actions, resulting in a smaller number of four SDGs being identified, however this paper required a higher degree of interpretation and therefore greater potential for bias. These four reports invited further research as they held insufficient site-specific context to identify relevant SDGs for the Steering Group.

The GCC WHS Management Plan was a central document for this research, containing the vision, aims and objectives (VAO) for the Steering Group. The SDGs selected based on the VOA confirm the five identified within the Feasibility Judgement and add five more; SDG 4, SDG 8, SDG 9, SDG 12, SDG 17.

The remaining five documents, made up of corporate strategies, business plans and reviews of the constituent organisations in the Steering Group, largely support the SDGs identified in the VAO. However, it is not a consistent match across all documents and SDGs. Some of this could be attributed to the interpretation required to identify the SDGs from text and that none of these texts were written solely to discuss the GCCC WHS nor the SDGs.

The most consistently supported SDGs across these documents are:



The Decision Matrix 2 is more site specific than Decision Matrix 1 as the categories are based on monitoring and review of the GCCC WHS. It suggests a clear endorsement for championing SDG 15 Life on Land with eight selections against this, which makes sense as most of the accessible part of the WHS is terrestrial. Identifying SDG 14 Life Below Water reflects two thirds of the site being below water. Another three SDGs score four or more times with only SDG 4 not already identified in the Feasibility Judgement.

Interestingly SDG 17 Partnership For The Goals has not scored highly in Decision Matrix 2 nor in the second part of Decision matrix 1 despite the central ethos of the Steering Group being partnership work. This suggests partnership working might not be fully embedded in the ethos of the constituent organisations of the Steering Group.

The format and process of the decision matrices provided a succinct and visually accessible method to review and identify SDGs. However, the system is completely accurate. It is open to the researchers' bias with many documents requiring interpretation and the format itself did not allow all factors to be compared in one table and so two matrices were required. The scope and publishing dates of the documents are also likely to have impacted the exercise. For example, the Period Reporting was completed in 2013 and most of the documents were written before the language of SDGs existed.

The appropriate number of SDGs for the Steering Group to champion should not be so many that it renders the narrowing down process pointless, nor so few that it misses key aspects of the WHS or Steering Group's work. Five seems to be a minimum based on the Feasibility Judgement and ten a maximum based on the Steering Group VAO review.

Conclusion

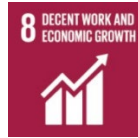
The Feasibility Judgement provided a clear mandate for five SDGs to be added to the Steering Groups' Champion List, each confirmed by the Decision Matrix. If the top scoring SDGs from the Decision Matrixes are added (score of 6 or above Matrix 1 and 7 or above Matrix 2) then SDG 8 Decent Work and Economic Growth and SDG 17 Partnerships of the Goals should be added, making a total of seven. However, there is a strong argument for also including SDG 4 Quality Education as learning is a key part of the GCCC WHS.



This review process has highlighted the wealth of factors connecting World Heritage with the GCCC WHS and the work of the Steering Group. The WHS itself sits at the core of this exercise, however the communities in the surrounding area have been on the horizon throughout and their well-being is key to the WHS meaningfully benefiting the people of NI.

Recommendations

1. **Champion** seven SDGs with the Steering Group



2. **Prioritise** SDG 3 Good Health and Well-being as the foremost SDG for the Steering Group in view of Programme for Government, The Covid-19 pandemic and persistent deprivation and mental ill-health experienced in surrounding communities - perhaps adopting Healthy Parks, Healthy People Programme



3. **Review** the Action Plan and identify which SDGs are supported by each Action and then reconsider additional SDGs that might be added to the Champion List after the review process.
4. **Share** this research with WH:UK to support UK WHSs developing their understanding of working with World Heritage in support of SDGs
5. **Consider** requesting socio-economic assessments in relation to issues raised through State of Conservation Reports to help assess their impact on sustainability, with particular reference to the seven SDGs on the Champion List
6. **Use** the accessible language of SDGs in public communications to help strengthen a shared purpose with local stakeholders around the World Heritage Status that reflects local social and economic needs

References

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